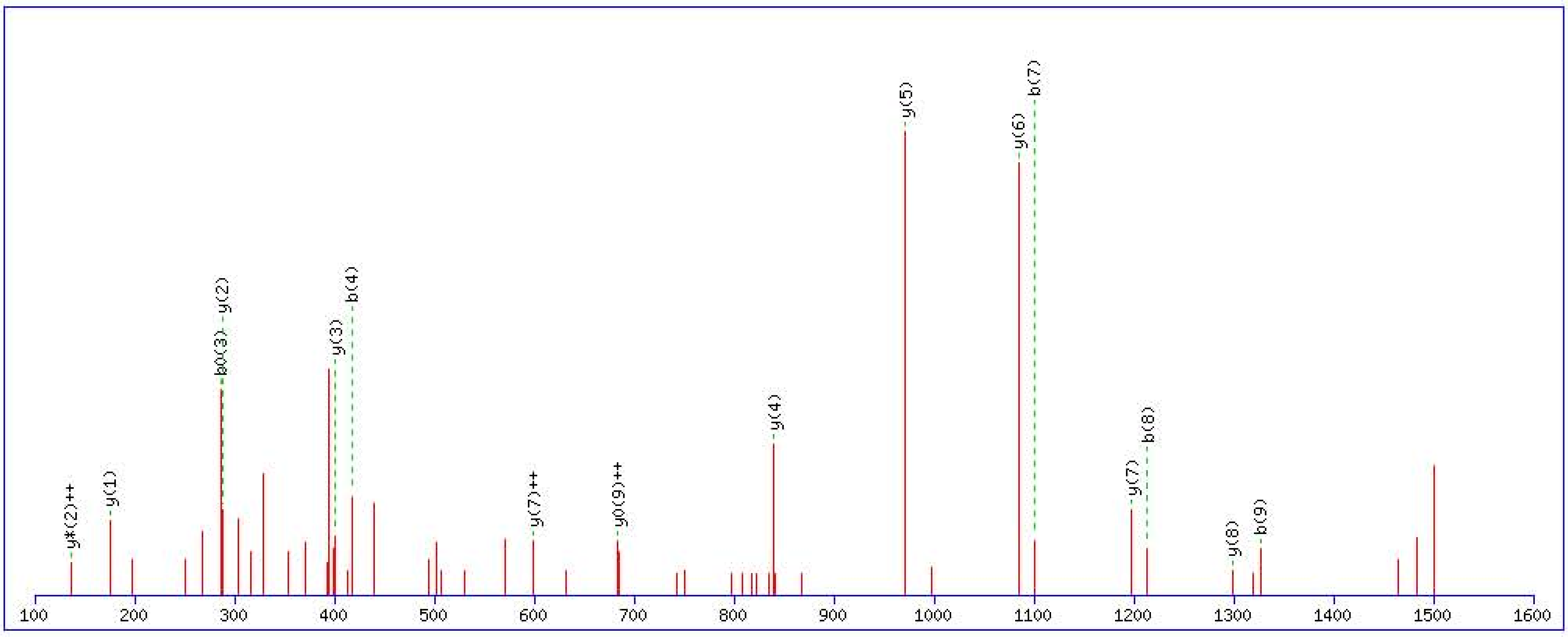
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DSTLIMQLLR**
Found in **1433B_HUMAN**, 14-3-3 protein beta/alpha OS=Homo sapiens GN=YWHAB PE=1 SV=3

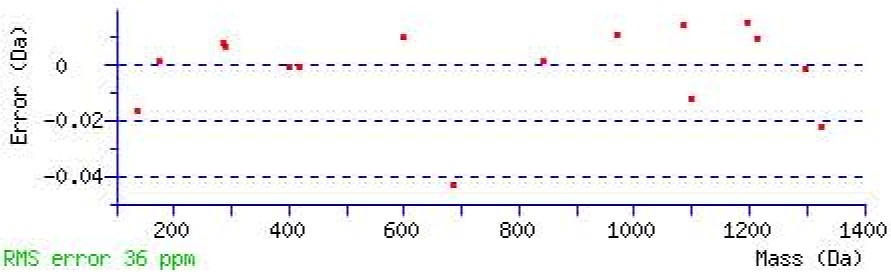
Match to Query 33792: 1499.832708 from(750.923630,2+) rtinseconds(2966) index(59252)
Title: Locus:1.1.1.1645.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

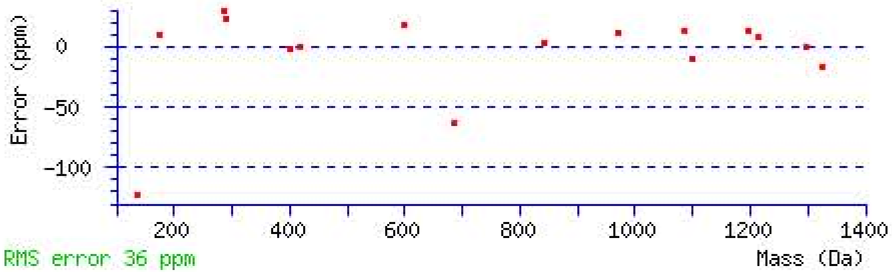
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1499.820374
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 0.00033
Matches : 16/82 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 10 |
| 2 | 203.066247 | 102.036761 | | | 185.055682 | 93.031479 | S | 1385.800726 | 693.404001 | 1368.774177 | 684.890726 | 1367.790161 | 684.398718 | 9 |
| 3 | 304.113926 | 152.560601 | | | 286.103361 | 143.555319 | T | *1298.768698* | 649.887987 | 1281.742149 | 641.374712 | 1280.758133 | 640.882704 | 8 |
| 4 | **417.197990** | 209.102633 | | | 399.187425 | 200.097351 | L | *1197.721019* | 599.364147 | 1180.694470 | 590.850873 | | | 7 |
| 5 | 530.282054 | 265.644665 | | | 512.271489 | 256.639383 | I | *1084.636955* | 542.822115 | 1067.610406 | 534.308841 | | | 6 |
| 6 | 661.322539 | 331.164908 | | | 643.311974 | 322.159625 | M | *971.552891* | 486.280083 | 954.526342 | 477.766809 | | | 5 |
| 7 | **1100.547865** | 550.777571 | 1083.521316 | 542.264296 | 1082.537300 | 541.772288 | Q | *840.512406* | 420.759841 | 823.485857 | 412.246566 | | | 4 |
| 8 | **1213.631929** | 607.319602 | 1196.605380 | 598.806328 | 1195.621364 | 598.314320 | L | *401.287080* | 201.147178 | 384.260531 | 192.633903 | | | 3 |
| 9 | **1326.715993** | 663.861634 | 1309.689444 | 655.348360 | 1308.705428 | 654.856352 | L | *288.203016* | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 10 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DSTLIMQLLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.1 | 1499.820374 | 0.012334 | DSTLIMQLLR |
| 22.0 | 1499.819489 | 0.013219 | SLSLVDNEIELLR |
| 18.8 | 1499.830719 | 0.001989 | EEIVDKTRLIER |
| 17.9 | 1499.824203 | 0.008505 | MNKLGTRLVPAER |
| 8.5 | 1499.830719 | 0.001989 | IEALSSKVQQLER |
| 7.8 | 1499.819504 | 0.013204 | KTLLVEDILGDER |
| 6.9 | 1499.820847 | 0.011861 | AFIKNSSLTVHQR |
| 6.9 | 1499.832062 | 0.000646 | AFSQRASLSIHKR |
| 6.7 | 1499.820374 | 0.012334 | MVQALTELLR |
| 6.4 | 1499.814316 | 0.018392 | QQGKAFQRAR |

**Mascot:** http://www.matrixscience.com/

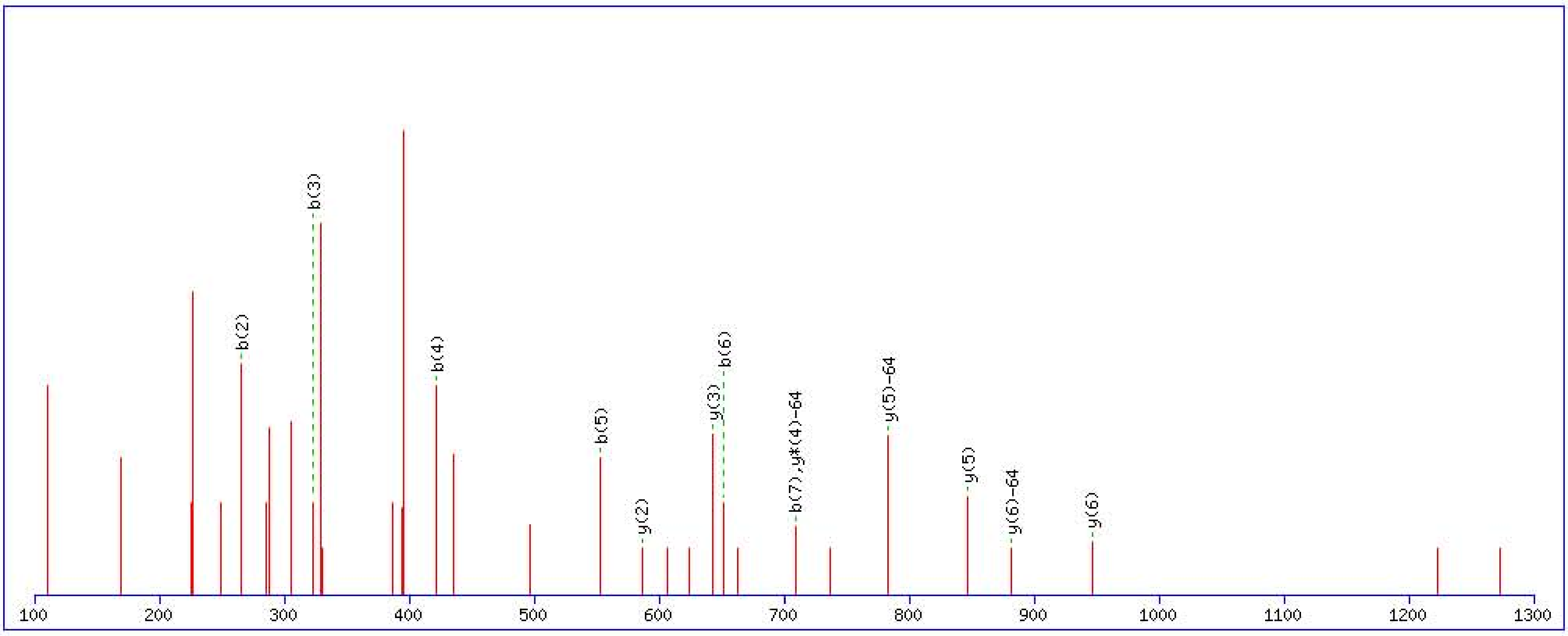
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HQGVMVGMGQK**
Found in **ACTA_HUMAN**, Actin, aortic smooth muscle OS=Homo sapiens GN=ACTA2 PE=1 SV=1

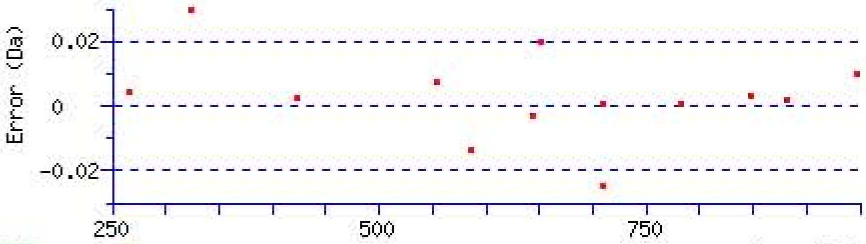
Match to Query 33746: 1497.724332 from(500.248720,3+) rtinseconds(1438) index(49079)
Title: Locus:1.1.1.1116.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●

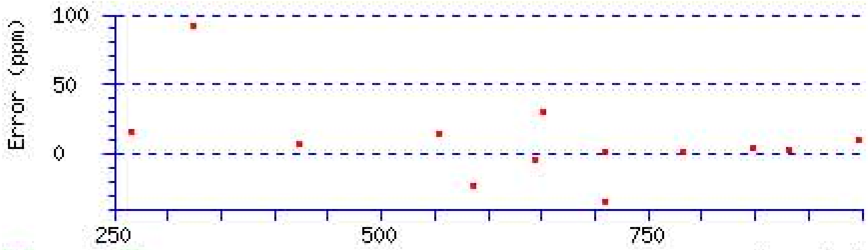


**Monoisotopic mass of neutral peptide Mr(calc):** 1497.725464
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**M8** : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 31 **Expect:** 0.011
**Matches :** 13/118 fragment ions using 24 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | H | | | | | 11 |
| 2 | *266.124766* | 133.566021 | 249.098217 | 125.052746 | Q | 1361.673813 | 681.340545 | 1344.647264 | 672.827270 | 10 |
| 3 | *323.146230* | 162.076753 | 306.119681 | 153.563478 | G | 1233.615235 | 617.311256 | 1216.588686 | 608.797981 | 9 |
| 4 | *422.214644* | 211.610960 | 405.188095 | 203.097685 | V | 1176.593771 | 588.800524 | 1159.567222 | 580.287249 | 8 |
| 5 | *553.255129* | 277.131203 | 536.228580 | 268.617928 | M | 1077.525357 | 539.266317 | 1060.498808 | 530.753042 | 7 |
| 6 | *652.323543* | 326.665410 | 635.296994 | 318.152135 | V | *946.484872* | 473.746074 | 929.458323 | 465.232800 | 6 |
| 7 | *709.345007* | 355.176142 | 692.318458 | 346.662867 | G | *847.416458* | 424.211867 | 830.389909 | 415.698593 | 5 |
| 8 | 856.380407 | 428.693842 | 839.353858 | 420.180567 | M | 790.394994 | 395.701135 | 773.368445 | 387.187861 | 4 |
| 9 | 913.401871 | 457.204574 | 896.375322 | 448.691299 | G | *643.359594* | 322.183435 | 626.333045 | 313.670161 | 3 |
| 10 | 1352.627197 | 676.817237 | 1335.600648 | 668.303962 | Q | *586.338130* | 293.672703 | 569.311581 | 285.159429 | 2 |
| 11 | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | 1 |



RMS error 29 ppm



RMS error 29 ppm

NCBI **BLAST** search of HQGVMVGMGQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.2 | 1497.725464 | -0.001132 | HQGVMVGMGQK |

**Mascot:** http://www.matrixscience.com/

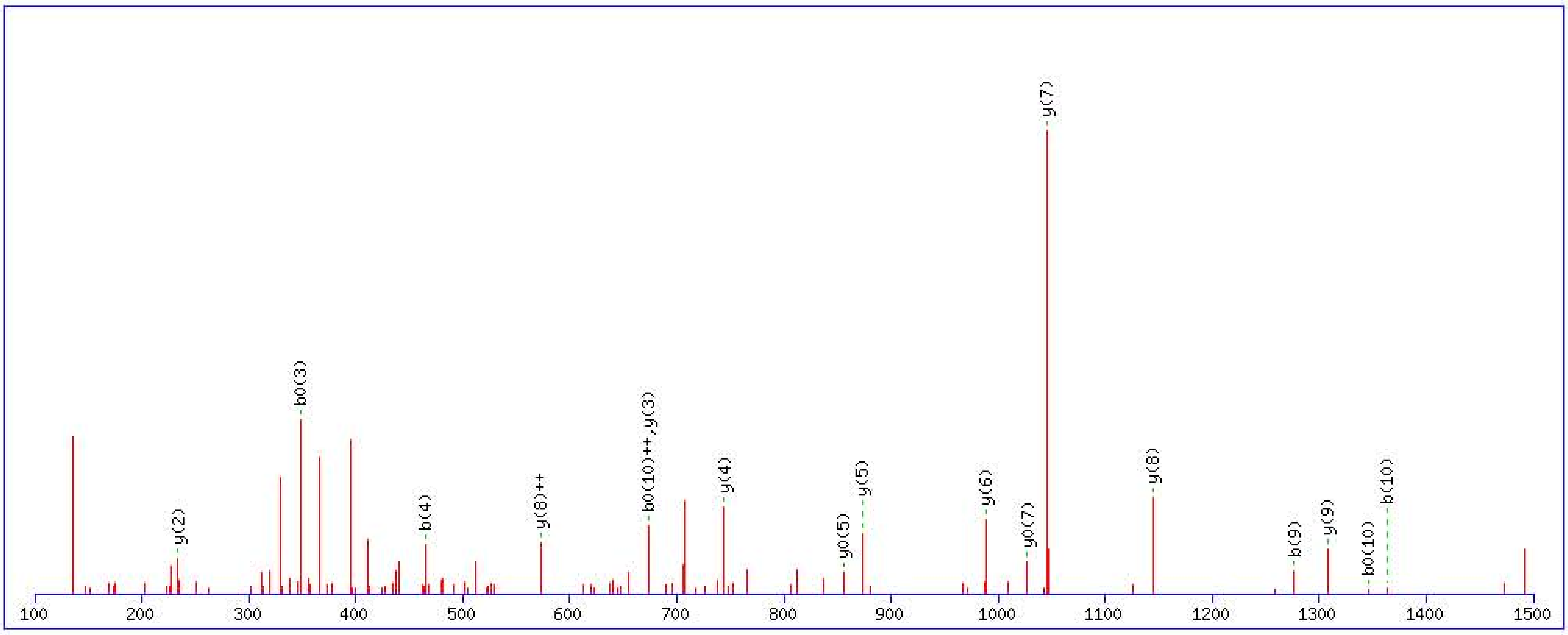
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DSYVGDEAQSK**
Found in **ACTA_HUMAN**, Actin, aortic smooth muscle OS=Homo sapiens GN=ACTA2 PE=1 SV=1

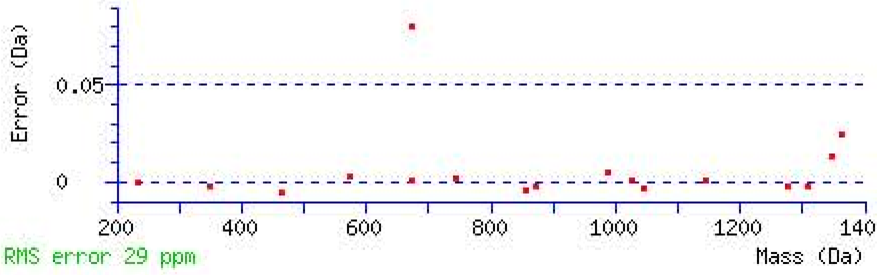
Match to Query 34165: 1508.680588 from(755.347570,2+) rtinseconds(1545) index(33589)
Title: Locus:1.1.1.2957.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

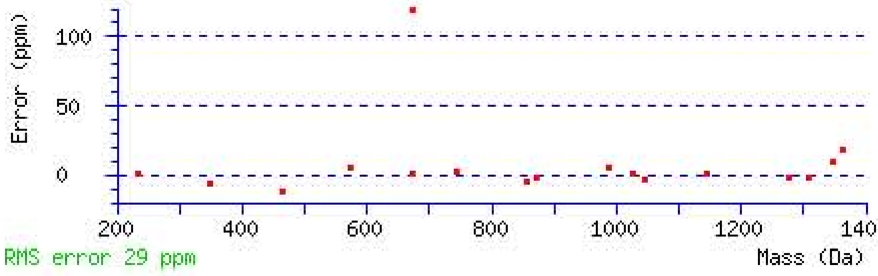
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1508.681702
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 53  Expect: 5.6e-005
Matches : 17/102 fragment ions using 28 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 11 |
| 2 | 203.066247 | 102.036761 | | | 185.055682 | 93.031479 | S | 1394.662043 | 697.834660 | 1377.635494 | 689.321385 | 1376.651478 | 688.829377 | 10 |
| 3 | 366.129576 | 183.568426 | | | 348.119011 | 174.563144 | Y | ***1307.630015*** | 654.318646 | 1290.603466 | 645.805371 | 1289.619450 | 645.313363 | 9 |
| 4 | **465.197990** | 233.102633 | | | 447.187425 | 224.097351 | V | ***1144.566686*** | 572.786981 | 1127.540137 | 564.273707 | 1126.556121 | 563.781699 | 8 |
| 5 | 522.219454 | 261.613365 | | | 504.208889 | 252.608083 | G | ***1045.498272*** | 523.252774 | 1028.471723 | 514.739500 | 1027.487707 | 514.247492 | 7 |
| 6 | 637.246397 | 319.126837 | | | 619.235832 | 310.121554 | D | ***988.476808*** | 494.742042 | 971.450259 | 486.228768 | 970.466243 | 485.736760 | 6 |
| 7 | 766.288990 | 383.648133 | | | 748.278425 | 374.642851 | E | ***873.449865*** | 437.228571 | 856.423316 | 428.715296 | 855.439300 | 428.223288 | 5 |
| 8 | 837.326104 | 419.166690 | | | 819.315539 | 410.161408 | A | ***744.407272*** | 372.707274 | 727.380723 | 364.194000 | 726.396707 | 363.701992 | 4 |
| 9 | **1276.551430** | 638.779353 | 1259.524881 | 630.266079 | 1258.540865 | 629.774070 | Q | ***673.370158*** | 337.188717 | 656.343609 | 328.675443 | 655.359593 | 328.183435 | 3 |
| 10 | **1363.583458** | 682.295367 | 1346.556909 | 673.782093 | 1345.572893 | 673.290085 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 11 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of DSYVGDEAQSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.7 | 1508.681702 | -0.001114 | DSYVGDEAQSK |
| 7.5 | 1508.690277 | -0.009689 | GGRGGMGGSDRGGFNK |

**Mascot:** http://www.matrixscience.com/

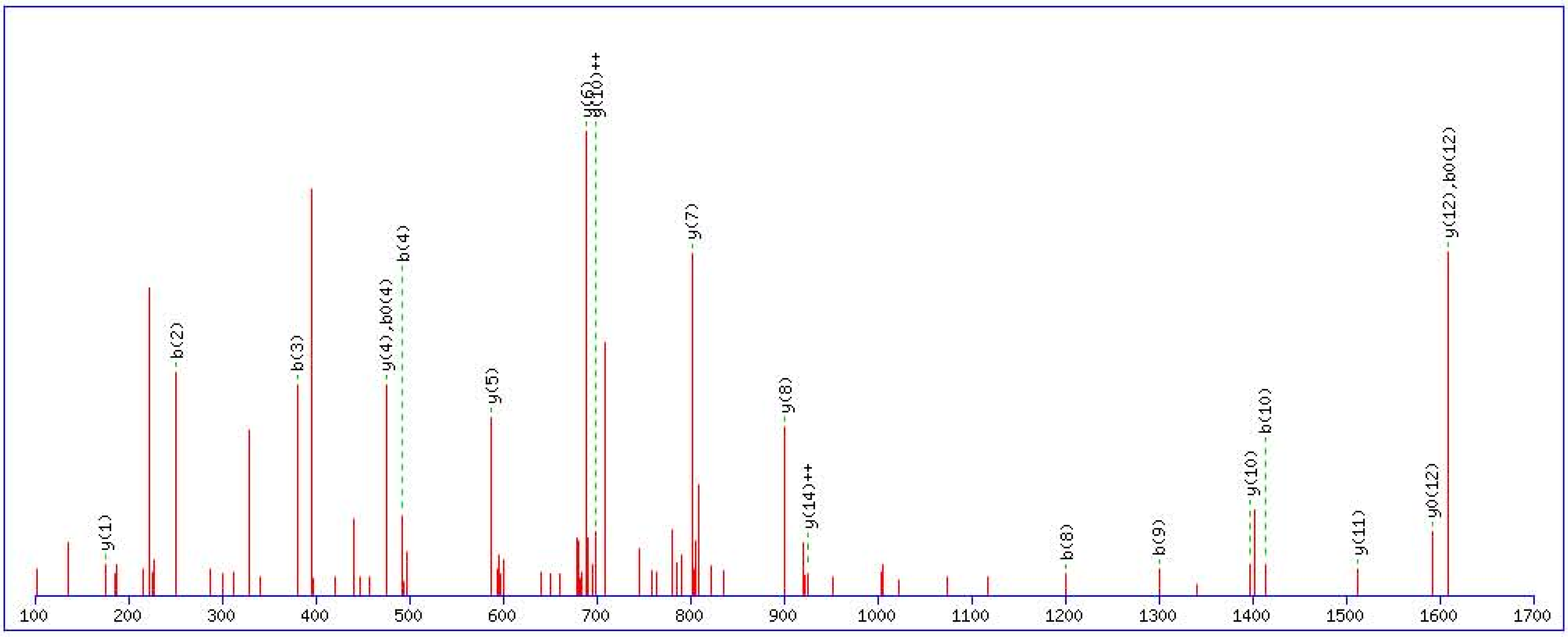
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SYELPDGQVITIGNER**
Found in **ACTA_HUMAN**, Actin, aortic smooth muscle OS=Homo sapiens GN=ACTA2 PE=1 SV=1

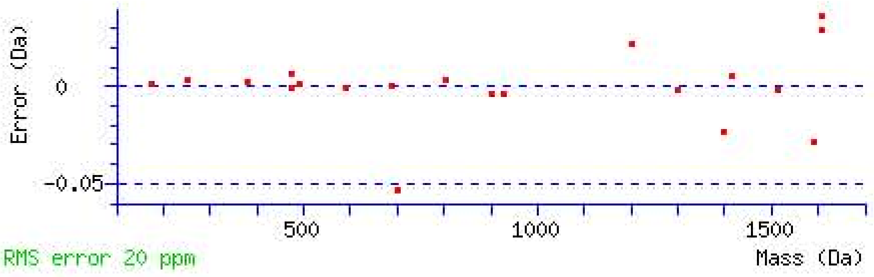
Match to Query 49230: 2101.062372 from(701.361400,3+) rtinseconds(2611) index(40232)
Title: Locus:1.1.1.3328.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

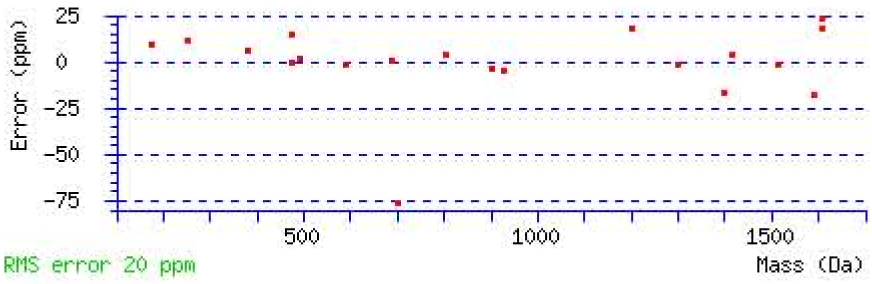
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2101.051376
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 55  Expect: 3.1e-005
Matches : 20/164 fragment ions using 30 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 16 |
| 2 | ***251.102633*** | 126.054954 | | | 233.092068 | 117.049672 | Y | 2015.026640 | 1008.016958 | 1998.000091 | 999.503683 | 1997.016075 | 999.011675 | 15 |
| 3 | ***380.145226*** | 190.576251 | | | 362.134661 | 181.570969 | E | 1851.963311 | 926.485294 | 1834.936762 | 917.972019 | 1833.952746 | 917.480011 | 14 |
| 4 | ***493.229290*** | 247.118283 | | | 475.218725 | 238.113001 | L | 1722.920718 | 861.963997 | 1705.894169 | 853.450722 | 1704.910153 | 852.958714 | 13 |
| 5 | 590.282054 | 295.644665 | | | 572.271489 | 286.639383 | P | ***1609.836654*** | 805.421965 | 1592.810105 | 796.908691 | 1591.826089 | 796.416682 | 12 |
| 6 | 705.308997 | 353.158137 | | | 687.298432 | 344.152854 | D | ***1512.783890*** | 756.895583 | 1495.757341 | 748.382309 | 1494.773325 | 747.890300 | 11 |
| 7 | 762.330461 | 381.668869 | | | 744.319896 | 372.663586 | G | ***1397.756947*** | 699.382111 | 1380.730398 | 690.868837 | 1379.746382 | 690.376829 | 10 |
| 8 | ***1201.555787*** | 601.281532 | 1184.529238 | 592.768257 | 1183.545222 | 592.276249 | Q | 1340.735483 | 670.871379 | 1323.708934 | 662.358105 | 1322.724918 | 661.866097 | 9 |
| 9 | ***1300.624201*** | 650.815739 | 1283.597652 | 642.302464 | 1282.613636 | 641.810456 | V | ***901.510157*** | 451.258716 | 884.483608 | 442.745442 | 883.499592 | 442.253434 | 8 |
| 10 | ***1413.708265*** | 707.357771 | 1396.681716 | 698.844496 | 1395.697700 | 698.352488 | I | ***802.441743*** | 401.724509 | 785.415194 | 393.211235 | 784.431178 | 392.719227 | 7 |
| 11 | 1514.755944 | 757.881610 | 1497.729395 | 749.368336 | 1496.745379 | 748.876328 | T | ***689.357679*** | 345.182478 | 672.331130 | 336.669203 | 671.347114 | 336.177195 | 6 |
| 12 | 1627.840008 | 814.423642 | 1610.813459 | 805.910368 | 1609.829443 | 805.418359 | I | ***588.310000*** | 294.658638 | 571.283451 | 286.145363 | 570.299435 | 285.653355 | 5 |
| 13 | 1684.861472 | 842.934374 | 1667.834923 | 834.421099 | 1666.850907 | 833.929091 | G | ***475.225936*** | 238.116606 | 458.199387 | 229.603331 | 457.215371 | 229.111323 | 4 |
| 14 | 1798.904399 | 899.955837 | 1781.877850 | 891.442563 | 1780.893834 | 890.950555 | N | 418.204472 | 209.605874 | 401.177923 | 201.092600 | 400.193907 | 200.600592 | 3 |
| 15 | 1927.946992 | 964.477134 | 1910.920443 | 955.963860 | 1909.936427 | 955.471851 | E | 304.161545 | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 16 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SYELPDGQVITIGNER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.3 | 2101.051376 | 0.010996 | SYELPDGQVITIGNER |
| 7.2 | 2101.047363 | 0.015009 | IMGGNSILHSAADSVTSAVQK |

**Mascot:** http://www.matrixscience.com/

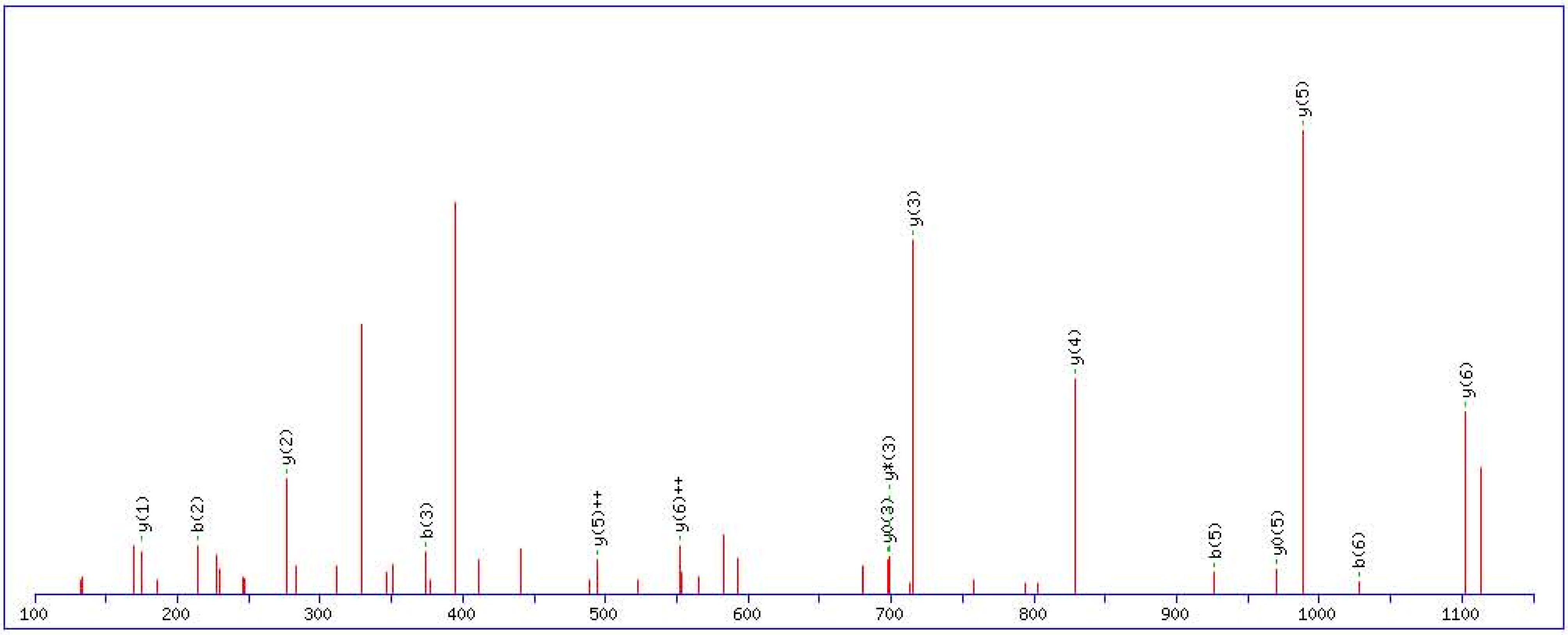
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VNCLQTR**
Found in **AFAM_HUMAN**, Afamin OS=Homo sapiens GN=AFM PE=1 SV=1

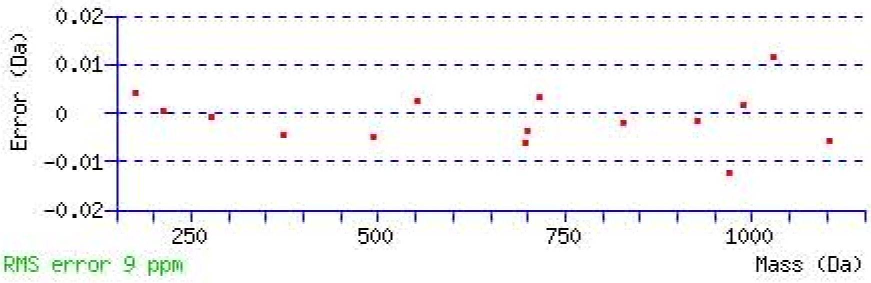
Match to Query 23313: 1200.592788 from(601.303670,2+) rtinseconds(1485) index(33178)
Title: Locus:1.1.1.2936.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

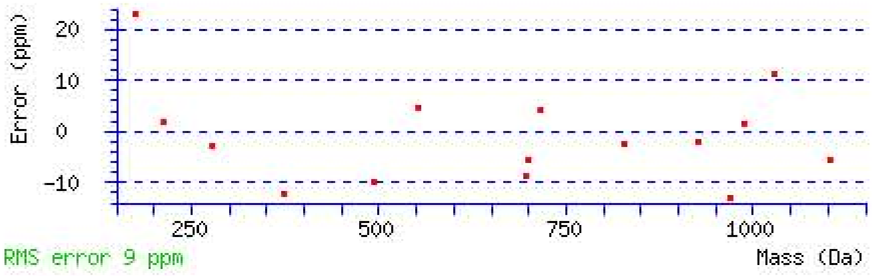
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1150 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1200.610733
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q5** : Biotin:Thermo-21345 (Q)
**Ions Score:** 39 **Expect:** 0.00065
**Matches :** 15/58 fragment ions using 27 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 7 |
| 2 | **214.118617** | 107.562947 | 197.092068 | 99.049672 | | | N | ***1102.549597*** | 551.778437 | 1085.523048 | 543.265162 | 1084.539032 | 542.773154 | 6 |
| 3 | **374.149266** | 187.578271 | 357.122717 | 179.064997 | | | C | ***988.506670*** | 494.756973 | 971.480121 | 486.243698 | 970.496105 | 485.751691 | 5 |
| 4 | 487.233330 | 244.120303 | 470.206781 | 235.607029 | | | L | ***828.476021*** | 414.741649 | 811.449472 | 406.228374 | 810.465456 | 405.736366 | 4 |
| 5 | **926.458656** | 463.732966 | 909.432107 | 455.219692 | | | Q | ***715.391957*** | 358.199617 | 698.365408 | 349.686342 | 697.381392 | 349.194334 | 3 |
| 6 | **1027.506335** | 514.256806 | 1010.479786 | 505.743531 | 1009.495770 | 505.251523 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VNCLQTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.7 | 1200.610733 | -0.017945 | VNCLQTR |
| 4.4 | 1200.603333 | -0.010545 | GRIAEPSVCGR |
| 3.0 | 1200.592087 | 0.000701 | QEATNATR |
| 2.9 | 1200.592102 | 0.000686 | QSVGENTR |
| 2.0 | 1200.603333 | -0.010545 | SQEGRGTR |
| 0.1 | 1200.610733 | -0.017945 | QCNVITR |

**Mascot:** http://www.matrixscience.com/

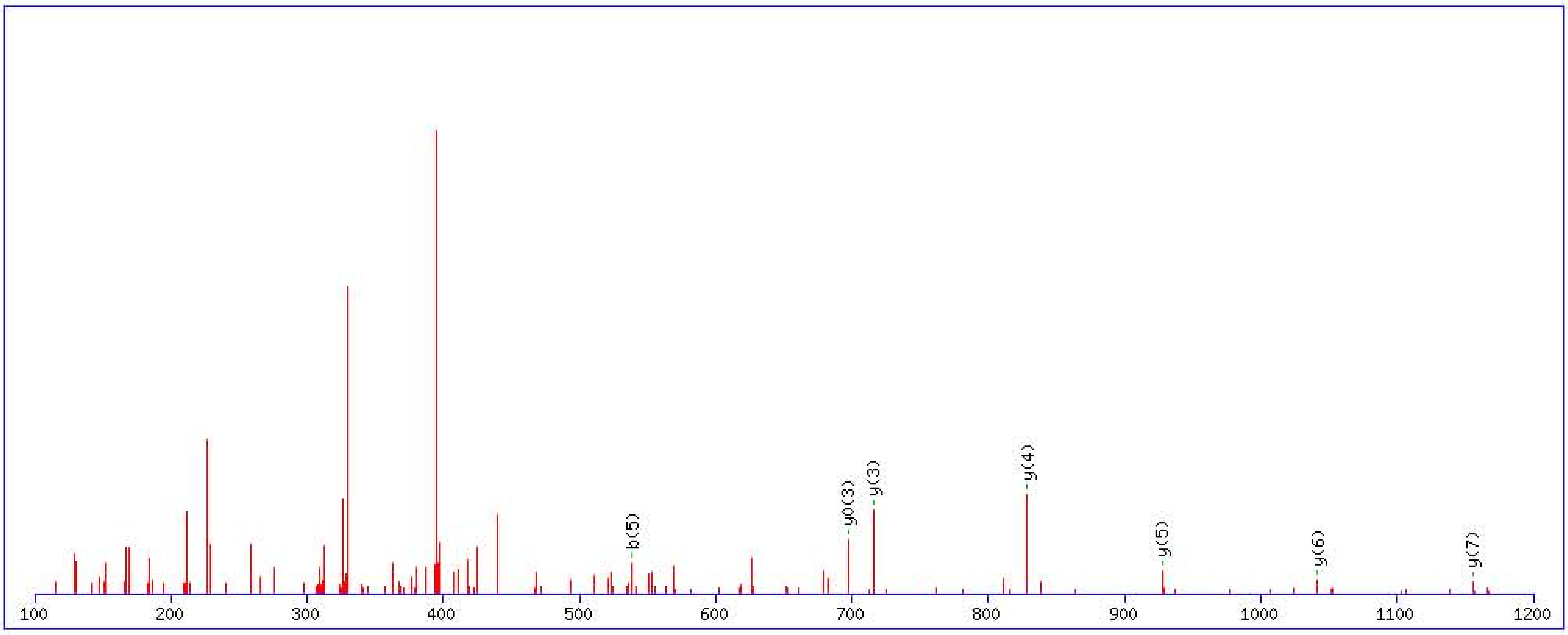
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LPNNVLQEK**
Found in **AFAM_HUMAN**, Afamin OS=Homo sapiens GN=AFM PE=1 SV=1

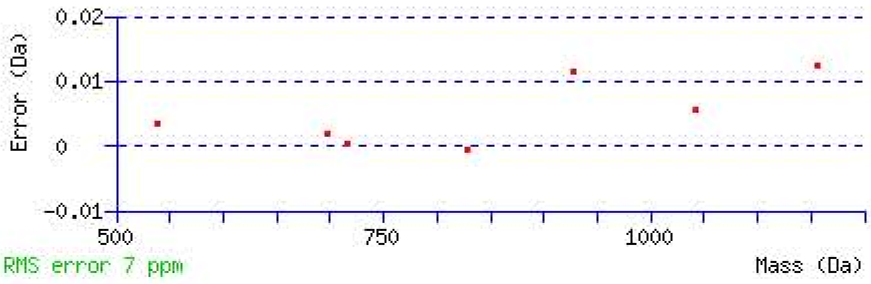
Match to Query 29030: 1364.745432 from(455.922420,3+) rtinseconds(1846) index(4828)
Title: Locus:1.1.1.1452.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

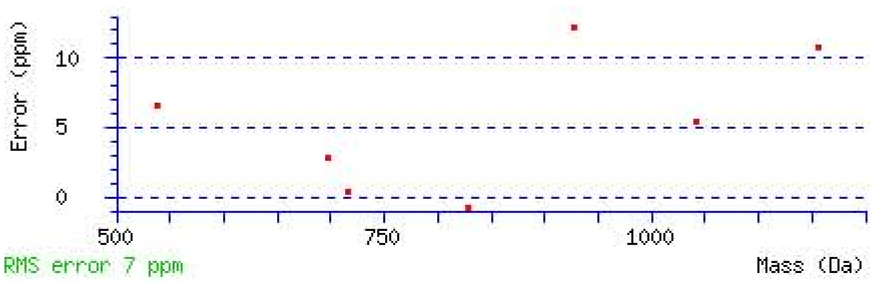
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1364.748581
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 26 **Expect:** 0.024
**Matches :** 7/76 fragment ions using 11 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 9 |
| 2 | 211.144104 | 106.075690 | | | | | P | 1252.671819 | 626.839548 | 1235.645270 | 618.326273 | 1234.661254 | 617.834265 | 8 |
| 3 | 325.187031 | 163.097153 | 308.160482 | 154.583879 | | | N | ***1155.619055*** | 578.313166 | 1138.592506 | 569.799891 | 1137.608490 | 569.307883 | 7 |
| 4 | 439.229958 | 220.118617 | 422.203409 | 211.605343 | | | N | ***1041.576128*** | 521.291702 | 1024.549579 | 512.778428 | 1023.565563 | 512.286420 | 6 |
| 5 | **538.298372** | 269.652824 | 521.271823 | 261.139550 | | | V | ***927.533201*** | 464.270239 | 910.506652 | 455.756964 | 909.522636 | 455.264956 | 5 |
| 6 | 651.382436 | 326.194856 | 634.355887 | 317.681582 | | | L | ***828.464787*** | 414.736032 | 811.438238 | 406.222757 | 810.454222 | 405.730749 | 4 |
| 7 | 1090.607762 | 545.807519 | 1073.581213 | 537.294245 | | | Q | ***715.380723*** | 358.194000 | 698.354174 | 349.680725 | 697.370158 | 349.188717 | 3 |
| 8 | 1219.650355 | 610.328816 | 1202.623806 | 601.815541 | 1201.639790 | 601.323533 | E | 276.155397 | 138.581336 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 9 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LPNNVLQEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.4 | 1364.748581 | -0.003149 | LPNNVLQEK |
| 8.5 | 1364.759827 | -0.014395 | QTSSLIIHR |
| 0.2 | 1364.745239 | 0.000193 | KVVSWIDVYTR |

**Mascot:** http://www.matrixscience.com/

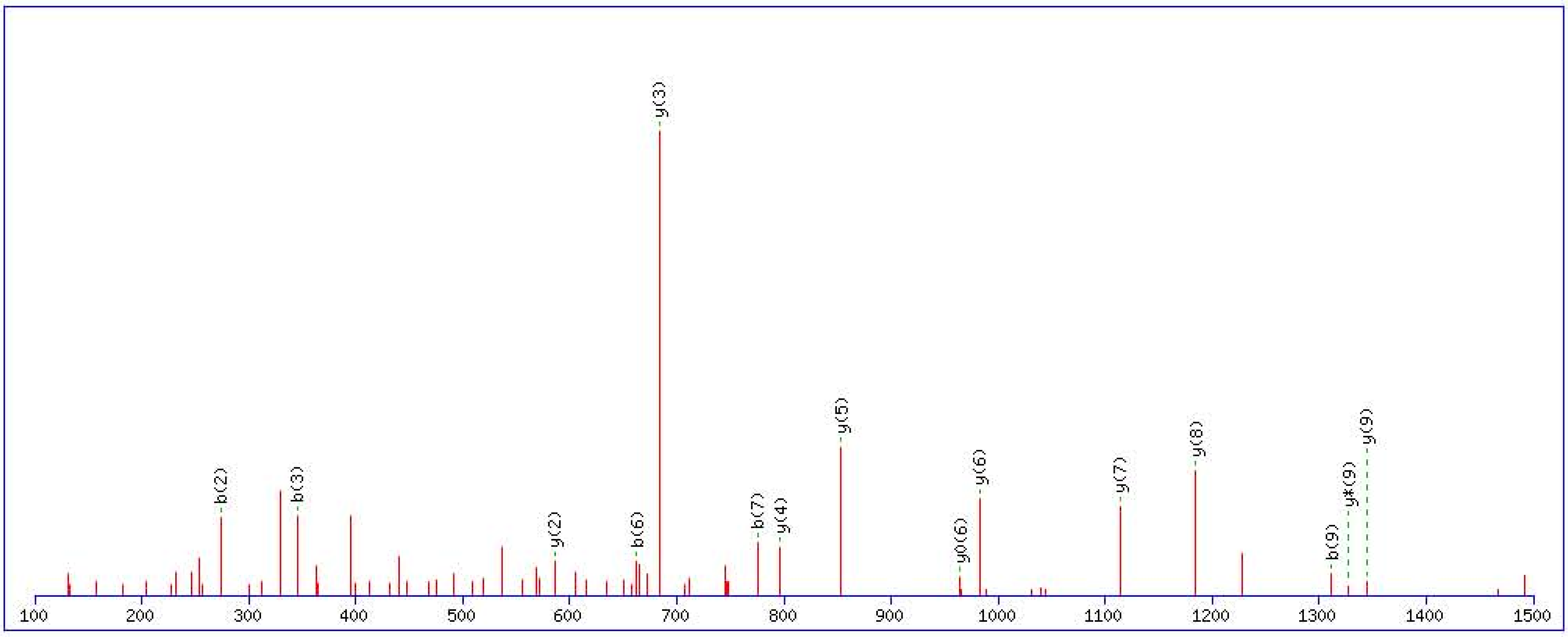
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ICAMEGLPQK**
Found in **AFAM_HUMAN**, Afamin OS=Homo sapiens GN=AFM PE=1 SV=1

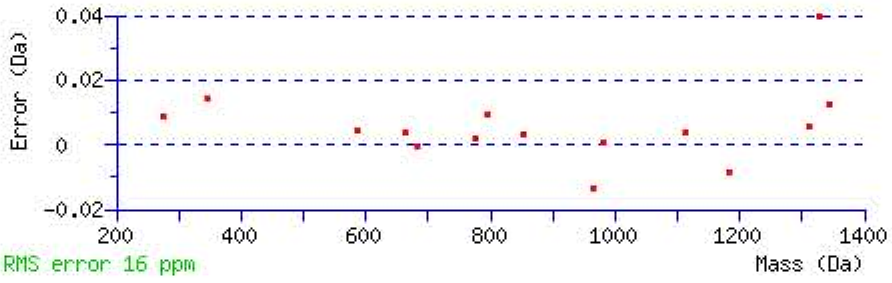
Match to Query 32669: 1456.720928 from(729.367740,2+) rtinseconds(1934) index(5503)
Title: Locus:1.1.1.1482.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

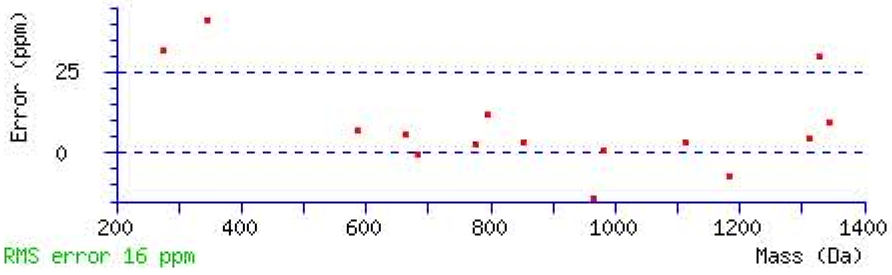
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1456.724030
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 56  Expect: 5.2e-005
Matches : 15/74 fragment ions using 24 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 10 |
| 2 | **274.121989** | 137.564632 | | | | | C | ***1344.647263*** | 672.827270 | 1327.620714 | 664.313995 | 1326.636698 | 663.821987 | 9 |
| 3 | **345.159103** | 173.083190 | | | | | A | ***1184.616614*** | 592.811945 | 1167.590065 | 584.298671 | 1166.606049 | 583.806663 | 8 |
| 4 | 476.199588 | 238.603432 | | | | | M | ***1113.579500*** | 557.293388 | 1096.552951 | 548.780114 | 1095.568935 | 548.288106 | 7 |
| 5 | 605.242181 | 303.124729 | | | 587.231616 | 294.119446 | E | ***982.539015*** | 491.773146 | 965.512466 | 483.259871 | 964.528450 | 482.767863 | 6 |
| 6 | **662.263645** | 331.635461 | | | 644.253080 | 322.630178 | G | ***853.496422*** | 427.251849 | 836.469873 | 418.738575 | | | 5 |
| 7 | **775.347709** | 388.177493 | | | 757.337144 | 379.172210 | L | ***796.474958*** | 398.741117 | 779.448409 | 390.227843 | | | 4 |
| 8 | 872.400473 | 436.703875 | | | 854.389908 | 427.698592 | P | ***683.390894*** | 342.199085 | 666.364345 | 333.685811 | | | 3 |
| 9 | **1311.625799** | 656.316538 | 1294.599250 | 647.803263 | 1293.615234 | 647.311255 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 10 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of ICAMEGLPQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 56.1 | 1456.724030 | -0.003102 | ICAMEGLPQK |
| 15.8 | 1456.740921 | -0.019993 | ATVPAGEGVSLEEAK |
| 6.7 | 1456.742279 | -0.021351 | LSGSHSQGVAYPVR |
| 4.5 | 1456.742279 | -0.021351 | RDGAGGWTPLVSNK |
| 4.0 | 1456.738434 | -0.017506 | LFPNTSDPQK |
| 2.0 | 1456.723145 | -0.002217 | QQTLEAEEAK |
| 0.6 | 1456.734390 | -0.013462 | QDQISASELR |
| 0.5 | 1456.723160 | -0.002232 | NQEILDDTAK |

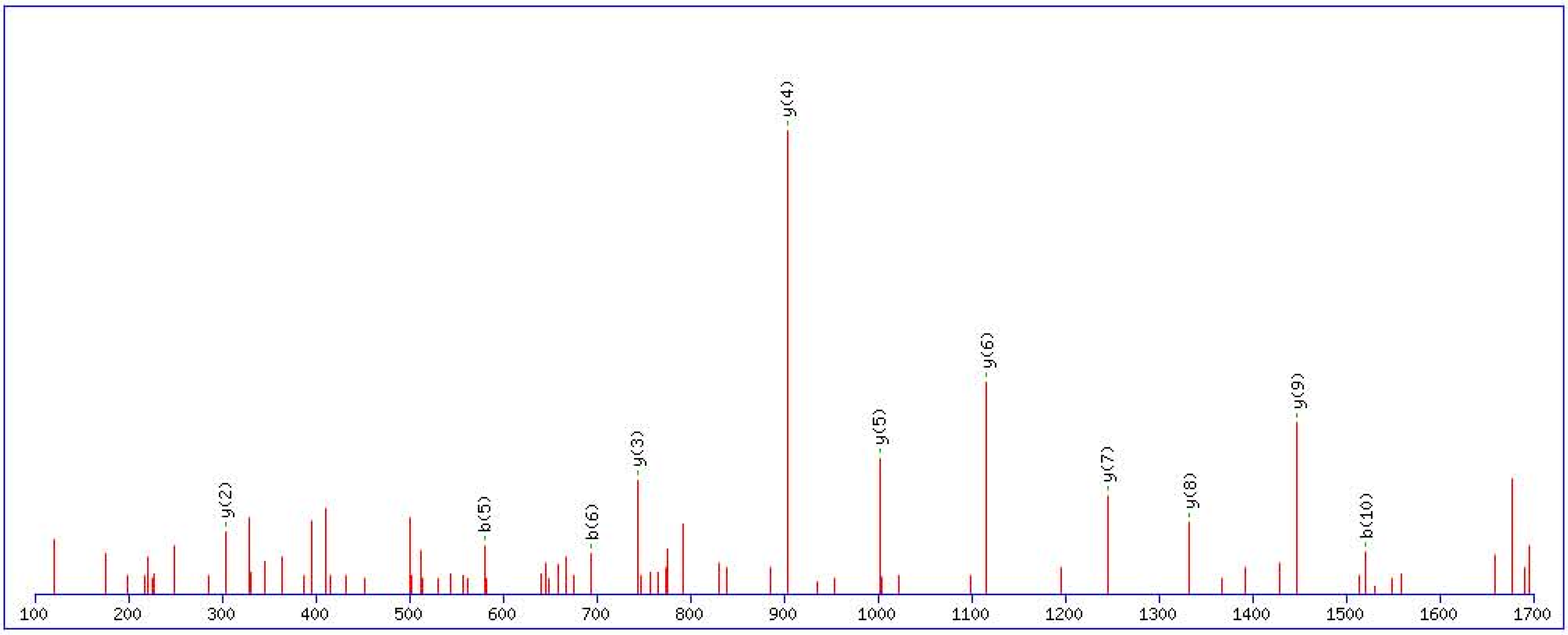
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **FTDSENVCQER**
Found in **AFAM_HUMAN**, Afamin OS=Homo sapiens GN=AFM PE=1 SV=1

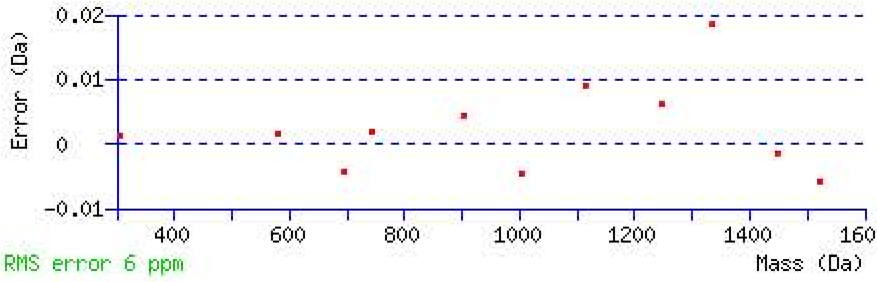
Match to Query 40311: 1694.744068 from(848.379310,2+) rtinseconds(1574) index(3370)
Title: Locus:1.1.1.1357.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

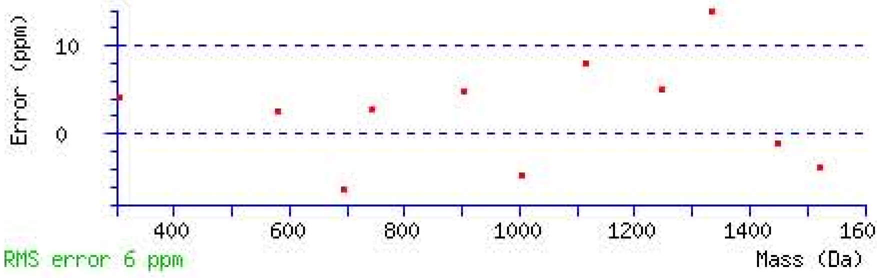
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1694.739243
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 63  Expect: 7.2e-006
Matches : 11/106 fragment ions using 16 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 11 |
| 2 | 249.123369 | 125.065322 | | | 231.112804 | 116.060040 | T | 1548.678104 | 774.842690 | 1531.651555 | 766.329416 | 1530.667539 | 765.837408 | 10 |
| 3 | 364.150312 | 182.578794 | | | 346.139747 | 173.573512 | D | ***1447.630425*** | 724.318851 | 1430.603876 | 715.805576 | 1429.619860 | 715.313568 | 9 |
| 4 | 451.182340 | 226.094808 | | | 433.171775 | 217.089526 | S | ***1332.603482*** | 666.805379 | 1315.576933 | 658.292105 | 1314.592917 | 657.800097 | 8 |
| 5 | **580.224933** | 290.616105 | | | 562.214368 | 281.610822 | E | ***1245.571454*** | 623.289365 | 1228.544905 | 614.776091 | 1227.560889 | 614.284083 | 7 |
| 6 | **694.267860** | 347.637568 | 677.241311 | 339.124294 | 676.257295 | 338.632286 | N | ***1116.528861*** | 558.768069 | 1099.502312 | 550.254794 | 1098.518296 | 549.762786 | 6 |
| 7 | 793.336274 | 397.171775 | 776.309725 | 388.658501 | 775.325709 | 388.166493 | V | ***1002.485934*** | 501.746605 | 985.459385 | 493.233331 | 984.475369 | 492.741323 | 5 |
| 8 | 953.366923 | 477.187100 | 936.340374 | 468.673825 | 935.356358 | 468.181817 | C | ***903.417520*** | 452.212398 | 886.390971 | 443.699124 | 885.406955 | 443.207116 | 4 |
| 9 | 1392.592249 | 696.799763 | 1375.565700 | 688.286488 | 1374.581684 | 687.794480 | Q | ***743.386871*** | 372.197074 | 726.360322 | 363.683799 | 725.376306 | 363.191791 | 3 |
| 10 | **1521.634842** | 761.321059 | 1504.608293 | 752.807785 | 1503.624277 | 752.315777 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FTDSENVCQER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.4 | 1694.739243 | 0.004825 | FTDSENVCQER |
| 12.3 | 1694.768219 | -0.024151 | EQSVDCRAGLEFER |

**Mascot:** http://www.matrixscience.com/

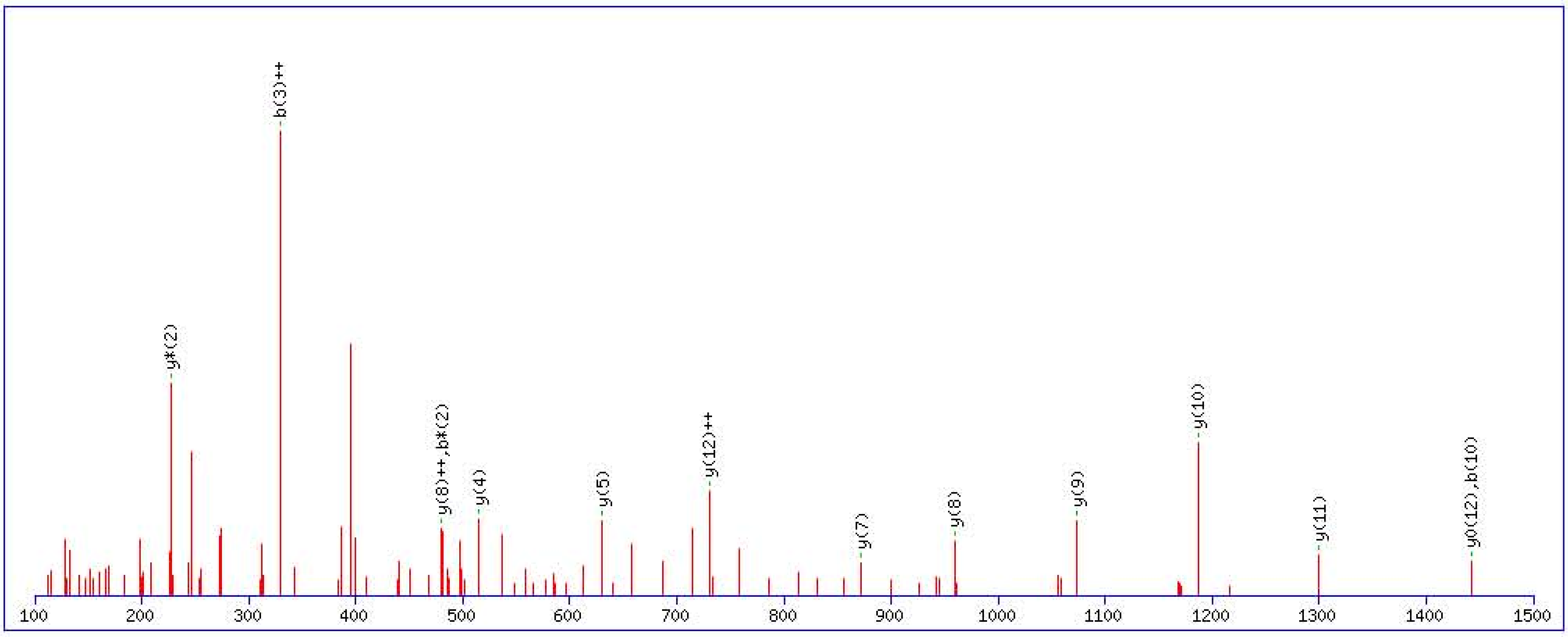
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GQCIINSNKDDRPK**
Found in **AFAM_HUMAN**, Afamin OS=Homo sapiens GN=AFM PE=1 SV=1

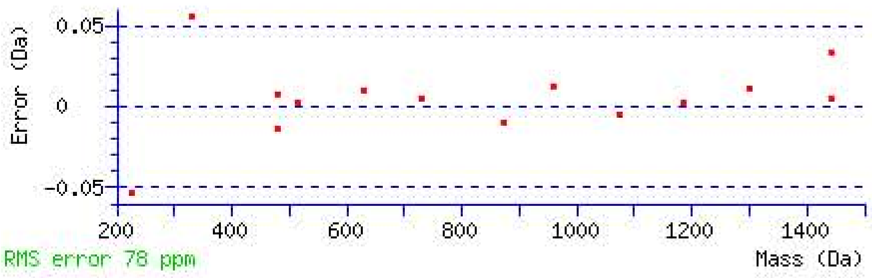
Match to Query 45629: 1954.968096 from(489.749300,4+) rtinseconds(1350) index(1871)
Title: Locus:1.1.1.1279.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

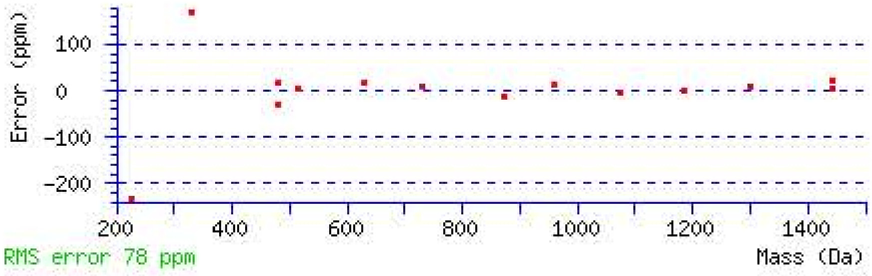
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1954.971680
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 60  Expect: 4.1e-006
Matches : 14/136 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 14 |
| 2 | 497.254066 | 249.130671 | 480.227517 | 240.617397 | | | Q | 1898.957513 | 949.982395 | 1881.930964 | 941.469120 | 1880.946948 | 940.977112 | 13 |
| 3 | 657.284715 | **329.145996** | 640.258166 | 320.632721 | | | C | 1459.732187 | 730.369732 | 1442.705638 | 721.856457 | 1441.721622 | 721.364449 | 12 |
| 4 | 770.368779 | 385.688028 | 753.342230 | 377.174753 | | | I | ***1299.701538*** | 650.354407 | 1282.674989 | 641.841133 | 1281.690973 | 641.349125 | 11 |
| 5 | 883.452843 | 442.230060 | 866.426294 | 433.716785 | | | I | ***1186.617474*** | 593.812375 | 1169.590925 | 585.299101 | 1168.606909 | 584.807093 | 10 |
| 6 | 997.495770 | 499.251523 | 980.469221 | 490.738249 | | | N | ***1073.533410*** | 537.270343 | 1056.506861 | 528.757069 | 1055.522845 | 528.265061 | 9 |
| 7 | 1084.527798 | 542.767537 | 1067.501249 | 534.254263 | 1066.517233 | 533.762255 | S | ***959.490483*** | 480.248880 | 942.463934 | 471.735605 | 941.479918 | 471.243597 | 8 |
| 8 | 1198.570725 | 599.789001 | 1181.544176 | 591.275726 | 1180.560160 | 590.783718 | N | ***872.458455*** | 436.732866 | 855.431906 | 428.219591 | 854.447890 | 427.727583 | 7 |
| 9 | 1326.665688 | 663.836482 | 1309.639139 | 655.323208 | 1308.655123 | 654.831200 | K | 758.415528 | 379.711402 | 741.388979 | 371.198128 | 740.404963 | 370.706120 | 6 |
| 10 | **1441.692631** | 721.349954 | 1424.666082 | 712.836679 | 1423.682066 | 712.344671 | D | ***630.320565*** | 315.663921 | 613.294016 | 307.150646 | 612.310000 | 306.658638 | 5 |
| 11 | 1556.719574 | 778.863425 | 1539.693025 | 770.350151 | 1538.709009 | 769.858143 | D | ***515.293622*** | 258.150449 | 498.267073 | 249.637175 | 497.283057 | 249.145167 | 4 |
| 12 | 1712.820685 | 856.913981 | 1695.794136 | 848.400706 | 1694.810120 | 847.908698 | R | 400.266679 | 200.636977 | 383.240130 | 192.123703 | | | 3 |
| 13 | 1809.873449 | 905.440363 | 1792.846900 | 896.927088 | 1791.862884 | 896.435080 | P | 244.165568 | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 14 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GQCIINSNKDDRPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 60.0 | 1954.971680 | -0.003584 | GQCIINSNKDDRPK |
| 2.5 | 1954.953094 | 0.015002 | KDDRTGTGTLSVFGMQAR |

**Mascot:** http://www.matrixscience.com/

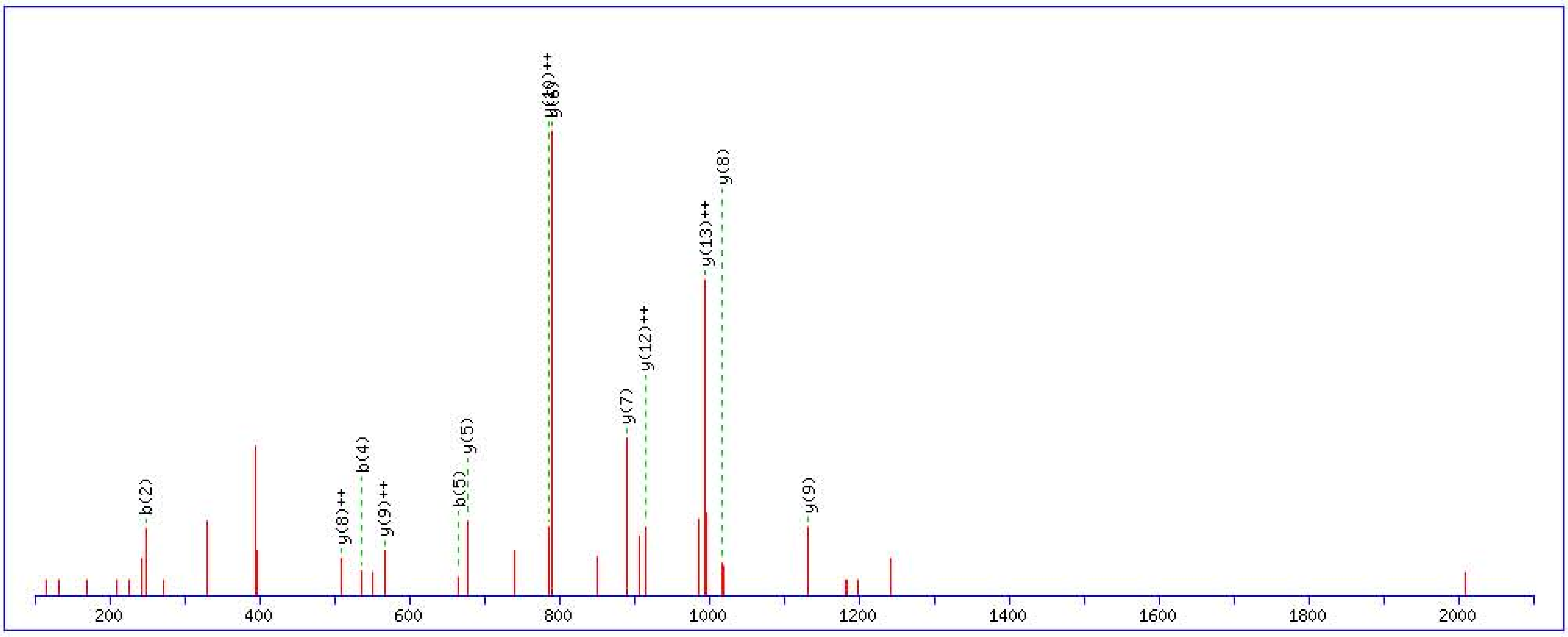
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SCCEEQNKVNCLQTR**
Found in **AFAM_HUMAN**, Afamin OS=Homo sapiens GN=AFM PE=1 SV=1

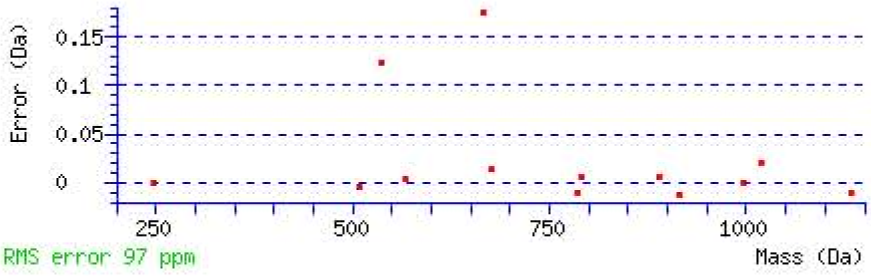
Match to Query 51769: 2235.979722 from(746.333850,3+) rtinseconds(1443) index(2476)
Title: Locus:1.1.1.1311.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

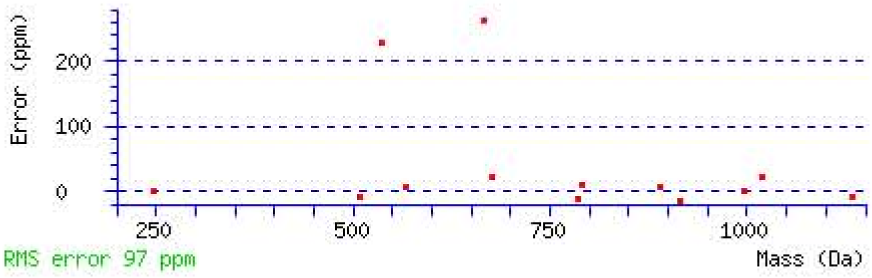
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2235.985703
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 32  Expect: 0.0033
Matches : 13/156 fragment ions using 23 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 15 |
| 2 | **248.069953** | 124.538614 | | | 230.059388 | 115.533332 | C | 2149.960963 | 1075.484119 | 2132.934414 | 1066.970845 | 2131.950398 | 1066.478837 | 14 |
| 3 | 408.100602 | 204.553939 | | | 390.090037 | 195.548657 | C | 1989.930314 | 995.468795 | 1972.903765 | 986.955521 | 1971.919749 | 986.463512 | 13 |
| 4 | **537.143195** | 269.075236 | | | 519.132630 | 260.069953 | E | 1829.899665 | 915.453470 | 1812.873116 | 906.940196 | 1811.889100 | 906.448188 | 12 |
| 5 | **666.185788** | 333.596532 | | | 648.175223 | 324.591250 | E | 1700.857072 | 850.932174 | 1683.830523 | 842.418899 | 1682.846507 | 841.926891 | 11 |
| 6 | 1105.411114 | 553.209195 | 1088.384565 | 544.695921 | 1087.400549 | 544.203913 | Q | 1571.814479 | 786.410877 | 1554.787930 | 777.897603 | 1553.803914 | 777.405595 | 10 |
| 7 | 1219.454041 | 610.230659 | 1202.427492 | 601.717384 | 1201.443476 | 601.225376 | N | ***1132.589153*** | 566.798214 | 1115.562604 | 558.284940 | 1114.578588 | 557.792932 | 9 |
| 8 | 1347.549004 | 674.278140 | 1330.522455 | 665.764866 | 1329.538439 | 665.272858 | K | ***1018.546226*** | 509.776751 | 1001.519677 | 501.263476 | 1000.535661 | 500.771468 | 8 |
| 9 | 1446.617418 | 723.812347 | 1429.590869 | 715.299073 | 1428.606853 | 714.807065 | V | ***890.451263*** | 445.729269 | 873.424714 | 437.215995 | 872.440698 | 436.723987 | 7 |
| 10 | 1560.660345 | 780.833811 | 1543.633796 | 772.320536 | 1542.649780 | 771.828528 | N | ***791.382849*** | 396.195062 | 774.356300 | 387.681788 | 773.372284 | 387.189780 | 6 |
| 11 | 1720.690994 | 860.849135 | 1703.664445 | 852.335861 | 1702.680429 | 851.843853 | C | ***677.339922*** | 339.173599 | 660.313373 | 330.660324 | 659.329357 | 330.168316 | 5 |
| 12 | 1833.775058 | 917.391167 | 1816.748509 | 908.877893 | 1815.764493 | 908.385885 | L | 517.309273 | 259.158274 | 500.282724 | 250.645000 | 499.298708 | 250.152992 | 4 |
| 13 | 1961.833636 | 981.420456 | 1944.807087 | 972.907182 | 1943.823071 | 972.415174 | Q | 404.225209 | 202.616242 | 387.198660 | 194.102968 | 386.214644 | 193.610960 | 3 |
| 14 | 2062.881315 | 1031.944295 | 2045.854766 | 1023.431021 | 2044.870750 | 1022.939013 | T | 276.166631 | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 15 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SCCEEQNKVNCLQTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.7 | 2235.985703 | -0.005981 | SCCEEQNKVNCLQTR |
| 8.1 | 2235.985703 | -0.005981 | SCCEEQNKVNCLQTR |

**Mascot:** http://www.matrixscience.com/

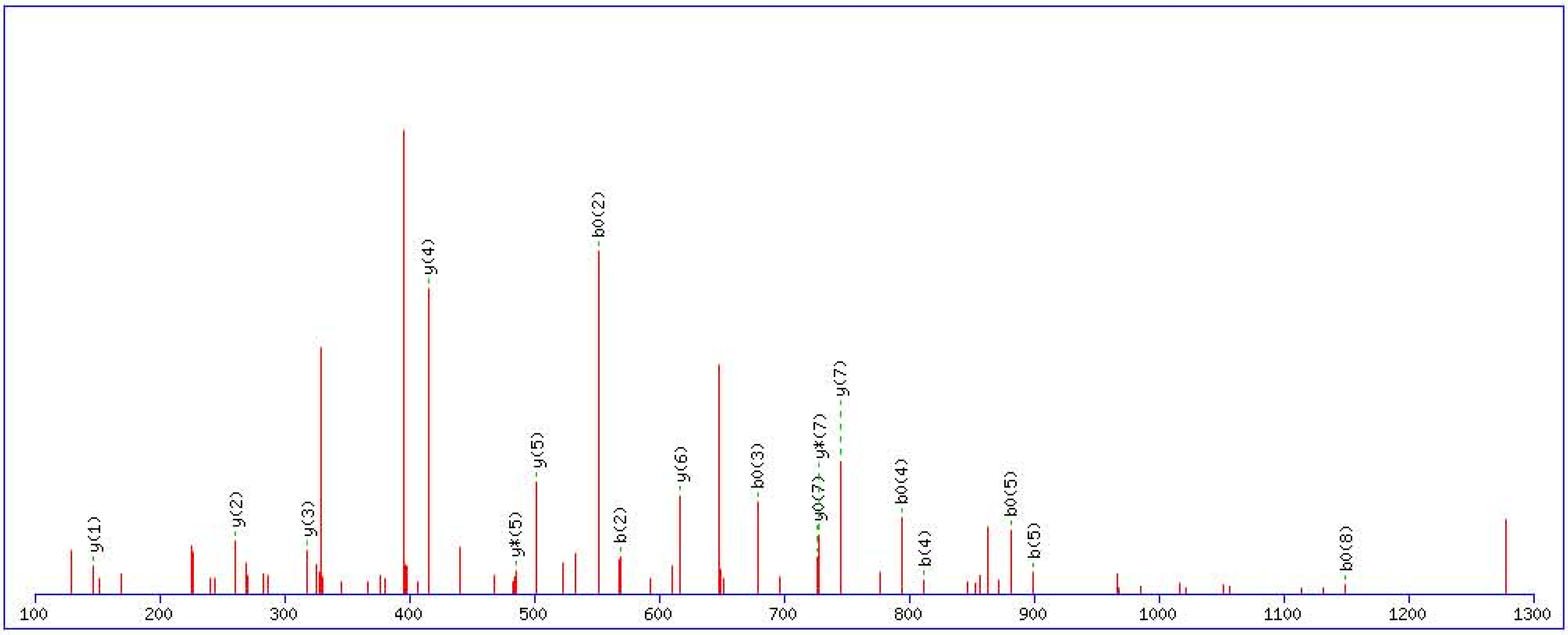
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EQQDSPGNK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

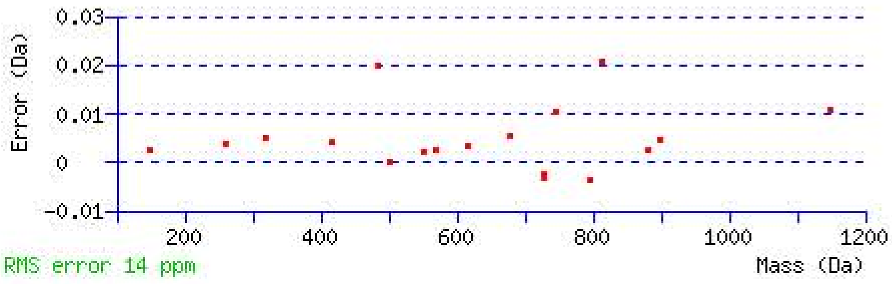
Match to Query 26443: 1312.609468 from(657.312010,2+) rtinseconds(1174) index(1044)
Title: Locus:1.1.1.1217.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

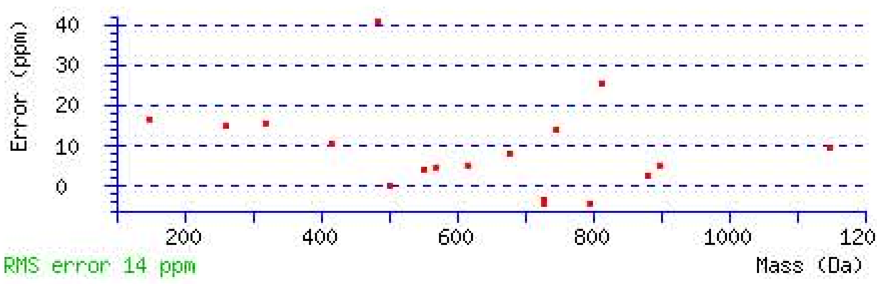
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1300] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1312.608139
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 35  Expect: 0.0032
Matches : 18/86 fragment ions using 42 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 9 |
| 2 | **569.275195** | 285.141236 | 552.248646 | 276.627961 | 551.264630 | 276.135953 | Q | 1184.572834 | 592.790055 | 1167.546285 | 584.276780 | 1166.562269 | 583.784772 | 8 |
| 3 | 697.333773 | 349.170525 | 680.307224 | 340.657250 | 679.323208 | 340.165242 | Q | ***745.347508*** | 373.177392 | 728.320959 | 364.664117 | 727.336943 | 364.172109 | 7 |
| 4 | **812.360716** | 406.683996 | 795.334167 | 398.170722 | 794.350151 | 397.678714 | D | ***617.288930*** | 309.148103 | 600.262381 | 300.634828 | 599.278365 | 300.142820 | 6 |
| 5 | **899.392744** | 450.200010 | 882.366195 | 441.686736 | 881.382179 | 441.194728 | S | ***502.261987*** | 251.634631 | 485.235438 | 243.121357 | 484.251422 | 242.629349 | 5 |
| 6 | 996.445508 | 498.726392 | 979.418959 | 490.213118 | 978.434943 | 489.721110 | P | ***415.229959*** | 208.118617 | 398.203410 | 199.605343 | | | 4 |
| 7 | 1053.466972 | 527.237124 | 1036.440423 | 518.723850 | 1035.456407 | 518.231841 | G | ***318.177195*** | 159.592235 | 301.150646 | 151.078961 | | | 3 |
| 8 | 1167.509899 | 584.258587 | 1150.483350 | 575.745313 | 1149.499334 | 575.253305 | N | ***261.155731*** | 131.081503 | 244.129182 | 122.568229 | | | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EQQDSPGNK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 35.1 | 1312.608139 | 0.001329 | EQQDSPGNK |
| 28.6 | 1312.608139 | 0.001329 | EQQDSPGNK |
| 8.8 | 1312.625900 | -0.016432 | QEAVHTDSLEGK |
| 3.0 | 1312.596863 | 0.012605 | SKLEEMYEER |
| 0.3 | 1312.601624 | 0.007844 | CGECGKAFTRK |

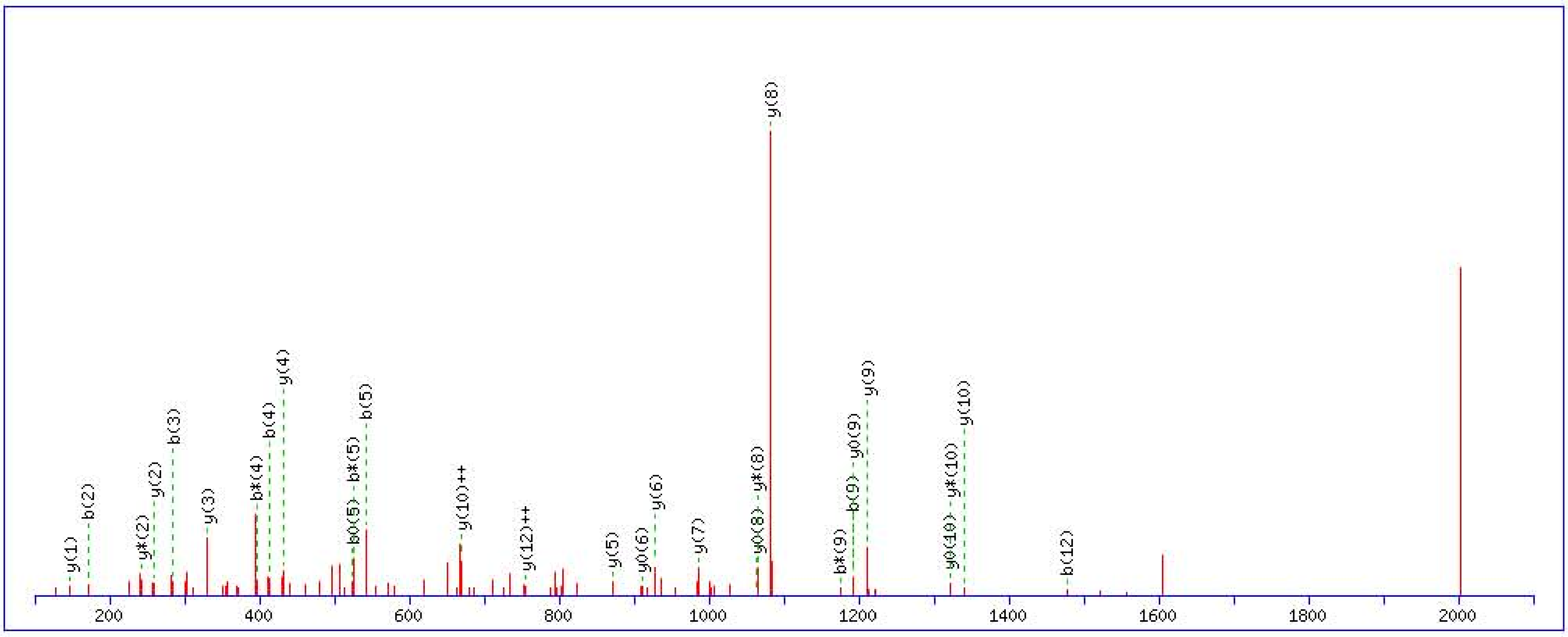
# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **LGNQEPGGQTALK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

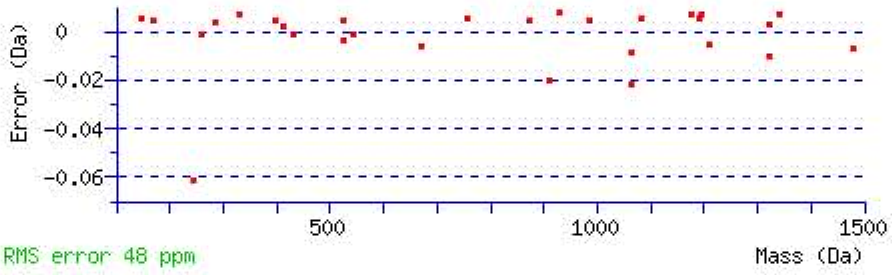
Match to Query 38122: 1622.831528 from(812.423040,2+) rtinseconds(1606) index(66496)
Title: Locus:1.1.1.1496.14 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1622.845016
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q9 : Biotin:Thermo-21345 (Q)
**Ions Score:** 43 **Expect:** 0.00038
**Matches :** 29/126 fragment ions using 81 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 13 |
| 2 | **171.112804** | 86.060040 | | | | | G | 1510.768241 | 755.887759 | 1493.741692 | 747.374484 | 1492.757676 | 746.882476 | 12 |
| 3 | **285.155731** | 143.081504 | 268.129182 | 134.568229 | | | N | 1453.746777 | 727.377027 | 1436.720228 | 718.863752 | 1435.736212 | 718.371744 | 11 |
| 4 | **413.214309** | 207.110793 | 396.187760 | 198.597518 | | | Q | ***1339.703850*** | 670.355563 | 1322.677301 | 661.842289 | 1321.693285 | 661.350281 | 10 |
| 5 | **542.256902** | 271.632089 | 525.230353 | 263.118815 | 524.246337 | 262.626807 | E | ***1211.645272*** | 606.326274 | 1194.618723 | 597.813000 | 1193.634707 | 597.320991 | 9 |
| 6 | 639.309666 | 320.158471 | 622.283117 | 311.645197 | 621.299101 | 311.153189 | P | ***1082.602679*** | 541.804978 | 1065.576130 | 533.291703 | 1064.592114 | 532.799695 | 8 |
| 7 | 696.331130 | 348.669203 | 679.304581 | 340.155929 | 678.320565 | 339.663921 | G | ***985.549915*** | 493.278596 | 968.523366 | 484.765321 | 967.539350 | 484.273313 | 7 |
| 8 | 753.352594 | 377.179935 | 736.326045 | 368.666661 | 735.342029 | 368.174653 | G | ***928.528451*** | 464.767864 | 911.501902 | 456.254589 | 910.517886 | 455.762581 | 6 |
| 9 | **1192.577920** | 596.792598 | 1175.551371 | 588.279324 | 1174.567355 | 587.787316 | Q | ***871.506987*** | 436.257132 | 854.480438 | 427.743857 | 853.496422 | 427.251849 | 5 |
| 10 | 1293.625599 | 647.316438 | 1276.599050 | 638.803163 | 1275.615034 | 638.311155 | T | ***432.281661*** | 216.644468 | 415.255112 | 208.131194 | 414.271096 | 207.639186 | 4 |
| 11 | 1364.662713 | 682.834995 | 1347.636164 | 674.321720 | 1346.652148 | 673.829712 | A | ***331.233982*** | 166.120629 | 314.207433 | 157.607354 | | | 3 |
| 12 | **1477.746777** | 739.377027 | 1460.720228 | 730.863752 | 1459.736212 | 730.371744 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of LGNQEPGGQTALK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 42.7 | 1622.845016 | -0.013488 | LGNQEPGGQTALK |
| 6.8 | 1622.845016 | -0.013488 | LGNQEPGGQTALK |
| 5.8 | 1622.831085 | 0.000443 | GLNPNPSHQMTKRK |
| 5.4 | 1622.813324 | 0.018204 | NGLAQRMSHGNK |
| 5.1 | 1622.820511 | 0.011017 | FPPEASGYLHIGHAK |
| 2.3 | 1622.837601 | -0.006073 | SQSEKQTYLEVRR |

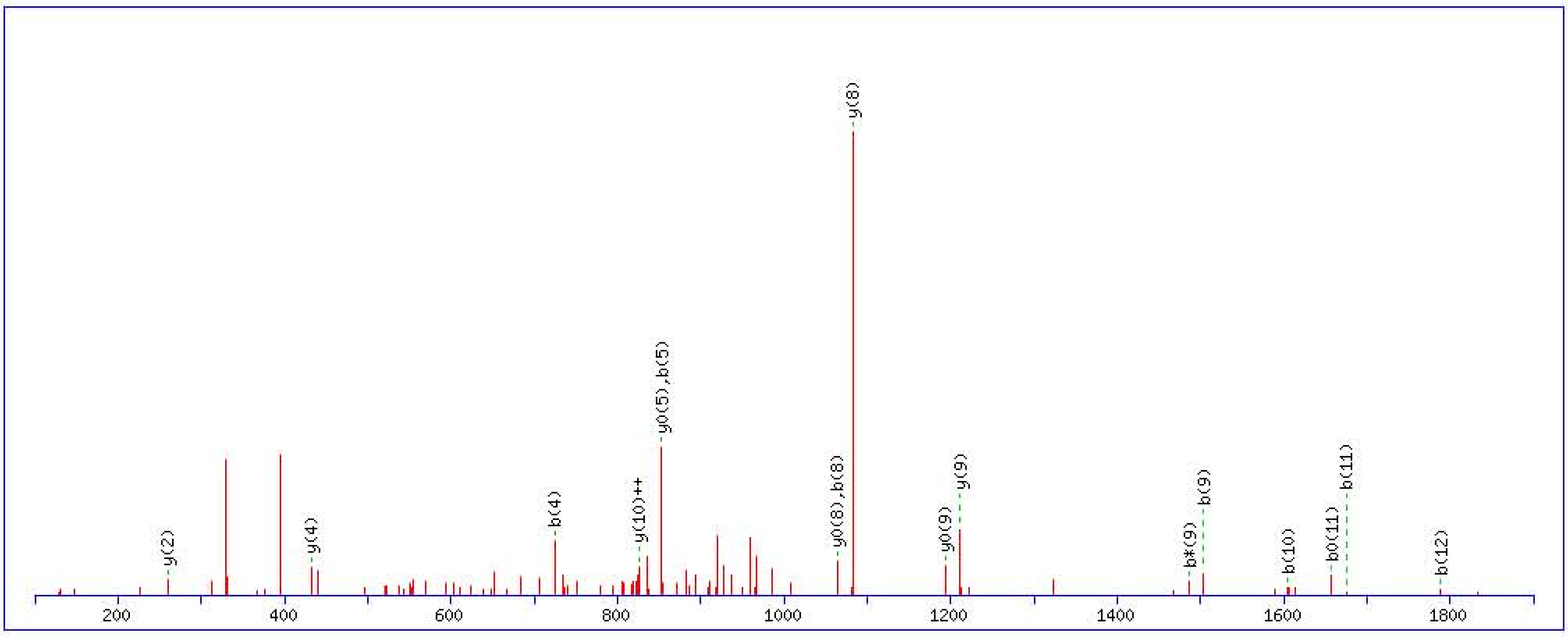
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LGNQEPGGQTALK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

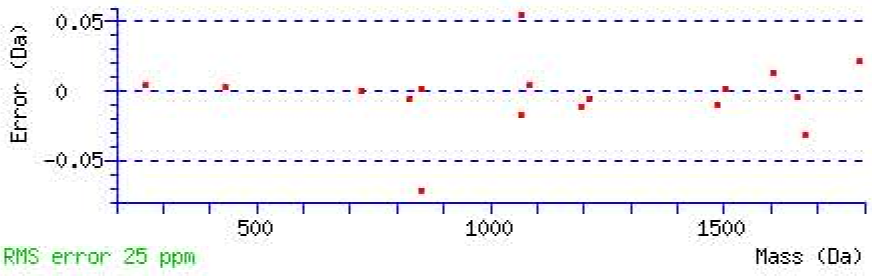
Match to Query 45252: 1934.017128 from(968.015840,2+) rtinseconds(1971) index(5715)
Title: Locus:1.1.1.1495.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

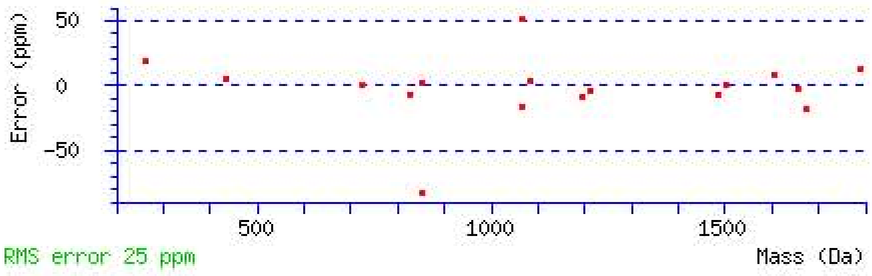
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1934.011765
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.019
Matches : 17/126 fragment ions using 31 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 13 |
| 2 | 171.112804 | 86.060040 | | | | | G | 1821.934989 | 911.471133 | 1804.908440 | 902.957858 | 1803.924424 | 902.465850 | 12 |
| 3 | 285.155731 | 143.081504 | 268.129182 | 134.568229 | | | N | 1764.913525 | 882.960400 | 1747.886976 | 874.447126 | 1746.902960 | 873.955118 | 11 |
| 4 | ***724.381057*** | 362.694167 | 707.354508 | 354.180892 | | | Q | 1650.870598 | 825.938937 | 1633.844049 | 817.425663 | 1632.860033 | 816.933654 | 10 |
| 5 | ***853.423650*** | 427.215463 | 836.397101 | 418.702189 | 835.413085 | 418.210181 | E | **1211.645272** | 606.326274 | 1194.618723 | 597.813000 | 1193.634707 | 597.320991 | 9 |
| 6 | 950.476414 | 475.741845 | 933.449865 | 467.228571 | 932.465849 | 466.736563 | P | **1082.602679** | 541.804977 | 1065.576130 | 533.291703 | 1064.592114 | 532.799695 | 8 |
| 7 | 1007.497878 | 504.252577 | 990.471329 | 495.739303 | 989.487313 | 495.247295 | G | 985.549915 | 493.278595 | 968.523366 | 484.765321 | 967.539350 | 484.273313 | 7 |
| 8 | ***1064.519342*** | 532.763309 | 1047.492793 | 524.250035 | 1046.508777 | 523.758027 | G | 928.528451 | 464.767863 | 911.501902 | 456.254589 | 910.517886 | 455.762581 | 6 |
| 9 | ***1503.744668*** | 752.375972 | 1486.718119 | 743.862698 | 1485.734103 | 743.370690 | Q | 871.506987 | 436.257132 | 854.480438 | 427.743857 | 853.496422 | 427.251849 | 5 |
| 10 | ***1604.792347*** | 802.899812 | 1587.765798 | 794.386537 | 1586.781782 | 793.894529 | T | **432.281661** | 216.644468 | 415.255112 | 208.131194 | 414.271096 | 207.639186 | 4 |
| 11 | ***1675.829461*** | 838.418369 | 1658.802912 | 829.905094 | 1657.818896 | 829.413086 | A | 331.233982 | 166.120629 | 314.207433 | 157.607354 | | | 3 |
| 12 | ***1788.913525*** | 894.960400 | 1771.886976 | 886.447126 | 1770.902960 | 885.955118 | L | **260.196868** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LGNQEPGGQTALK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.2 | 1934.011765 | 0.005363 | LGNQEPGGQTALK |
| 10.2 | 1934.032867 | -0.015739 | KSRPLTGLMDLAKEMTK |
| 5.1 | 1934.032867 | -0.015739 | KSRPLTGLMDLAKEMTK |
| 3.8 | 1934.037369 | -0.020241 | NYLEGIYNVPVAAVRTR |
| 1.7 | 1934.003647 | 0.013481 | SSSLGYISKAEEYFLLK |
| 0.9 | 1934.026154 | -0.009026 | QPLRKYVTPSDFDQLK |
| 0.8 | 1934.027008 | -0.009880 | VSFRLHITEPKMMFAK |

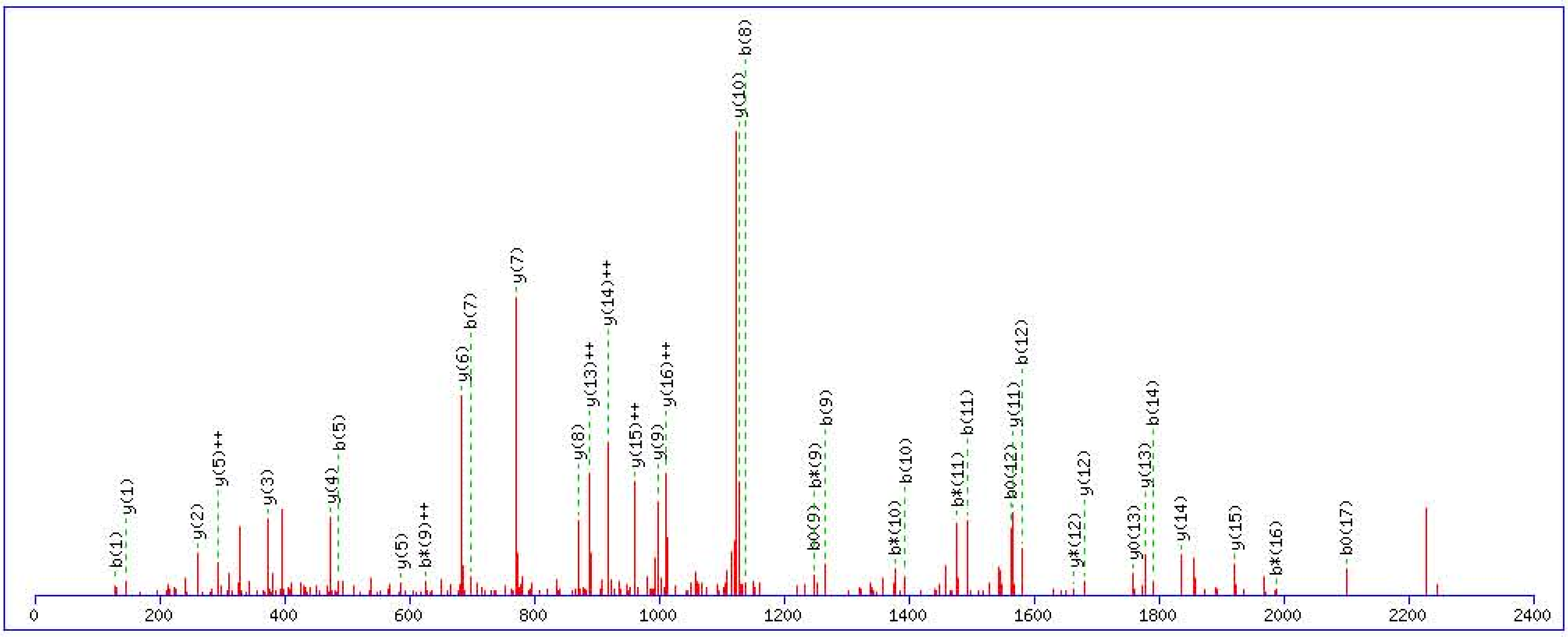
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QLTSGPNQEQVSPLTLLK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

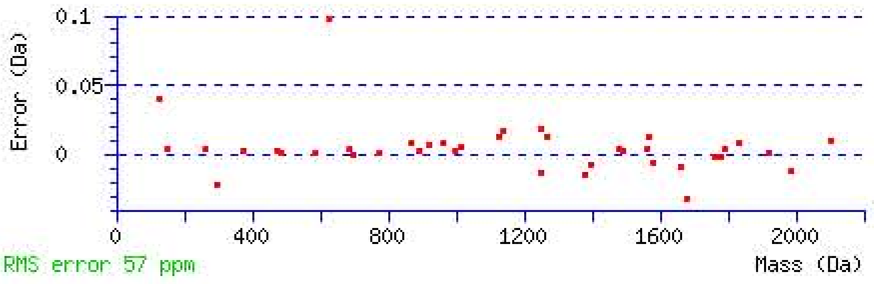
Match to Query 52312: 2263.243468 from(1132.629010,2+) rtinseconds(2502) index(8663)
Title: Locus:1.1.1.1680.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

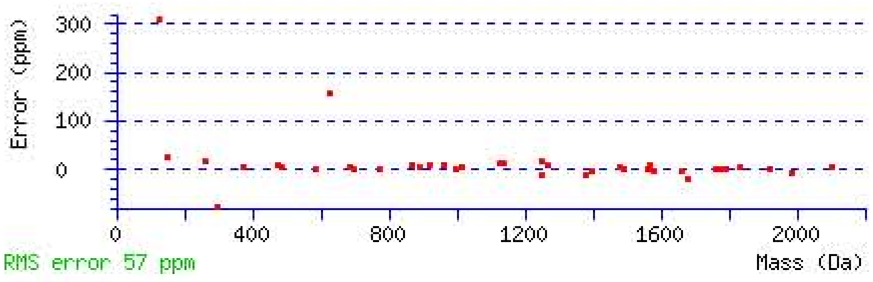
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2263.224594
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 116  Expect: 6.6e-011
Matches : 39/194 fragment ions using 60 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.065854** | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 18 |
| 2 | 242.149918 | 121.578597 | 225.123369 | 113.065323 | | | L | 2136.173304 | 1068.590290 | 2119.146755 | 1060.077015 | 2118.162739 | 1059.585007 | 17 |
| 3 | 343.197597 | 172.102437 | 326.171048 | 163.589162 | 325.187032 | 163.097154 | T | 2023.089240 | 1012.048258 | 2006.062691 | 1003.534984 | 2005.078675 | 1003.042976 | 16 |
| 4 | 430.229625 | 215.618450 | 413.203076 | 207.105176 | 412.219060 | 206.613168 | S | ***1922.041561*** | 961.524419 | 1905.015012 | 953.011144 | 1904.030996 | 952.519136 | 15 |
| 5 | **487.251089** | 244.129182 | 470.224540 | 235.615908 | 469.240524 | 235.123900 | G | ***1835.009533*** | 918.008405 | 1817.982984 | 909.495130 | 1816.998968 | 909.003122 | 14 |
| 6 | 584.303853 | 292.655565 | 567.277304 | 284.142290 | 566.293288 | 283.650282 | P | ***1777.988069*** | 889.497673 | 1760.961520 | 880.984398 | 1759.977504 | 880.492390 | 13 |
| 7 | **698.346780** | 349.677028 | 681.320231 | 341.163753 | 680.336215 | 340.671745 | N | ***1680.935305*** | 840.971291 | 1663.908756 | 832.458016 | 1662.924740 | 831.966008 | 12 |
| 8 | **1137.572106** | 569.289691 | 1120.545557 | 560.776416 | 1119.561541 | 560.284408 | Q | ***1566.892378*** | 783.949827 | 1549.865829 | 775.436553 | 1548.881813 | 774.944545 | 11 |
| 9 | **1266.614699** | 633.810988 | 1249.588150 | 625.297713 | 1248.604134 | 624.805705 | E | ***1127.667052*** | 564.337164 | 1110.640503 | 555.823890 | 1109.656487 | 555.331882 | 10 |
| 10 | **1394.673277** | 697.840277 | 1377.646728 | 689.327002 | 1376.662712 | 688.834994 | Q | ***998.624459*** | 499.815868 | 981.597910 | 491.302593 | 980.613894 | 490.810585 | 9 |
| 11 | **1493.741691** | 747.374484 | 1476.715142 | 738.861209 | 1475.731126 | 738.369201 | V | ***870.565881*** | 435.786579 | 853.539332 | 427.273304 | 852.555316 | 426.781296 | 8 |
| 12 | **1580.773719** | 790.890498 | 1563.747170 | 782.377223 | 1562.763154 | 781.885215 | S | ***771.497467*** | 386.252372 | 754.470918 | 377.739097 | 753.486902 | 377.247089 | 7 |
| 13 | 1677.826483 | 839.416880 | 1660.799934 | 830.903605 | 1659.815918 | 830.411597 | P | ***684.465439*** | 342.736358 | 667.438890 | 334.223083 | 666.454874 | 333.731075 | 6 |
| 14 | **1790.910547** | 895.958912 | 1773.883998 | 887.445637 | 1772.899982 | 886.953629 | L | ***587.412675*** | 294.209976 | 570.386126 | 285.696701 | 569.402110 | 285.204693 | 5 |
| 15 | 1891.958226 | 946.482751 | 1874.931677 | 937.969477 | 1873.947661 | 937.477469 | T | ***474.328611*** | 237.667944 | 457.302062 | 229.154669 | 456.318046 | 228.662661 | 4 |
| 16 | 2005.042290 | 1003.024783 | 1988.015741 | 994.511509 | 1987.031725 | 994.019501 | L | ***373.280932*** | 187.144104 | 356.254383 | 178.630830 | | | 3 |
| 17 | 2118.126354 | 1059.566815 | 2101.099805 | 1051.053540 | 2100.115789 | 1050.561532 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 18 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QLTSGPNQEQVSPLTLLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 115.6 | 2263.224594 | 0.018874 | QLTSGPNQEQVSPLTLLK |
| 80.5 | 2263.224594 | 0.018874 | QLTSGPNQEQVSPLTLLK |
| 45.3 | 2263.224594 | 0.018874 | QLTSGPNQEQVSPLTLLK |
| 7.0 | 2263.231979 | 0.011489 | LGKKIETIVMIFDCEGLGK |
| 6.4 | 2263.224594 | 0.018874 | GLALSSNKVKSVVMVVFDNEK |

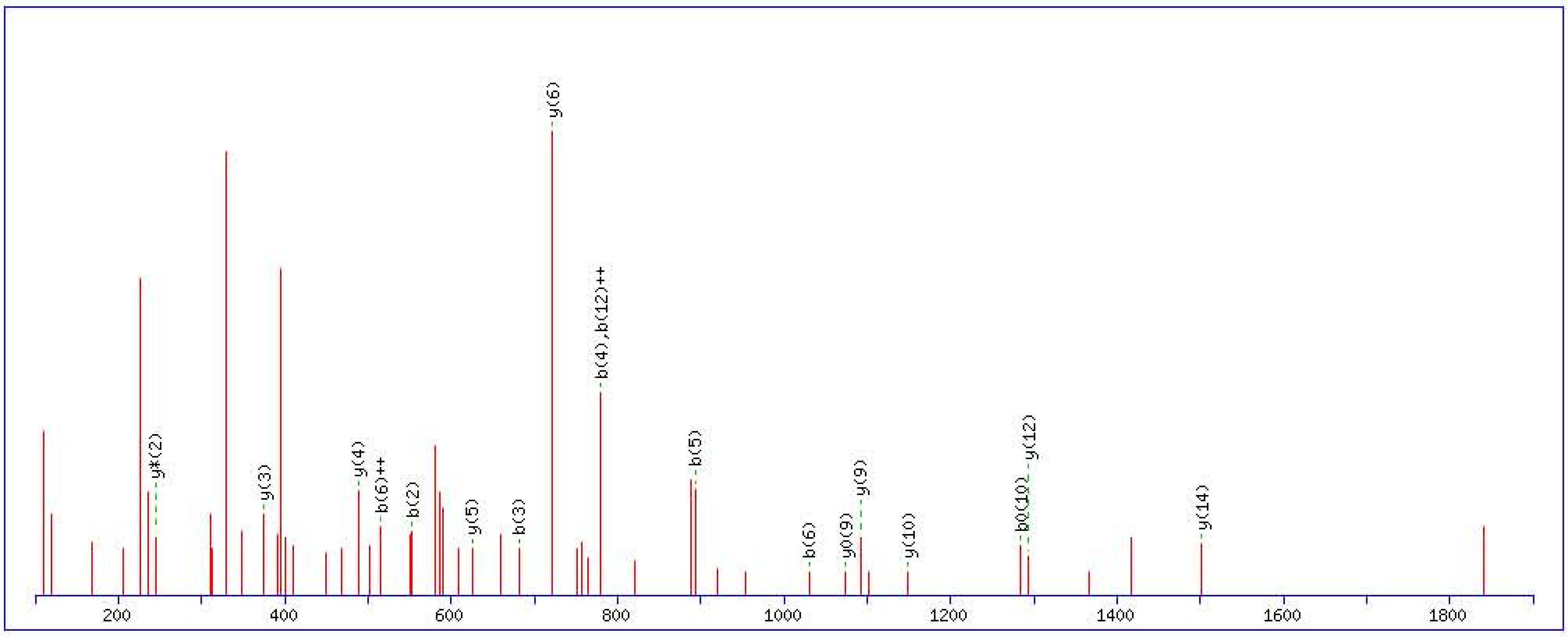
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LQQVLHAGSGPCLPHLLSR**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

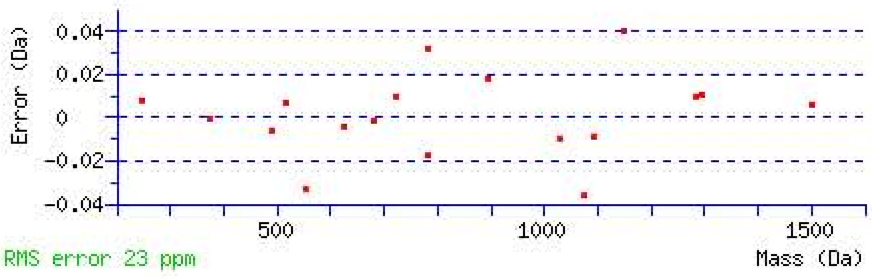
Match to Query 54203: 2393.285896 from(599.328750,4+) rtinseconds(2111) index(6515)
Title: Locus:1.1.1.1544.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●

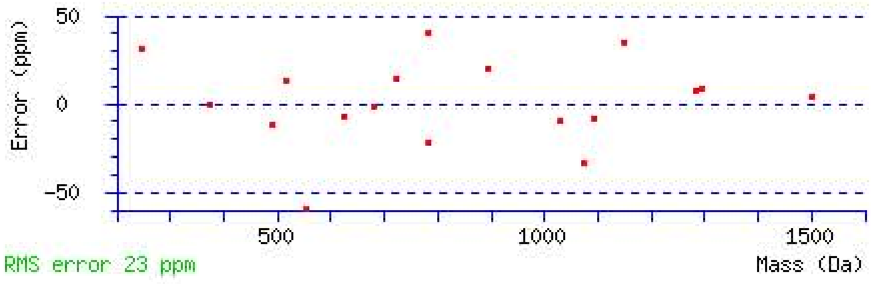


```
Monoisotopic mass of neutral peptide Mr(calc): 2393.282410
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.042
Matches : 18/196 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 19 |
| 2 | ***553.316666*** | 277.161971 | 536.290117 | 268.648697 | | | Q | 2281.205625 | 1141.106450 | 2264.179076 | 1132.593176 | 2263.195060 | 1132.101168 | 18 |
| 3 | ***681.375244*** | 341.191260 | 664.348695 | 332.677986 | | | Q | 1841.980299 | 921.493788 | 1824.953750 | 912.980513 | 1823.969734 | 912.488505 | 17 |
| 4 | ***780.443658*** | 390.725467 | 763.417109 | 382.212193 | | | V | 1713.921721 | 857.464498 | 1696.895172 | 848.951224 | 1695.911156 | 848.459216 | 16 |
| 5 | ***893.527722*** | 447.267499 | 876.501173 | 438.754225 | | | L | 1614.853307 | 807.930292 | 1597.826758 | 799.417017 | 1596.842742 | 798.925009 | 15 |
| 6 | ***1030.586634*** | **515.796955** | 1013.560085 | 507.283681 | | | H | ***1501.769243*** | 751.388260 | 1484.742694 | 742.874985 | 1483.758678 | 742.382977 | 14 |
| 7 | 1101.623748 | 551.315512 | 1084.597199 | 542.802238 | | | A | 1364.710331 | 682.858804 | 1347.683782 | 674.345529 | 1346.699766 | 673.853521 | 13 |
| 8 | 1158.645212 | 579.826244 | 1141.618663 | 571.312970 | | | G | ***1293.673217*** | 647.340247 | 1276.646668 | 638.826972 | 1275.662652 | 638.334964 | 12 |
| 9 | 1245.677240 | 623.342258 | 1228.650691 | 614.828984 | 1227.666675 | 614.336975 | S | 1236.651753 | 618.829515 | 1219.625204 | 610.316240 | 1218.641188 | 609.824232 | 11 |
| 10 | 1302.698704 | 651.852990 | 1285.672155 | 643.339716 | 1284.688139 | 642.847707 | G | ***1149.619725*** | 575.313501 | 1132.593176 | 566.800226 | 1131.609160 | 566.308218 | 10 |
| 11 | 1399.751468 | 700.379372 | 1382.724919 | 691.866098 | 1381.740903 | 691.374089 | P | ***1092.598261*** | 546.802769 | 1075.571712 | 538.289494 | 1074.587696 | 537.797486 | 9 |
| 12 | 1559.782117 | **780.394697** | 1542.755568 | 771.881422 | 1541.771552 | 771.389414 | C | 995.545497 | 498.276387 | 978.518948 | 489.763112 | 977.534932 | 489.271104 | 8 |
| 13 | 1672.866181 | 836.936728 | 1655.839632 | 828.423454 | 1654.855616 | 827.931446 | L | 835.514848 | 418.261062 | 818.488299 | 409.747788 | 817.504283 | 409.255780 | 7 |
| 14 | 1769.918945 | 885.463110 | 1752.892396 | 876.949836 | 1751.908380 | 876.457828 | P | ***722.430784*** | 361.719030 | 705.404235 | 353.205756 | 704.420219 | 352.713748 | 6 |
| 15 | 1906.977857 | 953.992566 | 1889.951308 | 945.479292 | 1888.967292 | 944.987284 | H | ***625.378020*** | 313.192648 | 608.351471 | 304.679374 | 607.367455 | 304.187366 | 5 |
| 16 | 2020.061921 | 1010.534598 | 2003.035372 | 1002.021324 | 2002.051356 | 1001.529316 | L | ***488.319108*** | 244.663192 | 471.292559 | 236.149918 | 470.308543 | 235.657910 | 4 |
| 17 | 2133.145985 | 1067.076630 | 2116.119436 | 1058.563356 | 2115.135420 | 1058.071348 | L | ***375.235044*** | 188.121160 | 358.208495 | 179.607886 | 357.224479 | 179.115878 | 3 |
| 18 | 2220.178013 | 1110.592644 | 2203.151464 | 1102.079370 | 2202.167448 | 1101.587362 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 19 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 23 ppm



RMS error 23 ppm

NCBI **BLAST** search of LQQVLHAGSGPCLPHLLSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.1 | 2393.282410 | 0.003486 | LQQVLHAGSGPCLPHLLSR |
| 25.6 | 2393.282410 | 0.003486 | LQQVLHAGSGPCLPHLLSR |

**Mascot:** http://www.matrixscience.com/

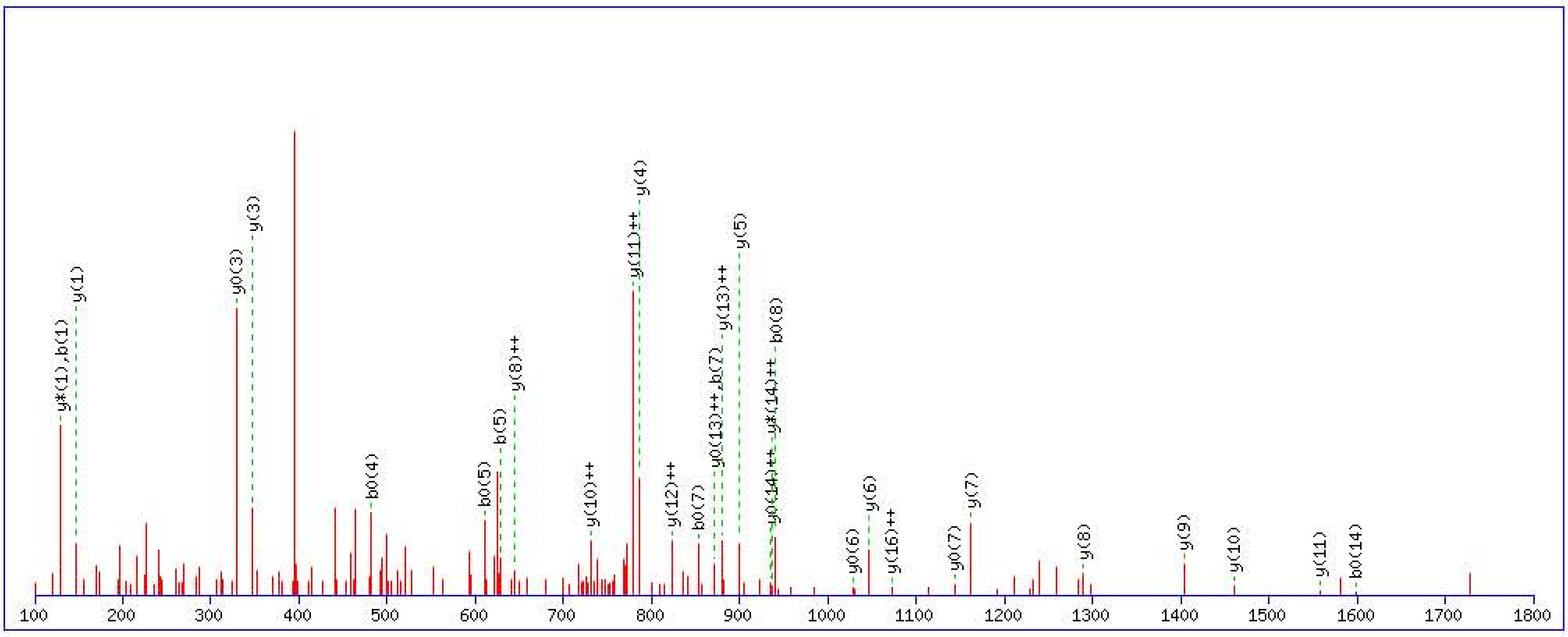
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ELKEQQDSPGNKDFLQSLK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

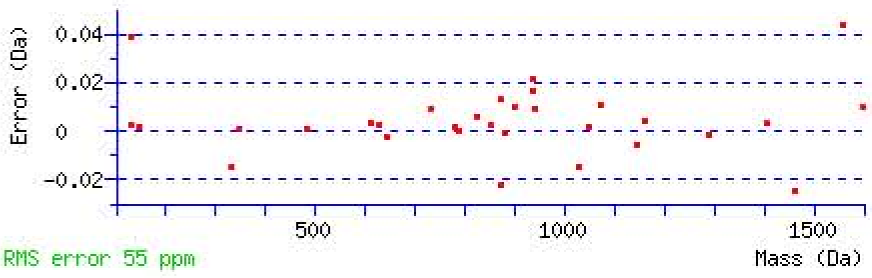
Match to Query 56923: 2514.277136 from(629.576560,4+) rtinseconds(1896) index(5176)
Title: Locus:1.1.1.1469.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

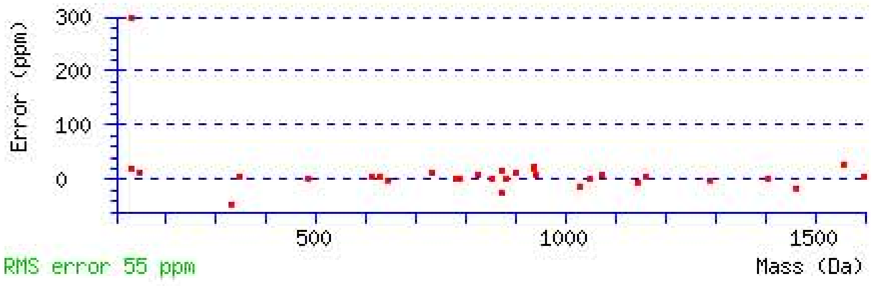
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2514.278793
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.00085
Matches : 31/208 fragment ions using 65 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **130.049869** | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 19 |
| 2 | 243.133933 | 122.070605 | | | 225.123368 | 113.065322 | L | 2386.243508 | 1193.625392 | 2369.216959 | 1185.112117 | 2368.232943 | 1184.620109 | 18 |
| 3 | 371.228896 | 186.118086 | 354.202347 | 177.604812 | 353.218331 | 177.112804 | K | 2273.159444 | 1137.083360 | 2256.132895 | 1128.570085 | 2255.148879 | 1128.078077 | 17 |
| 4 | 500.271489 | 250.639383 | 483.244940 | 242.126108 | 482.260924 | 241.634100 | E | 2145.064481 | 1073.035878 | 2128.037932 | 1064.522604 | 2127.053916 | 1064.030596 | 16 |
| 5 | **628.330067** | 314.668672 | 611.303518 | 306.155397 | 610.319502 | 305.663389 | Q | 2016.021888 | 1008.514582 | 1998.995339 | 1000.001308 | 1998.011323 | 999.509300 | 15 |
| 6 | 756.388645 | 378.697961 | 739.362096 | 370.184686 | 738.378080 | 369.692678 | Q | 1887.963310 | 944.485293 | 1870.936761 | 935.972019 | 1869.952745 | 935.480011 | 14 |
| 7 | **871.415588** | 436.211432 | 854.389039 | 427.698158 | 853.405023 | 427.206150 | D | 1759.904732 | 880.456004 | 1742.878183 | 871.942730 | 1741.894167 | 871.450722 | 13 |
| 8 | 958.447616 | 479.727446 | 941.421067 | 471.214172 | 940.437051 | 470.722164 | S | 1644.877789 | 822.942533 | 1627.851240 | 814.429258 | 1626.867224 | 813.937250 | 12 |
| 9 | 1055.500380 | 528.253828 | 1038.473831 | 519.740554 | 1037.489815 | 519.248545 | P | ***1557.845761*** | 779.426519 | 1540.819212 | 770.913244 | 1539.835196 | 770.421236 | 11 |
| 10 | 1112.521844 | 556.764560 | 1095.495295 | 548.251285 | 1094.511279 | 547.759277 | G | ***1460.792997*** | 730.900137 | 1443.766448 | 722.386862 | 1442.782432 | 721.894854 | 10 |
| 11 | 1226.564771 | 613.786023 | 1209.538222 | 605.272749 | 1208.554206 | 604.780741 | N | ***1403.771533*** | 702.389405 | 1386.744984 | 693.876130 | 1385.760968 | 693.384122 | 9 |
| 12 | 1354.659734 | 677.833505 | 1337.633185 | 669.320230 | 1336.649169 | 668.828222 | K | ***1289.728606*** | 645.367941 | 1272.702057 | 636.854667 | 1271.718041 | 636.362659 | 8 |
| 13 | 1469.686677 | 735.346976 | 1452.660128 | 726.833702 | 1451.676112 | 726.341694 | D | ***1161.633643*** | 581.320460 | 1144.607094 | 572.807185 | 1143.623078 | 572.315177 | 7 |
| 14 | 1616.755091 | 808.881184 | 1599.728542 | 800.367909 | 1598.744526 | 799.875901 | F | ***1046.606700*** | 523.806988 | 1029.580151 | 515.293714 | 1028.596135 | 514.801706 | 6 |
| 15 | 1729.839155 | 865.423215 | 1712.812606 | 856.909941 | 1711.828590 | 856.417933 | L | ***899.538286*** | 450.272781 | 882.511737 | 441.759507 | 881.527721 | 441.267499 | 5 |
| 16 | 2169.064481 | 1085.035878 | 2152.037932 | 1076.522604 | 2151.053916 | 1076.030596 | Q | ***786.454222*** | 393.730749 | 769.427673 | 385.217475 | 768.443657 | 384.725467 | 4 |
| 17 | 2256.096509 | 1128.551892 | 2239.069960 | 1120.038618 | 2238.085944 | 1119.546610 | S | ***347.228896*** | 174.118086 | 330.202347 | 165.604812 | 329.218331 | 165.112804 | 3 |
| 18 | 2369.180573 | 1185.093925 | 2352.154024 | 1176.580650 | 2351.170008 | 1176.088642 | L | 260.196868 | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 19 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of ELKEQQDSPGNKDFLQSLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.7 | 2514.278793 | -0.001657 | ELKEQQDSPGNKDFLQSLK |
| 7.0 | 2514.268951 | 0.008185 | GNSGPPGIVGQKGDPGYPGPAGPK |

**Mascot:** http://www.matrixscience.com/

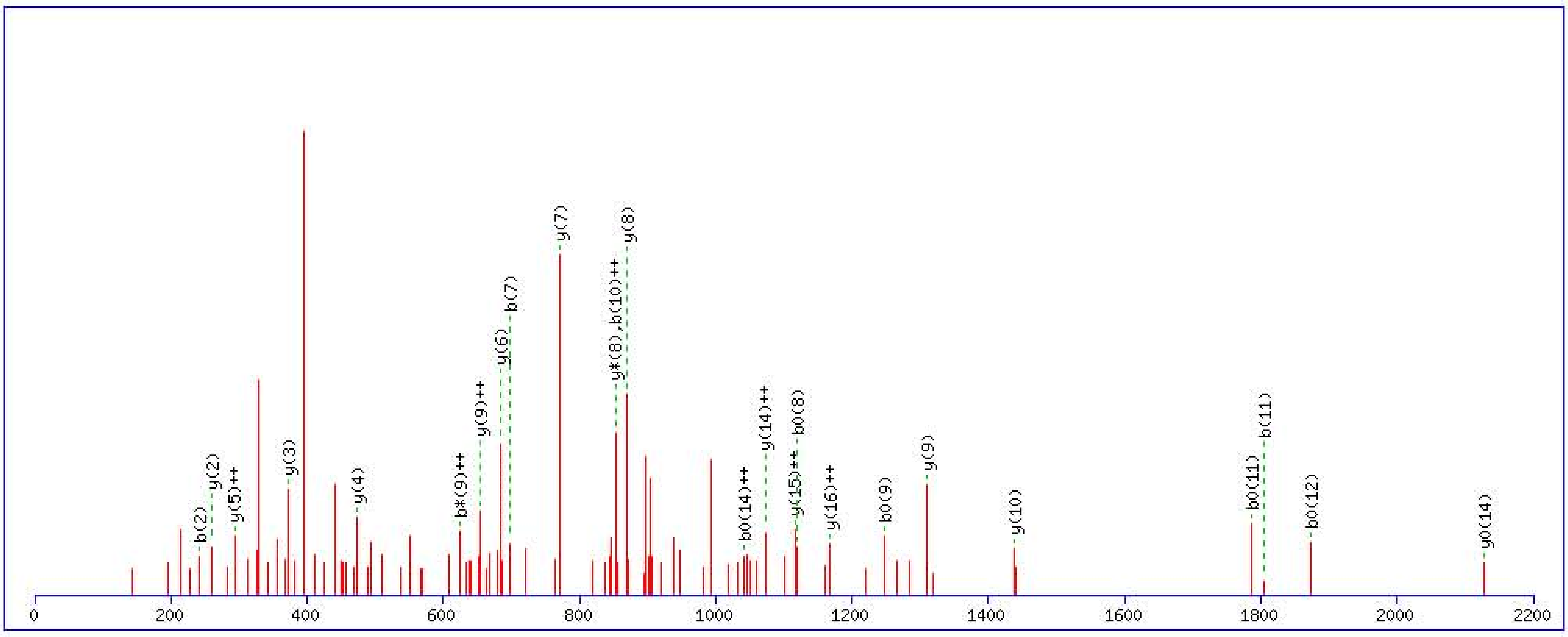
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QLTSGPNQEQVSPLTLLK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

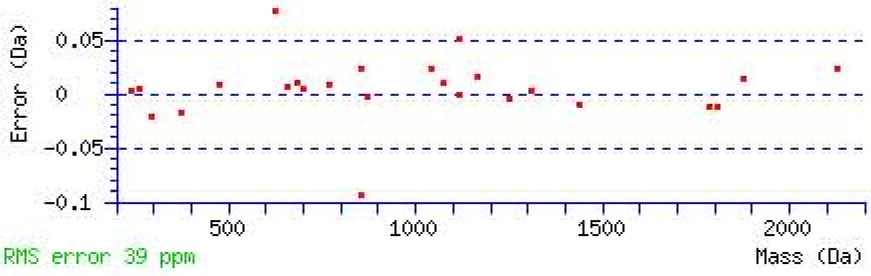
Match to Query 57391: 2574.407772 from(859.143200,3+) rtinseconds(2698) index(9758)
Title: Locus:1.1.1.1748.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

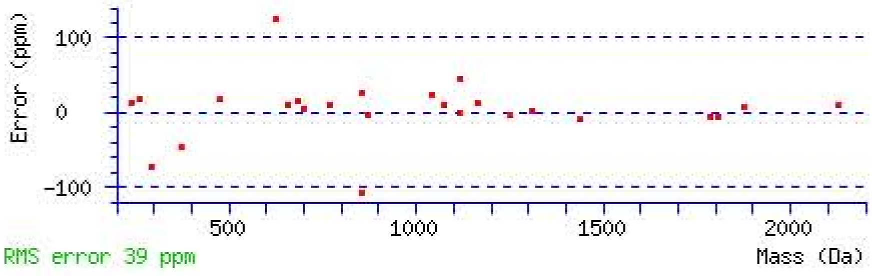
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2574.391342
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.001
Matches : 25/194 fragment ions using 42 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.065854 | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 18 |
| 2 | **242.149918** | 121.578597 | 225.123369 | 113.065323 | | | L | 2447.340052 | 1224.173664 | 2430.313503 | 1215.660389 | 2429.329487 | 1215.168381 | 17 |
| 3 | 343.197597 | 172.102437 | 326.171048 | 163.589162 | 325.187032 | 163.097154 | T | 2334.255988 | 1167.631632 | 2317.229439 | 1159.118357 | 2316.245423 | 1158.626349 | 16 |
| 4 | 430.229625 | 215.618450 | 413.203076 | 207.105176 | 412.219060 | 206.613168 | S | 2233.208309 | 1117.107792 | 2216.181760 | 1108.594518 | 2215.197744 | 1108.102510 | 15 |
| 5 | 487.251089 | 244.129182 | 470.224540 | 235.615908 | 469.240524 | 235.123900 | G | 2146.176281 | 1073.591778 | 2129.149732 | 1065.078504 | 2128.165716 | 1064.586496 | 14 |
| 6 | 584.303853 | 292.655565 | 567.277304 | 284.142290 | 566.293288 | 283.650282 | P | 2089.154817 | 1045.081046 | 2072.128268 | 1036.567772 | 2071.144252 | 1036.075764 | 13 |
| 7 | **698.346780** | 349.677028 | 681.320231 | 341.163753 | 680.336215 | 340.671745 | N | 1992.102053 | 996.554665 | 1975.075504 | 988.041390 | 1974.091488 | 987.549382 | 12 |
| 8 | 1137.572106 | 569.289691 | 1120.545557 | 560.776416 | 1119.561541 | 560.284408 | Q | 1878.059126 | 939.533201 | 1861.032577 | 931.019927 | 1860.048561 | 930.527919 | 11 |
| 9 | 1266.614699 | 633.810988 | 1249.588150 | 625.297713 | 1248.604134 | 624.805705 | E | ***1438.833800*** | 719.920538 | 1421.807251 | 711.407264 | 1420.823235 | 710.915256 | 10 |
| 10 | 1705.840025 | 853.423651 | 1688.813476 | 844.910376 | 1687.829460 | 844.418368 | Q | ***1309.791207*** | 655.399242 | 1292.764658 | 646.885967 | 1291.780642 | 646.393959 | 9 |
| 11 | **1804.908439** | 902.957858 | 1787.881890 | 894.444583 | 1786.897874 | 893.952575 | V | ***870.565881*** | 435.786579 | 853.539332 | 427.273304 | 852.555316 | 426.781296 | 8 |
| 12 | 1891.940467 | 946.473872 | 1874.913918 | 937.960597 | 1873.929902 | 937.468589 | S | ***771.497467*** | 386.252372 | 754.470918 | 377.739097 | 753.486902 | 377.247089 | 7 |
| 13 | 1988.993231 | 995.000254 | 1971.966682 | 986.486979 | 1970.982666 | 985.994971 | P | ***684.465439*** | 342.736358 | 667.438890 | 334.223083 | 666.454874 | 333.731075 | 6 |
| 14 | 2102.077295 | 1051.542285 | 2085.050746 | 1043.029011 | 2084.066730 | 1042.537003 | L | 587.412675 | 294.209976 | 570.386126 | 285.696701 | 569.402110 | 285.204693 | 5 |
| 15 | 2203.124974 | 1102.066125 | 2186.098425 | 1093.552850 | 2185.114409 | 1093.060842 | T | ***474.328611*** | 237.667944 | 457.302062 | 229.154669 | 456.318046 | 228.662661 | 4 |
| 16 | 2316.209038 | 1158.608157 | 2299.182489 | 1150.094882 | 2298.198473 | 1149.602874 | L | ***373.280932*** | 187.144104 | 356.254383 | 178.630830 | | | 3 |
| 17 | 2429.293102 | 1215.150189 | 2412.266553 | 1206.636914 | 2411.282537 | 1206.144906 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 18 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QLTSGPNQEQVSPLTLLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.4 | 2574.391342 | 0.016430 | QLTSGPNQEQVSPLTLLK |
| 28.3 | 2574.391342 | 0.016430 | QLTSGPNQEQVSPLTLLK |
| 9.6 | 2574.391342 | 0.016430 | QLTSGPNQEQVSPLTLLK |

**Mascot:** http://www.matrixscience.com/

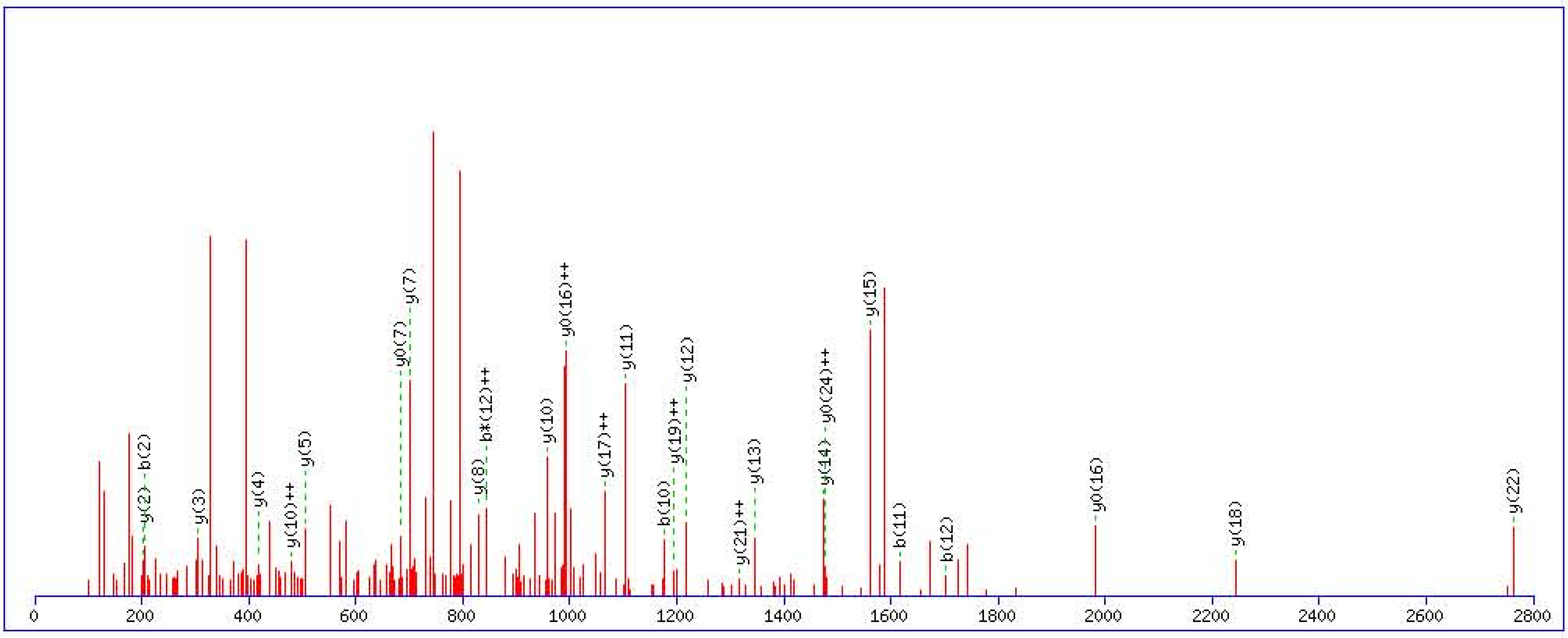
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GFPIKEDFLEQSEQLFGAKPVSLTGK**
Found in **A2AP_HUMAN**, Alpha-2-antiplasmin OS=Homo sapiens GN=SERPINF2 PE=1 SV=3

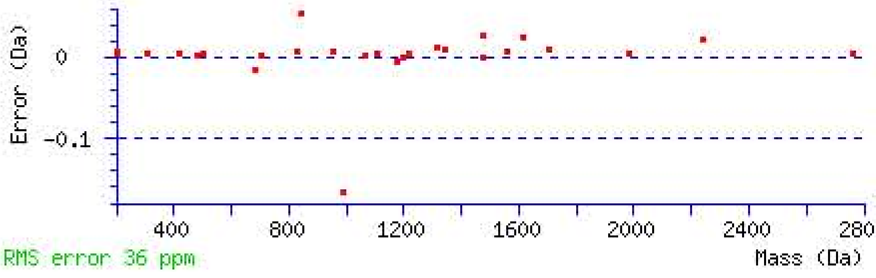
Match to Query 62986: 3175.678376 from(794.926870,4+) rtinseconds(2762) index(10173)
Title: Locus:1.1.1.1770.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

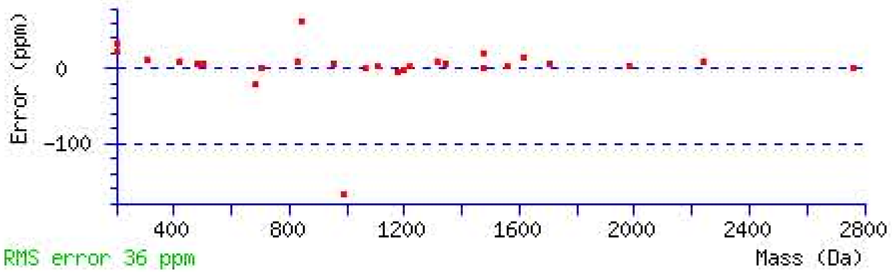
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3175.662750
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q11** : Biotin:Thermo-21345 (Q)
**Ions Score:** 71 **Expect:** 1.6e-006
**Matches** : 27/278 fragment ions using 56 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 26 |
| 2 | **205.097154** | 103.052215 | | | | | F | 3119.648573 | 1560.327924 | 3102.622024 | 1551.814650 | 3101.638008 | 1551.322642 | 25 |
| 3 | 302.149918 | 151.578597 | | | | | P | 2972.580159 | 1486.793717 | 2955.553610 | 1478.280443 | 2954.569594 | 1477.788435 | 24 |
| 4 | 415.233982 | 208.120629 | | | | | I | 2875.527395 | 1438.267335 | 2858.500846 | 1429.754061 | 2857.516830 | 1429.262053 | 23 |
| 5 | 543.328945 | 272.168111 | 526.302396 | 263.654836 | | | K | ***2762.443331*** | 1381.725303 | 2745.416782 | 1373.212029 | 2744.432766 | 1372.720021 | 22 |
| 6 | 672.371538 | 336.689407 | 655.344989 | 328.176133 | 654.360973 | 327.684125 | E | 2634.348368 | 1317.677822 | 2617.321819 | 1309.164547 | 2616.337803 | 1308.672539 | 21 |
| 7 | 787.398481 | 394.202879 | 770.371932 | 385.689604 | 769.387916 | 385.197596 | D | 2505.305775 | 1253.156525 | 2488.279226 | 1244.643251 | 2487.295210 | 1244.151243 | 20 |
| 8 | 934.466895 | 467.737086 | 917.440346 | 459.223811 | 916.456330 | 458.731803 | F | 2390.278832 | 1195.643054 | 2373.252283 | 1187.129779 | 2372.268267 | 1186.637771 | 19 |
| 9 | 1047.550959 | 524.279117 | 1030.524410 | 515.765843 | 1029.540394 | 515.273835 | L | ***2243.210418*** | 1122.108847 | 2226.183869 | 1113.595572 | 2225.199853 | 1113.103564 | 18 |
| 10 | **1176.593552** | 588.800414 | 1159.567003 | 580.287140 | 1158.582987 | 579.795132 | E | 2130.126354 | 1065.566815 | 2113.099805 | 1057.053540 | 2112.115789 | 1056.561532 | 17 |
| 11 | **1615.818878** | 808.413077 | 1598.792329 | 799.899803 | 1597.808313 | 799.407795 | Q | 2001.083761 | 1001.045519 | 1984.057212 | 992.532244 | 1983.073196 | 992.040236 | 16 |
| 12 | **1702.850906** | 851.929091 | 1685.824357 | 843.415817 | 1684.840341 | 842.923809 | S | ***1561.858435*** | 781.432856 | 1544.831886 | 772.919581 | 1543.847870 | 772.427573 | 15 |
| 13 | 1831.893499 | 916.450388 | 1814.866950 | 907.937113 | 1813.882934 | 907.445105 | E | ***1474.826407*** | 737.916842 | 1457.799858 | 729.403567 | 1456.815842 | 728.911559 | 14 |
| 14 | 1959.952077 | 980.479677 | 1942.925528 | 971.966402 | 1941.941512 | 971.474394 | Q | ***1345.783814*** | 673.395545 | 1328.757265 | 664.882271 | 1327.773249 | 664.390263 | 13 |
| 15 | 2073.036141 | 1037.021709 | 2056.009592 | 1028.508434 | 2055.025576 | 1028.016426 | L | ***1217.725236*** | 609.366256 | 1200.698687 | 600.852982 | 1199.714671 | 600.360974 | 12 |
| 16 | 2220.104555 | 1110.555916 | 2203.078006 | 1102.042641 | 2202.093990 | 1101.550633 | F | ***1104.641172*** | 552.824224 | 1087.614623 | 544.310949 | 1086.630607 | 543.818941 | 11 |
| 17 | 2277.126019 | 1139.066648 | 2260.099470 | 1130.553373 | 2259.115454 | 1130.061365 | G | ***957.572758*** | 479.290017 | 940.546209 | 470.776743 | 939.562193 | 470.284735 | 10 |
| 18 | 2348.163133 | 1174.585205 | 2331.136584 | 1166.071930 | 2330.152568 | 1165.579922 | A | 900.551294 | 450.779285 | 883.524745 | 442.266011 | 882.540729 | 441.774003 | 9 |
| 19 | 2476.258096 | 1238.632686 | 2459.231547 | 1230.119412 | 2458.247531 | 1229.627404 | K | ***829.514180*** | 415.260728 | 812.487631 | 406.747453 | 811.503615 | 406.255445 | 8 |
| 20 | 2573.310860 | 1287.159068 | 2556.284311 | 1278.645794 | 2555.300295 | 1278.153786 | P | ***701.419217*** | 351.213246 | 684.392668 | 342.699972 | 683.408652 | 342.207964 | 7 |
| 21 | 2672.379274 | 1336.693275 | 2655.352725 | 1328.180001 | 2654.368709 | 1327.687993 | V | 604.366453 | 302.686864 | 587.339904 | 294.173590 | 586.355888 | 293.681582 | 6 |
| 22 | 2759.411302 | 1380.209289 | 2742.384753 | 1371.696015 | 2741.400737 | 1371.204007 | S | ***505.298039*** | 253.152657 | 488.271490 | 244.639383 | 487.287474 | 244.147375 | 5 |
| 23 | 2872.495366 | 1436.751321 | 2855.468817 | 1428.238047 | 2854.484801 | 1427.746039 | L | ***418.266011*** | 209.636643 | 401.239462 | 201.123369 | 400.255446 | 200.631361 | 4 |
| 24 | 2973.543045 | 1487.275161 | 2956.516496 | 1478.761886 | 2955.532480 | 1478.269878 | T | ***305.181947*** | 153.094611 | 288.155398 | 144.581337 | 287.171382 | 144.089329 | 3 |
| 25 | 3030.564509 | 1515.785893 | 3013.537960 | 1507.272618 | 3012.553944 | 1506.780610 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 26 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GFPIKEDFLEQSEQLFGAKPVSLTGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 71.2 | 3175.662750 | 0.015626 | GFPIKEDFLEQSEQLFGAKPVSLTGK |
| 37.4 | 3175.662750 | 0.015626 | GFPIKEDFLEQSEQLFGAKPVSLTGK |

**Mascot:** http://www.matrixscience.com/

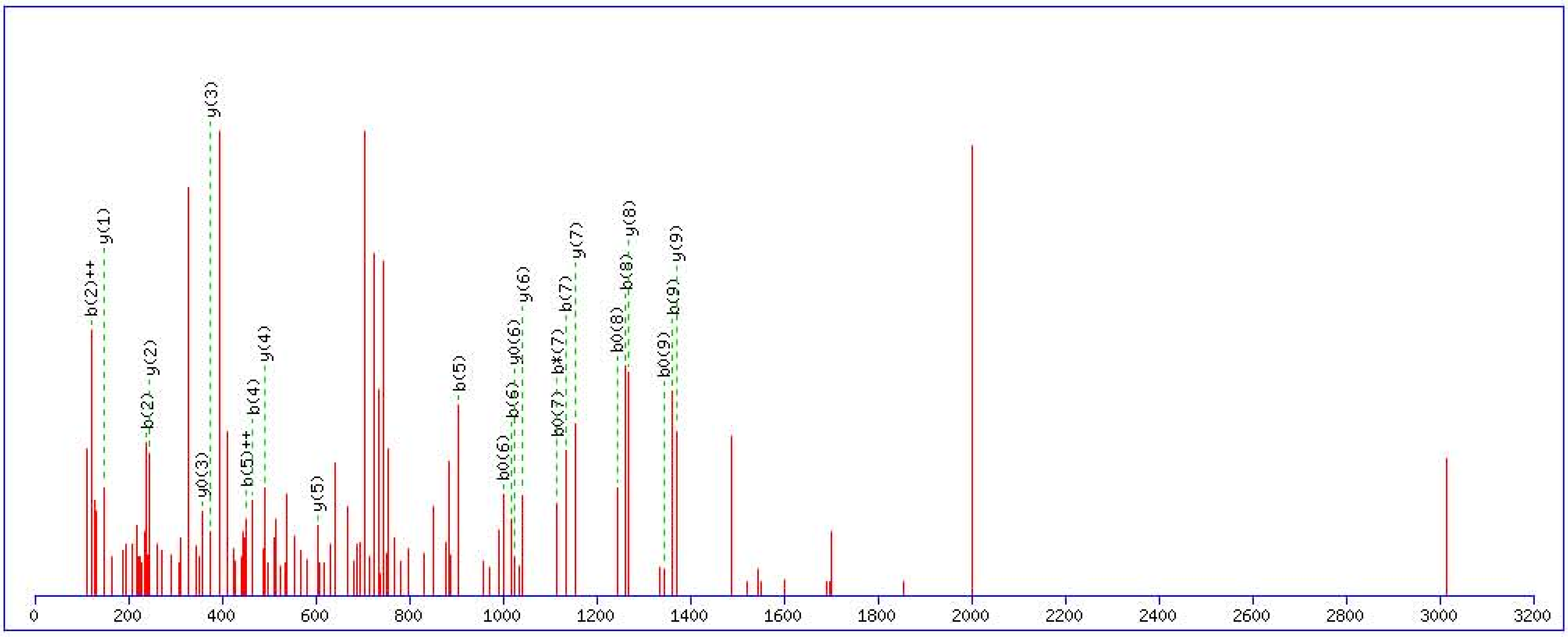
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HTLNQIDEVK**
Found in **FETUA_HUMAN**, Alpha-2-HS-glycoprotein OS=Homo sapiens GN=AHSG PE=1 SV=1

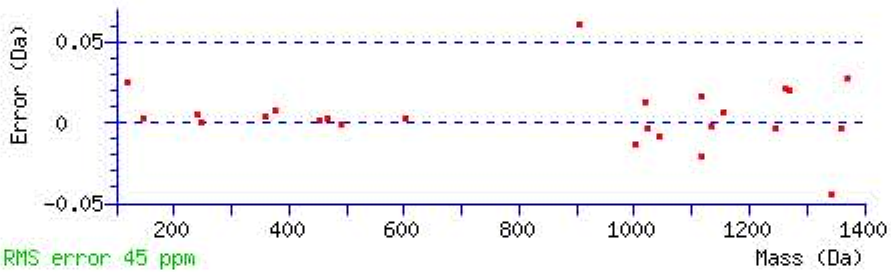
Match to Query 34068: 1506.778888 from(754.396720,2+) rtinseconds(1576) index(18994)
Title: Locus:1.1.1.551.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

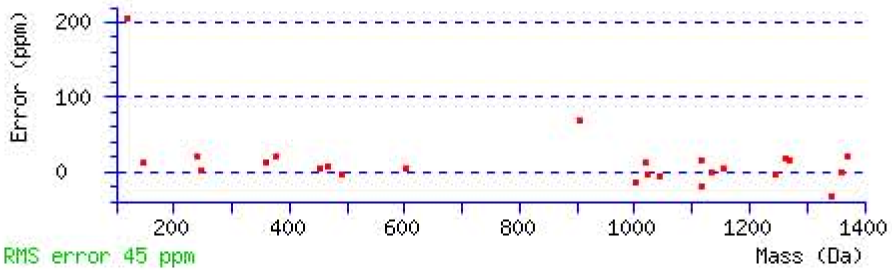
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1506.786438
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 6.6e-005
Matches : 25/96 fragment ions using 52 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 10 |
| 2 | **239.113867** | **120.060571** | | | 221.103302 | 111.055289 | T | ***1370.734814*** | 685.871045 | 1353.708265 | 677.357771 | 1352.724249 | 676.865763 | 9 |
| 3 | 352.197931 | 176.602603 | | | 334.187366 | 167.597321 | L | ***1269.687135*** | 635.347206 | 1252.660586 | 626.833931 | 1251.676570 | 626.341923 | 8 |
| 4 | **466.240858** | 233.624067 | 449.214309 | 225.110793 | 448.230293 | 224.618785 | N | ***1156.603071*** | 578.805174 | 1139.576522 | 570.291899 | 1138.592506 | 569.799891 | 7 |
| 5 | **905.466184** | **453.236730** | 888.439635 | 444.723456 | 887.455619 | 444.231448 | Q | ***1042.560144*** | 521.783710 | 1025.533595 | 513.270436 | 1024.549579 | 512.778428 | 6 |
| 6 | **1018.550248** | 509.778762 | 1001.523699 | 501.265488 | 1000.539683 | 500.773480 | I | ***603.334818*** | 302.171047 | 586.308269 | 293.657773 | 585.324253 | 293.165765 | 5 |
| 7 | **1133.577191** | 567.292234 | 1116.550642 | 558.778959 | 1115.566626 | 558.286951 | D | ***490.250754*** | 245.629015 | 473.224205 | 237.115741 | 472.240189 | 236.623733 | 4 |
| 8 | **1262.619784** | 631.813530 | 1245.593235 | 623.300256 | 1244.609219 | 622.808248 | E | ***375.223811*** | 188.115544 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 9 | **1361.688198** | 681.347737 | 1344.661649 | 672.834463 | 1343.677633 | 672.342455 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of HTLNQIDEVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.2 | 1506.786438 | -0.007550 | HTLNQIDEVK |
| 5.3 | 1506.779037 | -0.000149 | EHQALQDLVDLAR |
| 3.8 | 1506.790253 | -0.011365 | SSRFLKEGNNLSR |
| 2.5 | 1506.771149 | 0.007739 | GEKSSMERLLTEK |
| 2.1 | 1506.767792 | 0.011096 | SGTEYPENLRTLK |
| 1.8 | 1506.765320 | 0.013568 | KPPWHLCVDVEK |
| 1.3 | 1506.772507 | 0.006381 | QHISRNAQDK |
| 1.1 | 1506.759964 | 0.018924 | QQVTMVSDTEILK |
| 0.5 | 1506.756577 | 0.022311 | ITFDSEQLQEAVK |

**Mascot:** http://www.matrixscience.com/

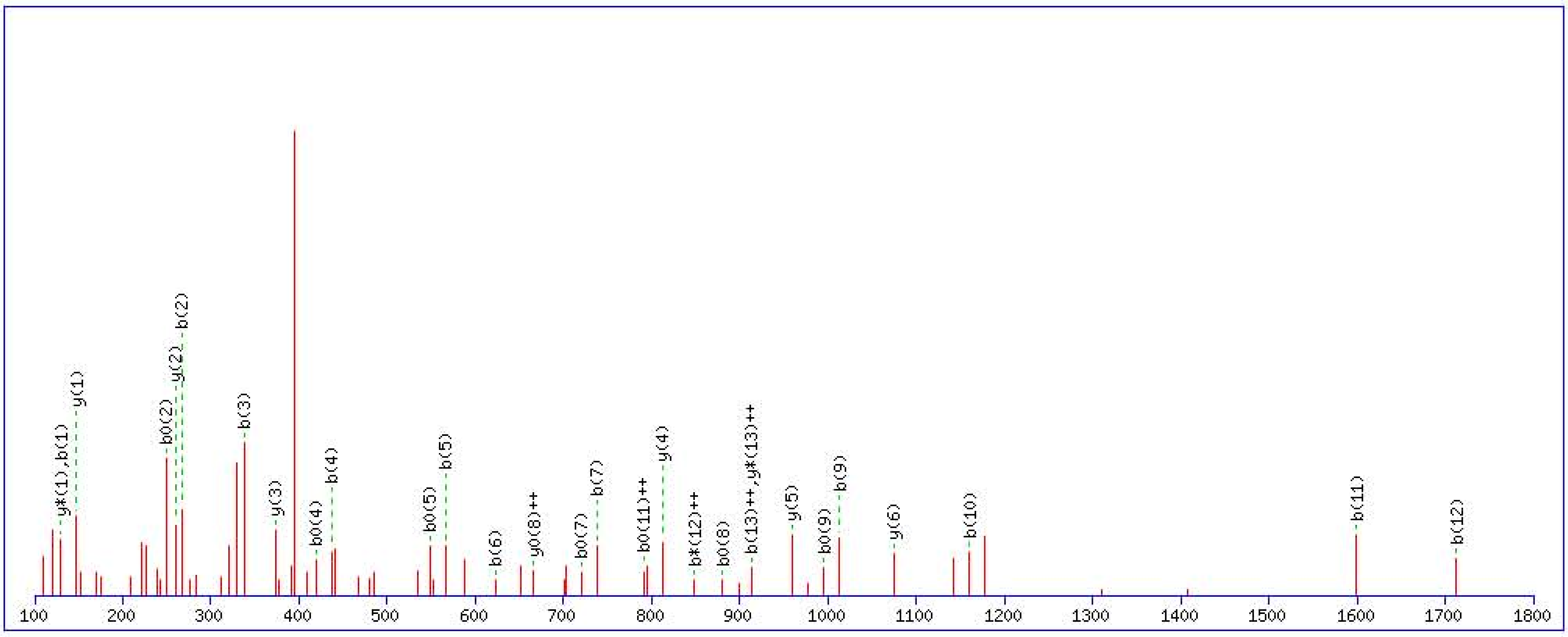
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EHAVEGDCDFQLLK**
Found in **FETUA_HUMAN**, Alpha-2-HS-glycoprotein OS=Homo sapiens GN=AHSG PE=1 SV=1

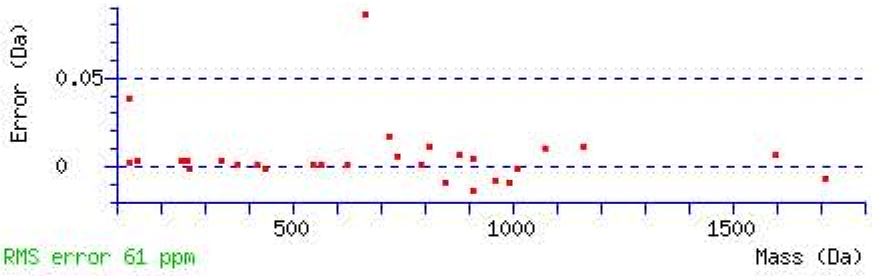
Match to Query 45981: 1970.925192 from(657.982340,3+) rtinseconds(2071) index(6273)
Title: Locus:1.1.1.1530.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

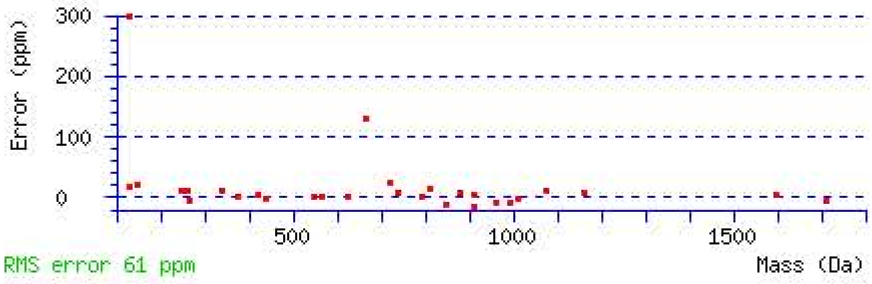
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1970.923019
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 69  Expect: 4.3e-007
Matches : 29/126 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***130.049869*** | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 14 |
| 2 | ***267.108781*** | 134.058028 | | | 249.098216 | 125.052746 | H | 1842.887704 | 921.947490 | 1825.861155 | 913.434216 | 1824.877139 | 912.942207 | 13 |
| 3 | ***338.145895*** | 169.576585 | | | 320.135330 | 160.571303 | A | 1705.828792 | 853.418034 | 1688.802243 | 844.904760 | 1687.818227 | 844.412752 | 12 |
| 4 | ***437.214309*** | 219.110792 | | | 419.203744 | 210.105510 | V | 1634.791678 | 817.899477 | 1617.765129 | 809.386203 | 1616.781113 | 808.894195 | 11 |
| 5 | ***566.256902*** | 283.632089 | | | 548.246337 | 274.626807 | E | 1535.723264 | 768.365270 | 1518.696715 | 759.851996 | 1517.712699 | 759.359988 | 10 |
| 6 | ***623.278366*** | 312.142821 | | | 605.267801 | 303.137539 | G | 1406.680671 | 703.843974 | 1389.654122 | 695.330699 | 1388.670106 | 694.838691 | 9 |
| 7 | ***738.305309*** | 369.656293 | | | 720.294744 | 360.651010 | D | 1349.659207 | 675.333241 | 1332.632658 | 666.819967 | 1331.648642 | 666.327959 | 8 |
| 8 | 898.335958 | 449.671617 | | | 880.325393 | 440.666335 | C | 1234.632264 | 617.819770 | 1217.605715 | 609.306496 | 1216.621699 | 608.814488 | 7 |
| 9 | ***1013.362901*** | 507.185089 | | | 995.352336 | 498.179806 | D | **1074.601615** | 537.804446 | 1057.575066 | 529.291171 | 1056.591050 | 528.799163 | 6 |
| 10 | ***1160.431315*** | 580.719296 | | | 1142.420750 | 571.714013 | F | **959.574672** | 480.290974 | 942.548123 | 471.777700 | | | 5 |
| 11 | ***1599.656641*** | 800.331959 | 1582.630092 | 791.818684 | 1581.646076 | 791.326676 | Q | **812.506258** | 406.756767 | 795.479709 | 398.243493 | | | 4 |
| 12 | ***1712.740705*** | 856.873991 | 1695.714156 | 848.360716 | 1694.730140 | 847.868708 | L | **373.280932** | 187.144104 | 356.254383 | 178.630829 | | | 3 |
| 13 | 1825.824769 | 913.416023 | 1808.798220 | 904.902748 | 1807.814204 | 904.410740 | L | **260.196868** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 14 | | | | | | | K | **147.112804** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EHAVEGDCDFQLLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 69.2 | 1970.923019 | 0.002173 | EHAVEGDCDFQLLK |
| 1.3 | 1970.905258 | 0.019934 | LDFNMTTNHSFMCLIK |

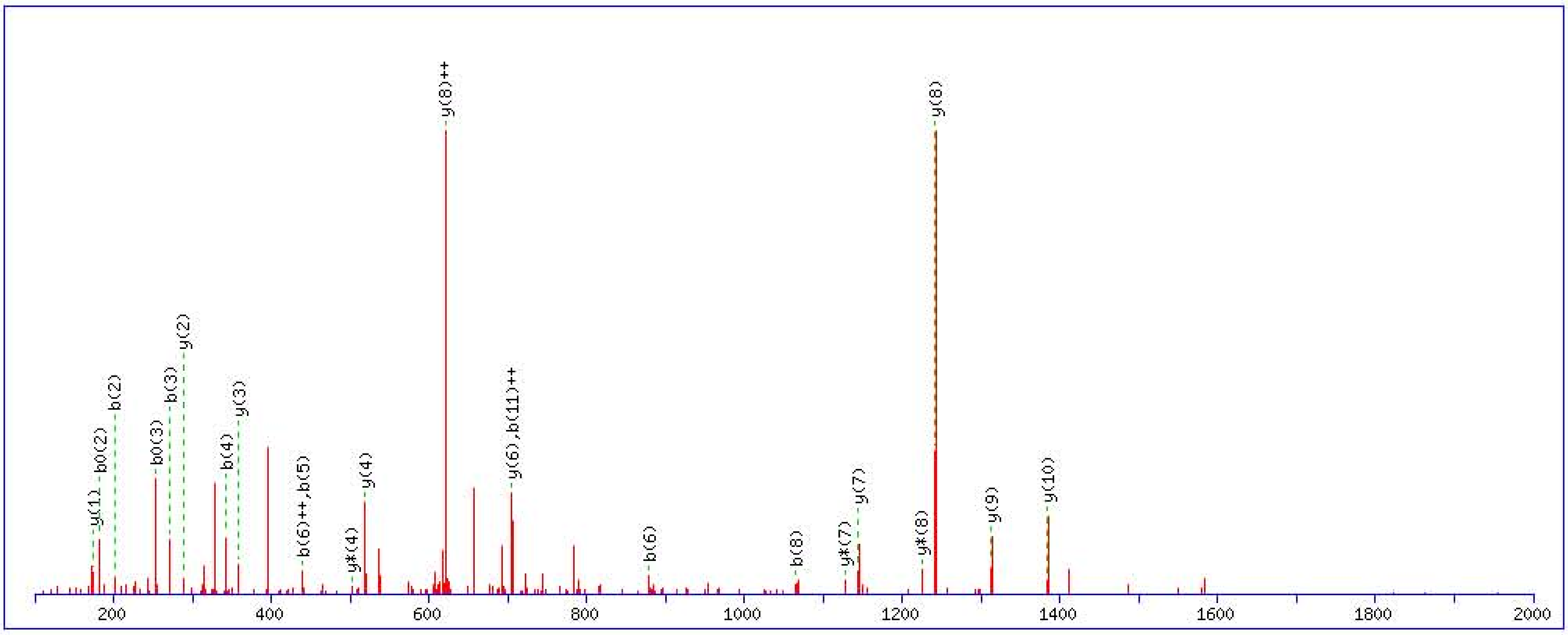
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VTAAPQSVCALR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

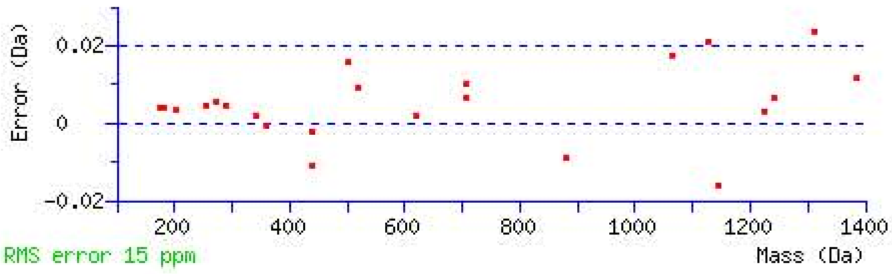
Match to Query 36296: 1582.833728 from(792.424140,2+) rtinseconds(1806) index(20396)
Title: Locus:1.1.1.631.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

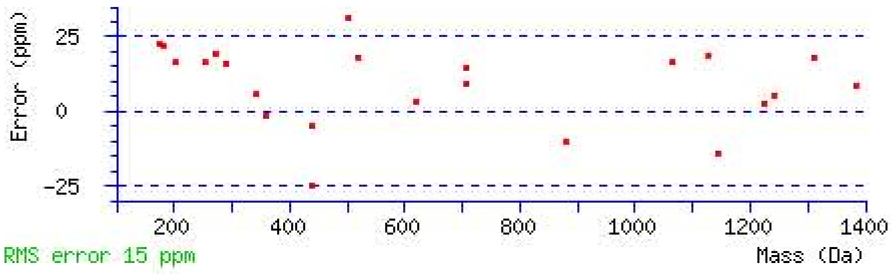
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1582.832352
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 37  Expect: 0.00044
Matches : 23/110 fragment ions using 56 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 12 |
| 2 | **201.123369** | 101.065322 | | | 183.112804 | 92.060040 | T | 1484.771218 | 742.889247 | 1467.744669 | 734.375972 | 1466.760653 | 733.883964 | 11 |
| 3 | **272.160483** | 136.583879 | | | 254.149918 | 127.578597 | A | ***1383.723539*** | 692.365407 | 1366.696990 | 683.852133 | 1365.712974 | 683.360125 | 10 |
| 4 | **343.197597** | 172.102437 | | | 325.187032 | 163.097154 | A | ***1312.686425*** | 656.846850 | 1295.659876 | 648.333576 | 1294.675860 | 647.841568 | 9 |
| 5 | **440.250361** | 220.628819 | | | 422.239796 | 211.623536 | P | ***1241.649311*** | 621.328293 | 1224.622762 | 612.815019 | 1223.638746 | 612.323011 | 8 |
| 6 | **879.475687** | **440.241482** | 862.449138 | 431.728207 | 861.465122 | 431.236199 | Q | ***1144.596547*** | 572.801911 | 1127.569998 | 564.288637 | 1126.585982 | 563.796629 | 7 |
| 7 | 966.507715 | 483.757496 | 949.481166 | 475.244221 | 948.497150 | 474.752213 | S | ***705.371221*** | 353.189248 | 688.344672 | 344.675974 | 687.360656 | 344.183966 | 6 |
| 8 | **1065.576129** | 533.291703 | 1048.549580 | 524.778428 | 1047.565564 | 524.286420 | V | 618.339193 | 309.673234 | 601.312644 | 301.159960 | | | 5 |
| 9 | 1225.606778 | 613.307027 | 1208.580229 | 604.793753 | 1207.596213 | 604.301745 | C | ***519.270779*** | 260.139028 | 502.244230 | 251.625753 | | | 4 |
| 10 | 1296.643892 | 648.825584 | 1279.617343 | 640.312310 | 1278.633327 | 639.820302 | A | ***359.240130*** | 180.123703 | 342.213581 | 171.610428 | | | 3 |
| 11 | 1409.727956 | **705.367616** | 1392.701407 | 696.854342 | 1391.717391 | 696.362333 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VTAAPQSVCALR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.0 | 1582.832352 | 0.001376 | VTAAPQSVCALR |
| 1.2 | 1582.846710 | -0.012982 | LVEHLLDPSRYNK |

**Mascot:** http://www.matrixscience.com/

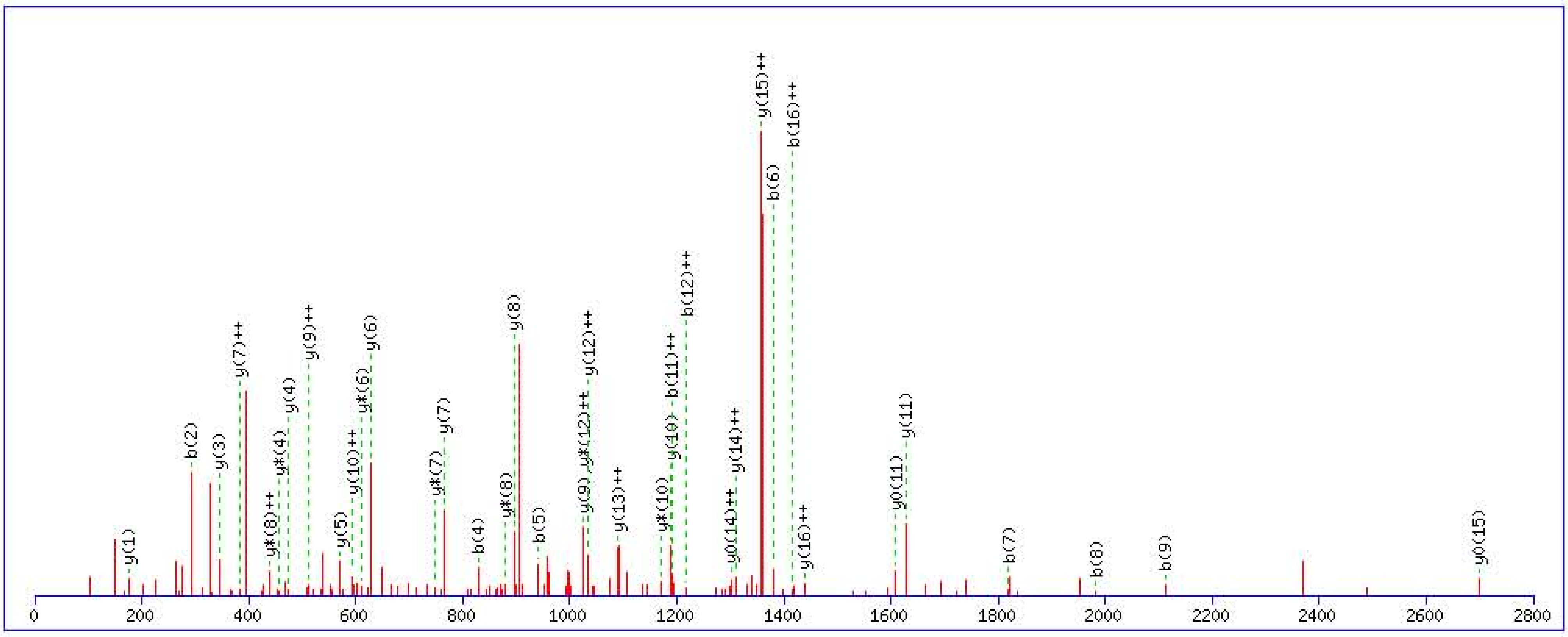
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MCPQLQQYEMHGPEGLR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

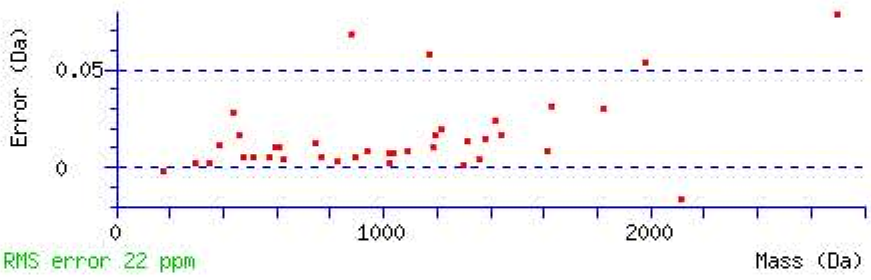
Match to Query 47425: 3006.443742 from(1003.155190,3+) rtinseconds(2332) index(38404)
Title: Locus:1.1.1.3231.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

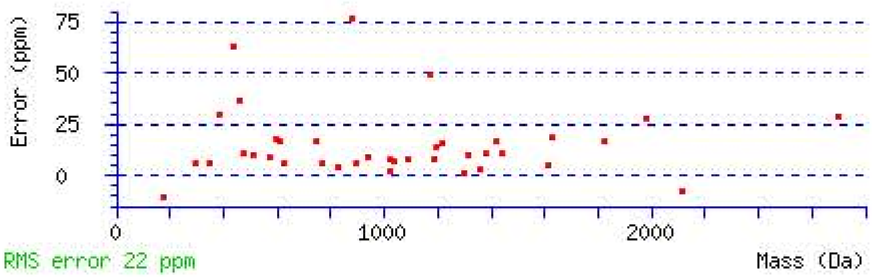
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3006.423264
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4     : Biotin:Thermo-21345 (Q)
Q6     : Biotin:Thermo-21345 (Q)
Q7     : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.021
Matches : 38/164 fragment ions using 102 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 17 |
| 2 | **292.078410** | 146.542843 | | | | | C | 2876.390075 | 1438.698675 | 2859.363526 | 1430.185401 | 2858.379510 | 1429.693393 | 16 |
| 3 | 389.131174 | 195.069225 | | | | | P | 2716.359426 | 1358.683351 | 2699.332877 | 1350.170076 | 2698.348861 | 1349.678068 | 15 |
| 4 | **828.356500** | 414.681888 | 811.329951 | 406.168614 | | | Q | 2619.306662 | 1310.156969 | 2602.280113 | 1301.643694 | 2601.296097 | 1301.151686 | 14 |
| 5 | **941.440564** | 471.223920 | 924.414015 | 462.710646 | | | L | 2180.081336 | 1090.544306 | 2163.054787 | 1082.031031 | 2162.070771 | 1081.539023 | 13 |
| 6 | **1380.665890** | 690.836583 | 1363.639341 | 682.323309 | | | Q | 2066.997272 | 1034.002274 | 2049.970723 | 1025.488999 | 2048.986707 | 1024.996991 | 12 |
| 7 | **1819.891216** | 910.449246 | 1802.864667 | 901.935972 | | | Q | ***1627.771946*** | 814.389611 | 1610.745397 | 805.876337 | 1609.761381 | 805.384329 | 11 |
| 8 | **1982.954545** | 991.980911 | 1965.927996 | 983.467636 | | | Y | ***1188.546620*** | 594.776948 | 1171.520071 | 586.263674 | 1170.536055 | 585.771666 | 10 |
| 9 | **2111.997138** | 1056.502207 | 2094.970589 | 1047.988932 | 2093.986573 | 1047.496925 | E | ***1025.483291*** | 513.245284 | 1008.456742 | 504.732009 | 1007.472726 | 504.240001 | 9 |
| 10 | 2243.037623 | 1122.022450 | 2226.011074 | 1113.509175 | 2225.027058 | 1113.017167 | M | ***896.440698*** | 448.723987 | 879.414149 | 440.210713 | 878.430133 | 439.718705 | 8 |
| 11 | 2380.096535 | **1190.551906** | 2363.069986 | 1182.038631 | 2362.085970 | 1181.546623 | H | ***765.400213*** | 383.203745 | 748.373664 | 374.690470 | 747.389648 | 374.198462 | 7 |
| 12 | 2437.117999 | **1219.062637** | 2420.091450 | 1210.549363 | 2419.107434 | 1210.057355 | G | ***628.341301*** | 314.674289 | 611.314752 | 306.161014 | 610.330736 | 305.669006 | 6 |
| 13 | 2534.170763 | 1267.589019 | 2517.144214 | 1259.075745 | 2516.160198 | 1258.583737 | P | ***571.319837*** | 286.163557 | 554.293288 | 277.650282 | 553.309272 | 277.158274 | 5 |
| 14 | 2663.213356 | 1332.110316 | 2646.186807 | 1323.597041 | 2645.202791 | 1323.105034 | E | ***474.267073*** | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 15 | 2720.234820 | 1360.621048 | 2703.208271 | 1352.107773 | 2702.224255 | 1351.615766 | G | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 16 | 2833.318884 | **1417.163080** | 2816.292335 | 1408.649806 | 2815.308319 | 1408.157798 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MCPQLQQYEMHGPEGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

#### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.7 | 3006.423264 | 0.020478 | MCPQLQQYEMHGPEGLR |

**Mascot:** http://www.matrixscience.com/

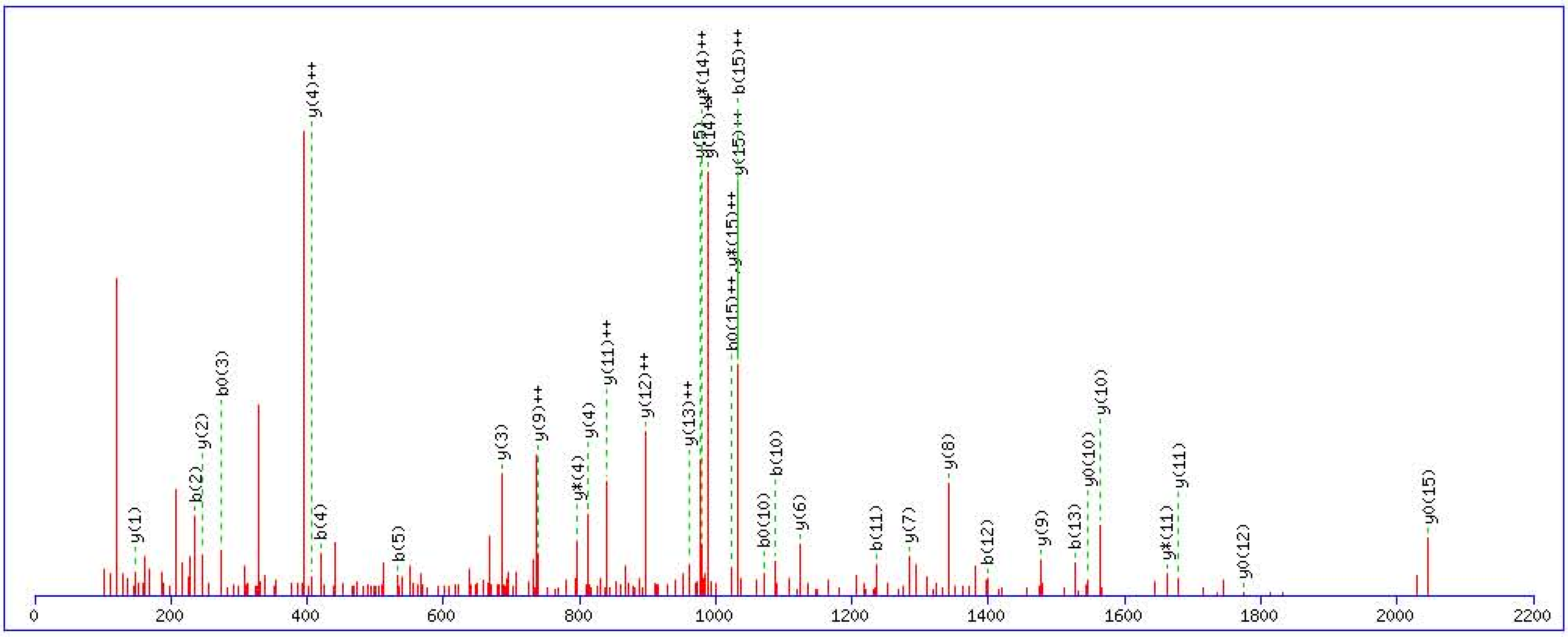
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **FSGQLNSHGCFYQQVK**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

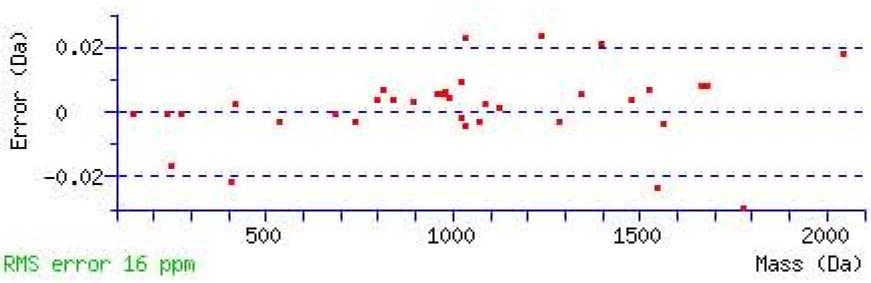
Match to Query 51197: 2210.043942 from(737.688590,3+) rtinseconds(1863) index(35359)
Title: Locus:1.1.1.3068.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

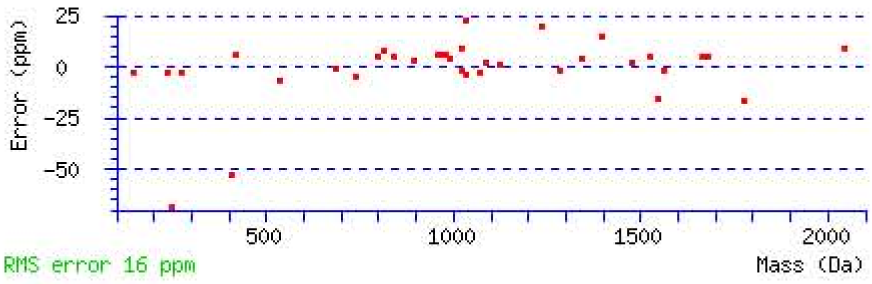
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2210.040131
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q14** : Biotin:Thermo-21345 (Q)
**Ions Score:** 46 **Expect:** 0.00045
**Matches** : 36/154 fragment ions using 87 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 16 |
| 2 | **235.107718** | 118.057497 | | | 217.097153 | 109.052214 | S | 2063.978979 | 1032.493127 | 2046.952430 | 1023.979853 | 2045.968414 | 1023.487845 | 15 |
| 3 | 292.129182 | 146.568229 | | | 274.118617 | 137.562946 | G | 1976.946951 | 988.977114 | 1959.920402 | 980.463839 | 1958.936386 | 979.971831 | 14 |
| 4 | **420.187760** | 210.597518 | 403.161211 | 202.084243 | 402.177195 | 201.592235 | Q | 1919.925487 | 960.466382 | 1902.898938 | 951.953107 | 1901.914922 | 951.461099 | 13 |
| 5 | **533.271824** | 267.139550 | 516.245275 | 258.626276 | 515.261259 | 258.134268 | L | 1791.866909 | 896.437093 | 1774.840360 | 887.923818 | 1773.856344 | 887.431810 | 12 |
| 6 | 647.314751 | 324.161014 | 630.288202 | 315.647739 | 629.304186 | 315.155731 | N | ***1678.782845*** | 839.895061 | 1661.756296 | 831.381786 | 1660.772280 | 830.889778 | 11 |
| 7 | 734.346779 | 367.677028 | 717.320230 | 359.163753 | 716.336214 | 358.671745 | S | ***1564.739918*** | 782.873597 | 1547.713369 | 774.360323 | 1546.729353 | 773.868315 | 10 |
| 8 | 871.405691 | 436.206483 | 854.379142 | 427.693209 | 853.395126 | 427.201201 | H | ***1477.707890*** | 739.357583 | 1460.681341 | 730.844309 | | | 9 |
| 9 | 928.427155 | 464.717216 | 911.400606 | 456.203941 | 910.416590 | 455.711933 | G | ***1340.648978*** | 670.828127 | 1323.622429 | 662.314853 | | | 8 |
| 10 | **1088.457804** | 544.732540 | 1071.431255 | 536.219266 | 1070.447239 | 535.727257 | C | ***1283.627514*** | 642.317395 | 1266.600965 | 633.804121 | | | 7 |
| 11 | **1235.526218** | 618.266747 | 1218.499669 | 609.753473 | 1217.515653 | 609.261464 | F | ***1123.596865*** | 562.302071 | 1106.570316 | 553.788796 | | | 6 |
| 12 | **1398.589547** | 699.798412 | 1381.562998 | 691.285137 | 1380.578982 | 690.793129 | Y | ***976.528451*** | 488.767864 | 959.501902 | 480.254589 | | | 5 |
| 13 | **1526.648125** | 763.827700 | 1509.621576 | 755.314426 | 1508.637560 | 754.822418 | Q | ***813.465122*** | 407.236199 | 796.438573 | 398.722925 | | | 4 |
| 14 | 1965.873451 | 983.440364 | 1948.846902 | 974.927089 | 1947.862886 | 974.435081 | Q | ***685.406544*** | 343.206910 | 668.379995 | 334.693636 | | | 3 |
| 15 | 2064.941865 | 1032.974570 | 2047.915316 | 1024.461296 | 2046.931300 | 1023.969288 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080972 | | | 2 |
| 16 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of FSGQLNSHGCFYQQVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.6 | 2210.040131 | 0.003811 | FSGQLNSHGCFYQQVK |
| 37.7 | 2210.040131 | 0.003811 | FSGQLNSHGCFYQQVK |

**Mascot:** http://www.matrixscience.com/

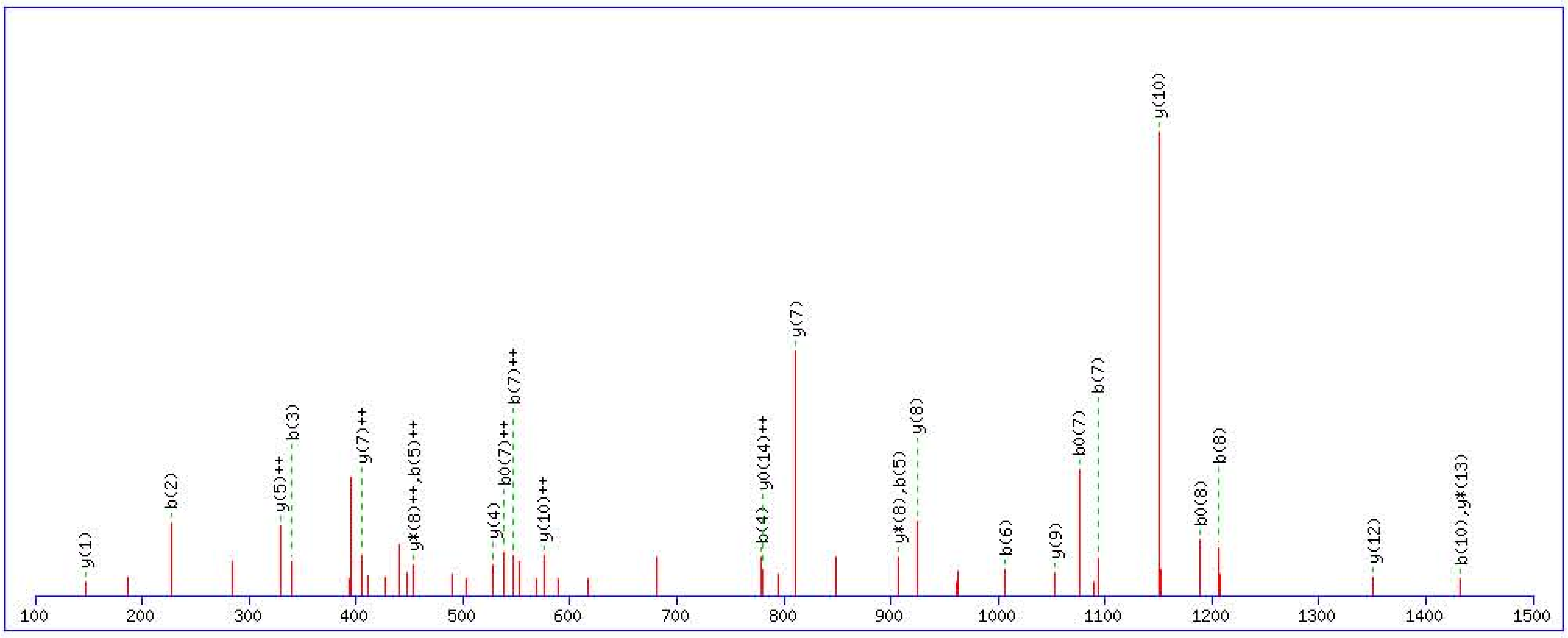
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LLLQQVSLPELPGEYSMK**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

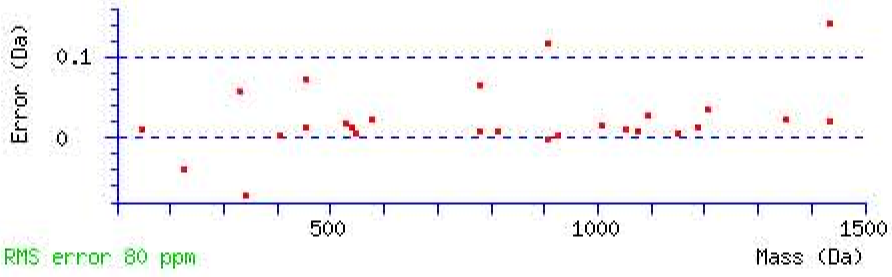
Match to Query 53813: 2355.271572 from(786.097800,3+) rtinseconds(2841) index(26709)
Title: Locus:1.1.1.990.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

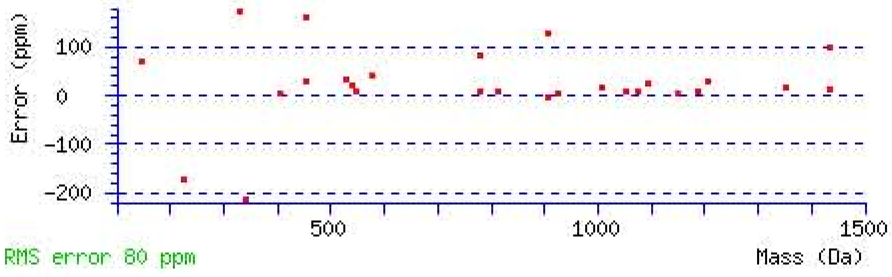
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2355.258179
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4     : Biotin:Thermo-21345 (Q)
Ions Score: 65  Expect: 1.3e-006
Matches : 27/182 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 18 |
| 2 | ***227.175404*** | 114.091340 | | | | | L | 2243.181426 | 1122.094351 | 2226.154877 | 1113.581076 | 2225.170861 | 1113.089068 | 17 |
| 3 | ***340.259468*** | 170.633372 | | | | | L | 2130.097362 | 1065.552319 | 2113.070813 | 1057.039044 | 2112.086797 | 1056.547036 | 16 |
| 4 | ***779.484794*** | 390.246035 | 762.458245 | 381.732760 | | | Q | 2017.013298 | 1009.010287 | 1999.986749 | 1000.497013 | 1999.002733 | 1000.005005 | 15 |
| 5 | ***907.543372*** | **454.275324** | 890.516823 | 445.762049 | | | Q | 1577.787972 | 789.397624 | 1560.761423 | 780.884350 | 1559.777407 | 780.392342 | 14 |
| 6 | ***1006.611786*** | 503.809531 | 989.585237 | 495.296256 | | | V | 1449.729394 | 725.368335 | 1432.702845 | 716.855061 | 1431.718829 | 716.363053 | 13 |
| 7 | ***1093.643814*** | **547.325545** | 1076.617265 | 538.812271 | 1075.633249 | 538.320263 | S | ***1350.660980*** | 675.834128 | 1333.634431 | 667.320854 | 1332.650415 | 666.828846 | 12 |
| 8 | ***1206.727878*** | 603.867577 | 1189.701329 | 595.354303 | 1188.717313 | 594.862294 | L | 1263.628952 | 632.318114 | 1246.602403 | 623.804840 | 1245.618387 | 623.312832 | 11 |
| 9 | 1303.780642 | 652.393959 | 1286.754093 | 643.880685 | 1285.770077 | 643.388676 | P | ***1150.544888*** | 575.776082 | 1133.518339 | 567.262808 | 1132.534323 | 566.770800 | 10 |
| 10 | ***1432.823235*** | 716.915256 | 1415.796686 | 708.401981 | 1414.812670 | 707.909973 | E | ***1053.492124*** | 527.249700 | 1036.465575 | 518.736426 | 1035.481559 | 518.244418 | 9 |
| 11 | 1545.907299 | 773.457288 | 1528.880750 | 764.944013 | 1527.896734 | 764.452005 | L | ***924.449531*** | 462.728404 | 907.422982 | 454.215129 | 906.438966 | 453.723121 | 8 |
| 12 | 1642.960063 | 821.983670 | 1625.933514 | 813.470395 | 1624.949498 | 812.978387 | P | ***811.365467*** | 406.186372 | 794.338918 | 397.673097 | 793.354902 | 397.181089 | 7 |
| 13 | 1699.981527 | 850.494401 | 1682.954978 | 841.981127 | 1681.970962 | 841.489119 | G | 714.312703 | 357.659990 | 697.286154 | 349.146715 | 696.302138 | 348.654707 | 6 |
| 14 | 1829.024120 | 915.015698 | 1811.997571 | 906.502423 | 1811.013555 | 906.010415 | E | 657.291239 | 329.149258 | 640.264690 | 320.635983 | 639.280674 | 320.143975 | 5 |
| 15 | 1992.087449 | 996.547362 | 1975.060900 | 988.034088 | 1974.076884 | 987.542080 | Y | ***528.248646*** | 264.627961 | 511.222097 | 256.114687 | 510.238081 | 255.622679 | 4 |
| 16 | 2079.119477 | 1040.063376 | 2062.092928 | 1031.550102 | 2061.108912 | 1031.058094 | S | 365.185317 | 183.096297 | 348.158768 | 174.583022 | 347.174752 | 174.091014 | 3 |
| 17 | 2210.159962 | 1105.583619 | 2193.133413 | 1097.070344 | 2192.149397 | 1096.578336 | M | 278.153289 | 139.580282 | 261.126740 | 131.067008 | | | 2 |
| 18 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LLLQQVSLPELPGEYSMK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 64.9 | 2355.258179 | 0.013393 | LLLQQVSLPELPGEYSMK |
| 53.6 | 2355.258179 | 0.013393 | LLLQQVSLPELPGEYSMK |
| 2.0 | 2355.259354 | 0.012218 | SQPRASGPPRSIQPQVSPR |
| 1.8 | 2355.273926 | -0.002354 | LGLYTFVNLANFVKSWTNLR |
| 0.6 | 2355.288498 | -0.016926 | LIQQERALLNFTEWKR |
| 0.6 | 2355.288498 | -0.016926 | LIQQERALLNFTEWKR |
| 0.5 | 2355.240891 | 0.030681 | IQQIRSLSEDVRFYYK |

**Mascot:** http://www.matrixscience.com/

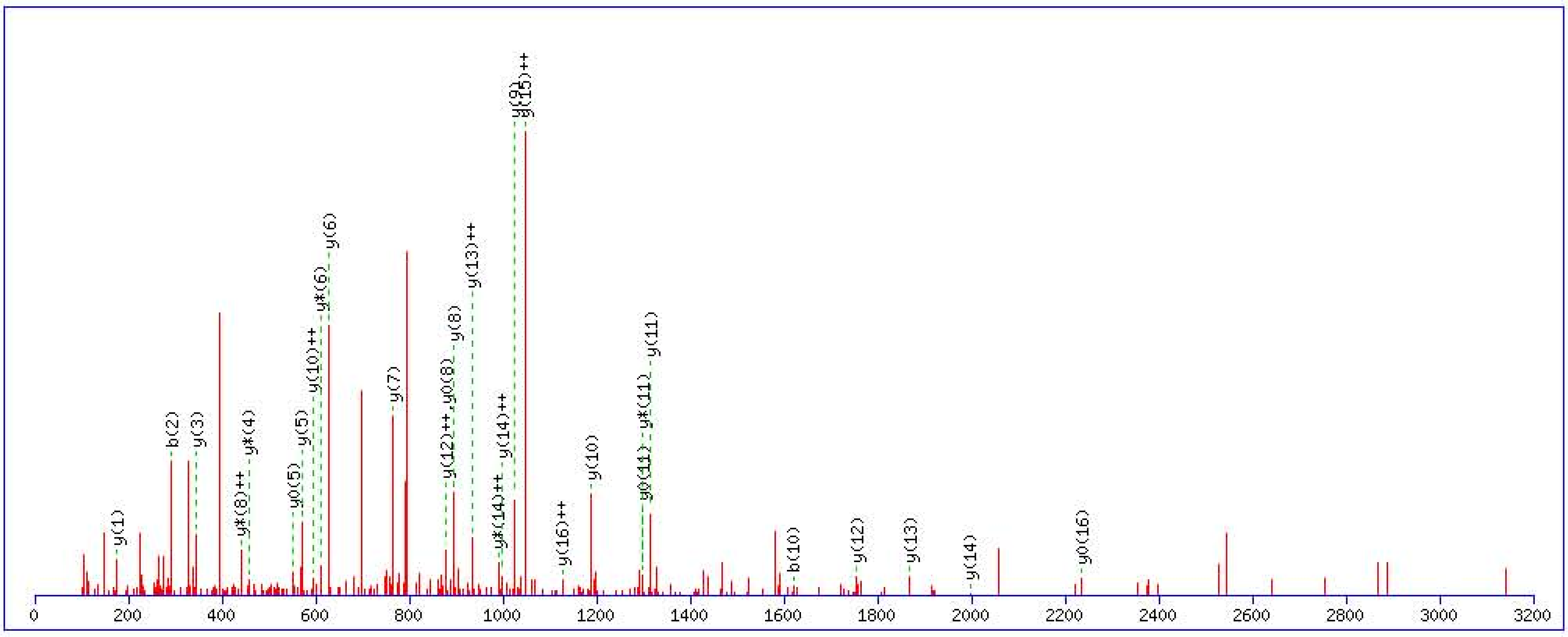
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MCPQLQQYEMHGPEGLR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

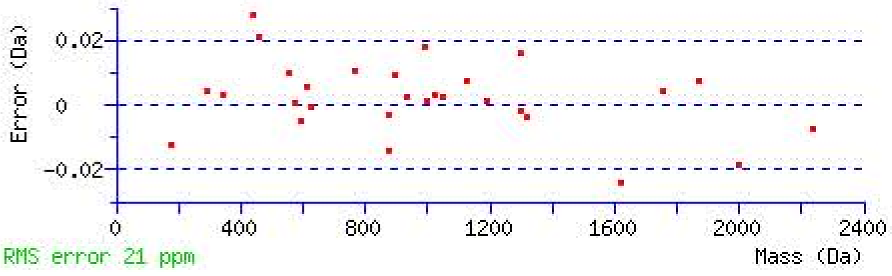
Match to Query 54075: 2384.095212 from(795.705680,3+) rtinseconds(1985) index(21610)
Title: Locus:1.1.1.693.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

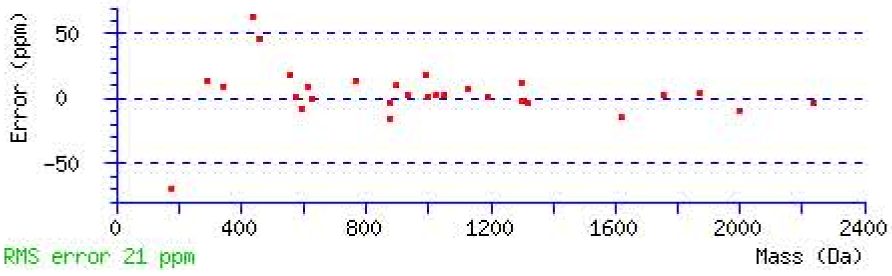
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2384.089767
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.001
Matches : 29/164 fragment ions using 82 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 17 |
| 2 | **292.078410** | 146.542843 | | | | | C | 2254.056579 | 1127.531927 | 2237.030030 | 1119.018653 | 2236.046014 | 1118.526645 | 16 |
| 3 | 389.131174 | 195.069225 | | | | | P | 2094.025930 | 1047.516603 | 2076.999381 | 1039.003328 | 2076.015365 | 1038.511320 | 15 |
| 4 | 517.189752 | 259.098514 | 500.163203 | 250.585240 | | | Q | ***1996.973166*** | 998.990221 | 1979.946617 | 990.476947 | 1978.962601 | 989.984939 | 14 |
| 5 | 630.273816 | 315.640546 | 613.247267 | 307.127272 | | | L | ***1868.914588*** | 934.960932 | 1851.888039 | 926.447658 | 1850.904023 | 925.955650 | 13 |
| 6 | 1069.499142 | 535.253209 | 1052.472593 | 526.739935 | | | Q | ***1755.830524*** | 878.418900 | 1738.803975 | 869.905626 | 1737.819959 | 869.413618 | 12 |
| 7 | 1197.557720 | 599.282498 | 1180.531171 | 590.769224 | | | Q | ***1316.605198*** | 658.806237 | 1299.578649 | 650.292963 | 1298.594633 | 649.800955 | 11 |
| 8 | 1360.621049 | 680.814163 | 1343.594500 | 672.300888 | | | Y | ***1188.546620*** | 594.776948 | 1171.520071 | 586.263674 | 1170.536055 | 585.771666 | 10 |
| 9 | 1489.663642 | 745.335459 | 1472.637093 | 736.822185 | 1471.653077 | 736.330177 | E | ***1025.483291*** | 513.245284 | 1008.456742 | 504.732009 | 1007.472726 | 504.240001 | 9 |
| 10 | **1620.704127** | 810.855702 | 1603.677578 | 802.342427 | 1602.693562 | 801.850419 | M | ***896.440698*** | 448.723987 | 879.414149 | 440.210713 | 878.430133 | 439.718705 | 8 |
| 11 | 1757.763039 | 879.385158 | 1740.736490 | 870.871883 | 1739.752474 | 870.379875 | H | ***765.400213*** | 383.203745 | 748.373664 | 374.690470 | 747.389648 | 374.198462 | 7 |
| 12 | 1814.784503 | 907.895890 | 1797.757954 | 899.382615 | 1796.773938 | 898.890607 | G | ***628.341301*** | 314.674289 | 611.314752 | 306.161014 | 610.330736 | 305.669006 | 6 |
| 13 | 1911.837267 | 956.422272 | 1894.810718 | 947.908997 | 1893.826702 | 947.416989 | P | ***571.319837*** | 286.163557 | 554.293288 | 277.650282 | 553.309272 | 277.158274 | 5 |
| 14 | 2040.879860 | 1020.943568 | 2023.853311 | 1012.430294 | 2022.869295 | 1011.938286 | E | 474.267073 | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 15 | 2097.901324 | 1049.454300 | 2080.874775 | 1040.941025 | 2079.890759 | 1040.449017 | G | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 16 | 2210.985388 | 1105.996332 | 2193.958839 | 1097.483057 | 2192.974823 | 1096.991049 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MCPQLQQYEMHGPEGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.7 | 2384.089767 | 0.005445 | MCPQLQQYEMHGPEGLR |
| 39.4 | 2384.089767 | 0.005445 | MCPQLQQYEMHGPEGLR |
| 25.7 | 2384.089767 | 0.005445 | MCPQLQQYEMHGPEGLR |

**Mascot:** http://www.matrixscience.com/

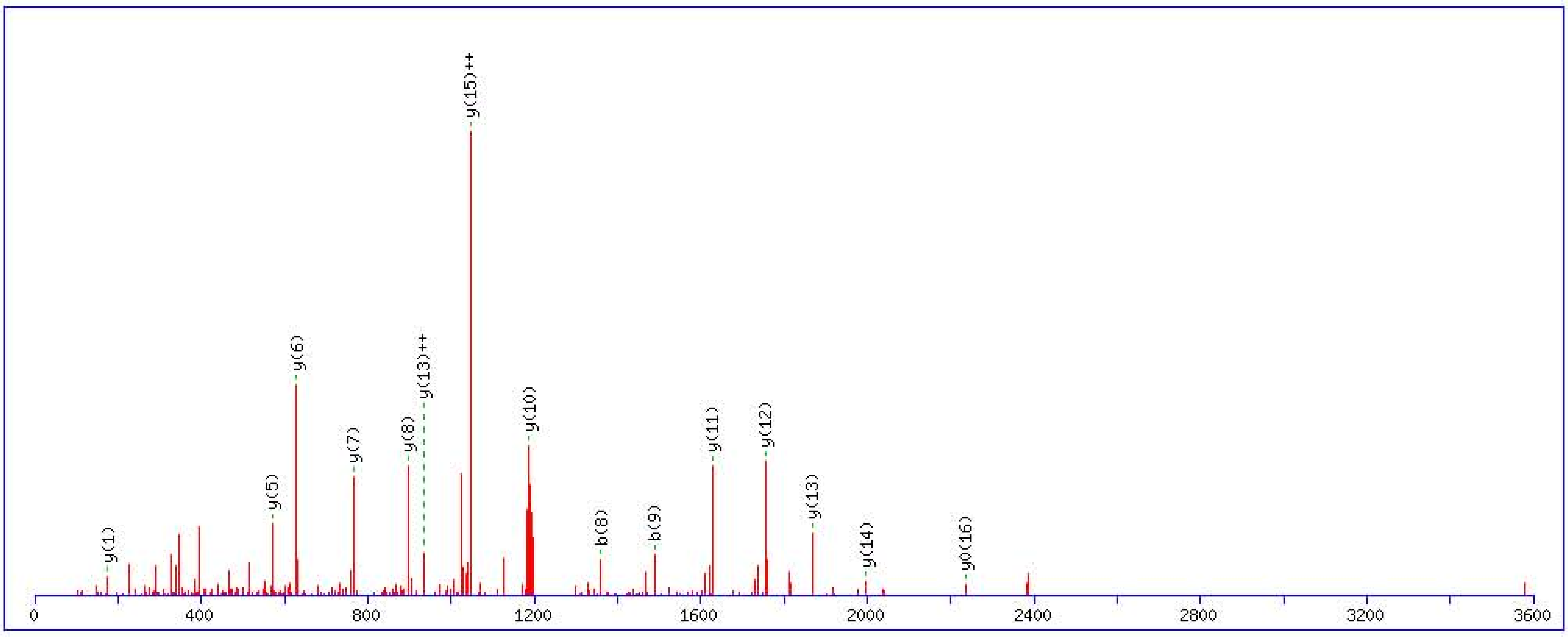
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MCPQLQQYEMHGPEGLR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

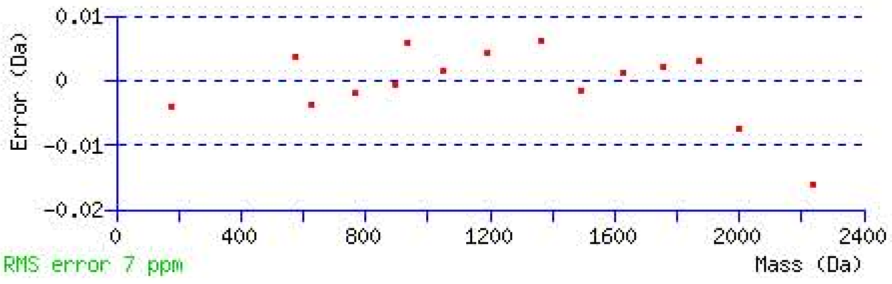
Match to Query 54085: 2384.108908 from(1193.061730,2+) rtinseconds(2028) index(36558)
Title: Locus:1.1.1.3125.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

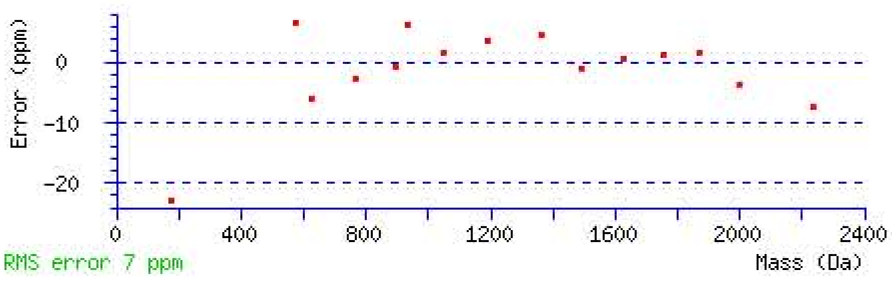
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2384.089767
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7     : Biotin:Thermo-21345 (Q)
Ions Score: 70  Expect: 1.5e-006
Matches : 15/164 fragment ions using 22 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 17 |
| 2 | 292.078410 | 146.542843 | | | | | C | 2254.056579 | 1127.531927 | 2237.030030 | 1119.018653 | 2236.046014 | 1118.526645 | 16 |
| 3 | 389.131174 | 195.069225 | | | | | P | 2094.025930 | 1047.516603 | 2076.999381 | 1039.003328 | 2076.015365 | 1038.511320 | 15 |
| 4 | 517.189752 | 259.098514 | 500.163203 | 250.585240 | | | Q | ***1996.973166*** | 998.990221 | 1979.946617 | 990.476947 | 1978.962601 | 989.984939 | 14 |
| 5 | 630.273816 | 315.640546 | 613.247267 | 307.127272 | | | L | ***1868.914588*** | 934.960932 | 1851.888039 | 926.447658 | 1850.904023 | 925.955650 | 13 |
| 6 | 758.332394 | 379.669835 | 741.305845 | 371.156561 | | | Q | ***1755.830524*** | 878.418900 | 1738.803975 | 869.905626 | 1737.819959 | 869.413618 | 12 |
| 7 | 1197.557720 | 599.282498 | 1180.531171 | 590.769224 | | | Q | ***1627.771946*** | 814.389611 | 1610.745397 | 805.876337 | 1609.761381 | 805.384329 | 11 |
| 8 | **1360.621049** | 680.814163 | 1343.594500 | 672.300888 | | | Y | ***1188.546620*** | 594.776948 | 1171.520071 | 586.263674 | 1170.536055 | 585.771666 | 10 |
| 9 | **1489.663642** | 745.335459 | 1472.637093 | 736.822185 | 1471.653077 | 736.330177 | E | 1025.483291 | 513.245284 | 1008.456742 | 504.732009 | 1007.472726 | 504.240001 | 9 |
| 10 | 1620.704127 | 810.855702 | 1603.677578 | 802.342427 | 1602.693562 | 801.850419 | M | ***896.440698*** | 448.723987 | 879.414149 | 440.210713 | 878.430133 | 439.718705 | 8 |
| 11 | 1757.763039 | 879.385158 | 1740.736490 | 870.871883 | 1739.752474 | 870.379875 | H | ***765.400213*** | 383.203745 | 748.373664 | 374.690470 | 747.389648 | 374.198462 | 7 |
| 12 | 1814.784503 | 907.895890 | 1797.757954 | 899.382615 | 1796.773938 | 898.890607 | G | ***628.341301*** | 314.674289 | 611.314752 | 306.161014 | 610.330736 | 305.669006 | 6 |
| 13 | 1911.837267 | 956.422272 | 1894.810718 | 947.908997 | 1893.826702 | 947.416989 | P | ***571.319837*** | 286.163557 | 554.293288 | 277.650282 | 553.309272 | 277.158274 | 5 |
| 14 | 2040.879860 | 1020.943568 | 2023.853311 | 1012.430294 | 2022.869295 | 1011.938286 | E | 474.267073 | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 15 | 2097.901324 | 1049.454300 | 2080.874775 | 1040.941025 | 2079.890759 | 1040.449017 | G | 345.224480 | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 16 | 2210.985388 | 1105.996332 | 2193.958839 | 1097.483057 | 2192.974823 | 1096.991049 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MCPQLQQYEMHGPEGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 70.0 | 2384.089767 | 0.019141 | MCPQLQQYEMHGPEGLR |
| 59.4 | 2384.089767 | 0.019141 | MCPQLQQYEMHGPEGLR |
| 31.4 | 2384.089767 | 0.019141 | MCPQLQQYEMHGPEGLR |

**Mascot:** http://www.matrixscience.com/

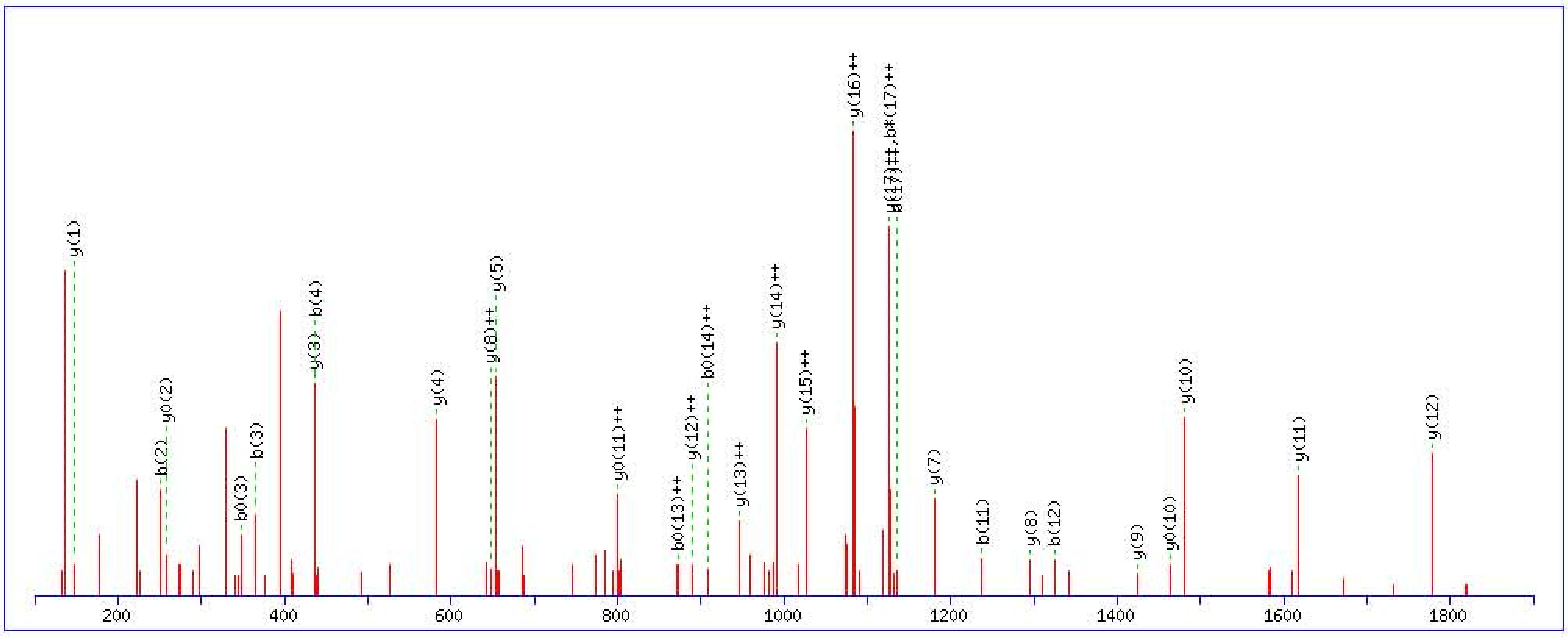
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YSDASDCHGEDSQAFCEK**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

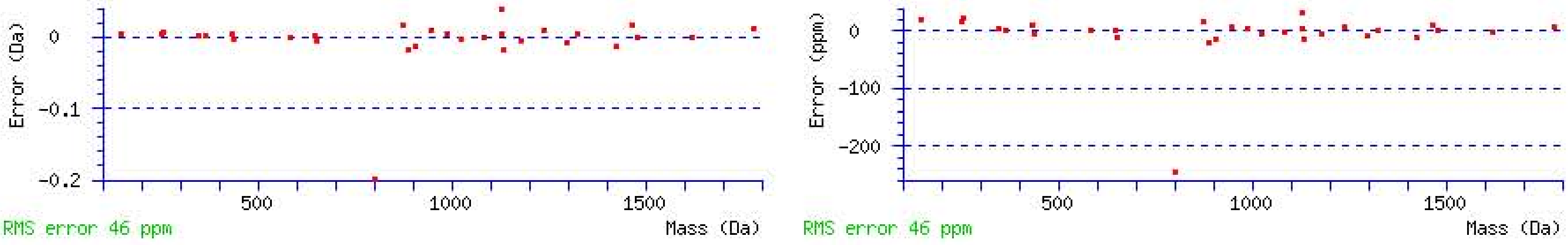
Match to Query 54704: 2415.935772 from(806.319200,3+) rtinseconds(1528) index(18656)
Title: Locus:1.1.1.534.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2415.940598
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 2e-006
Matches : 30/176 fragment ions using 56 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 18 |
| 2 | **251.102633** | 126.054954 | | | 233.092068 | 117.049672 | S | 2253.884545 | 1127.445910 | 2236.857996 | 1118.932636 | 2235.873980 | 1118.440628 | 17 |
| 3 | **366.129576** | 183.568426 | | | 348.119011 | 174.563144 | D | 2166.852517 | 1083.929896 | 2149.825968 | 1075.416622 | 2148.841952 | 1074.924614 | 16 |
| 4 | **437.166690** | 219.086983 | | | 419.156125 | 210.081700 | A | 2051.825574 | 1026.416425 | 2034.799025 | 1017.903150 | 2033.815009 | 1017.411142 | 15 |
| 5 | 524.198718 | 262.602997 | | | 506.188153 | 253.597715 | S | 1980.788460 | 990.897868 | 1963.761911 | 982.384594 | 1962.777895 | 981.892586 | 14 |
| 6 | 639.225661 | 320.116469 | | | 621.215096 | 311.111186 | D | 1893.756432 | 947.381854 | 1876.729883 | 938.868580 | 1875.745867 | 938.376572 | 13 |
| 7 | 799.256310 | 400.131793 | | | 781.245745 | 391.126510 | C | ***1778.729489*** | 889.868383 | 1761.702940 | 881.355108 | 1760.718924 | 880.863100 | 12 |
| 8 | 936.315222 | 468.661249 | | | 918.304657 | 459.655966 | H | ***1618.698840*** | 809.853058 | 1601.672291 | 801.339784 | 1600.688275 | 800.847776 | 11 |
| 9 | 993.336686 | 497.171981 | | | 975.326121 | 488.166699 | G | ***1481.639928*** | 741.323602 | 1464.613379 | 732.810328 | 1463.629363 | 732.318320 | 10 |
| 10 | 1122.379279 | 561.693278 | | | 1104.368714 | 552.687995 | E | ***1424.618464*** | 712.812870 | 1407.591915 | 704.299596 | 1406.607899 | 703.807588 | 9 |
| 11 | **1237.406222** | 619.206749 | | | 1219.395657 | 610.201467 | D | ***1295.575871*** | 648.291574 | 1278.549322 | 639.778299 | 1277.565306 | 639.286291 | 8 |
| 12 | **1324.438250** | 662.722763 | | | 1306.427685 | 653.717481 | S | ***1180.548928*** | 590.778102 | 1163.522379 | 582.264828 | 1162.538363 | 581.772820 | 7 |
| 13 | 1763.663576 | 882.335426 | 1746.637027 | 873.822152 | 1745.653011 | 873.330144 | Q | 1093.516900 | 547.262088 | 1076.490351 | 538.748814 | 1075.506335 | 538.256806 | 6 |
| 14 | 1834.700690 | 917.853983 | 1817.674141 | 909.340709 | 1816.690125 | 908.848701 | A | ***654.291574*** | 327.649425 | 637.265025 | 319.136151 | 636.281009 | 318.644143 | 5 |
| 15 | 1981.769104 | 991.388190 | 1964.742555 | 982.874916 | 1963.758539 | 982.382908 | F | ***583.254460*** | 292.130868 | 566.227911 | 283.617594 | 565.243895 | 283.125586 | 4 |
| 16 | 2141.799753 | 1071.403514 | 2124.773204 | 1062.890240 | 2123.789188 | 1062.398232 | C | ***436.186046*** | 218.596661 | 419.159497 | 210.083386 | 418.175481 | 209.591378 | 3 |
| 17 | 2270.842346 | 1135.924811 | 2253.815797 | 1127.411536 | 2252.831781 | 1126.919528 | E | 276.155397 | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 18 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of YSDASDCHGEDSQAFCEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.0 | 2415.940598 | -0.004826 | YSDASDCHGEDSQAFCEK |

**Mascot:** http://www.matrixscience.com/

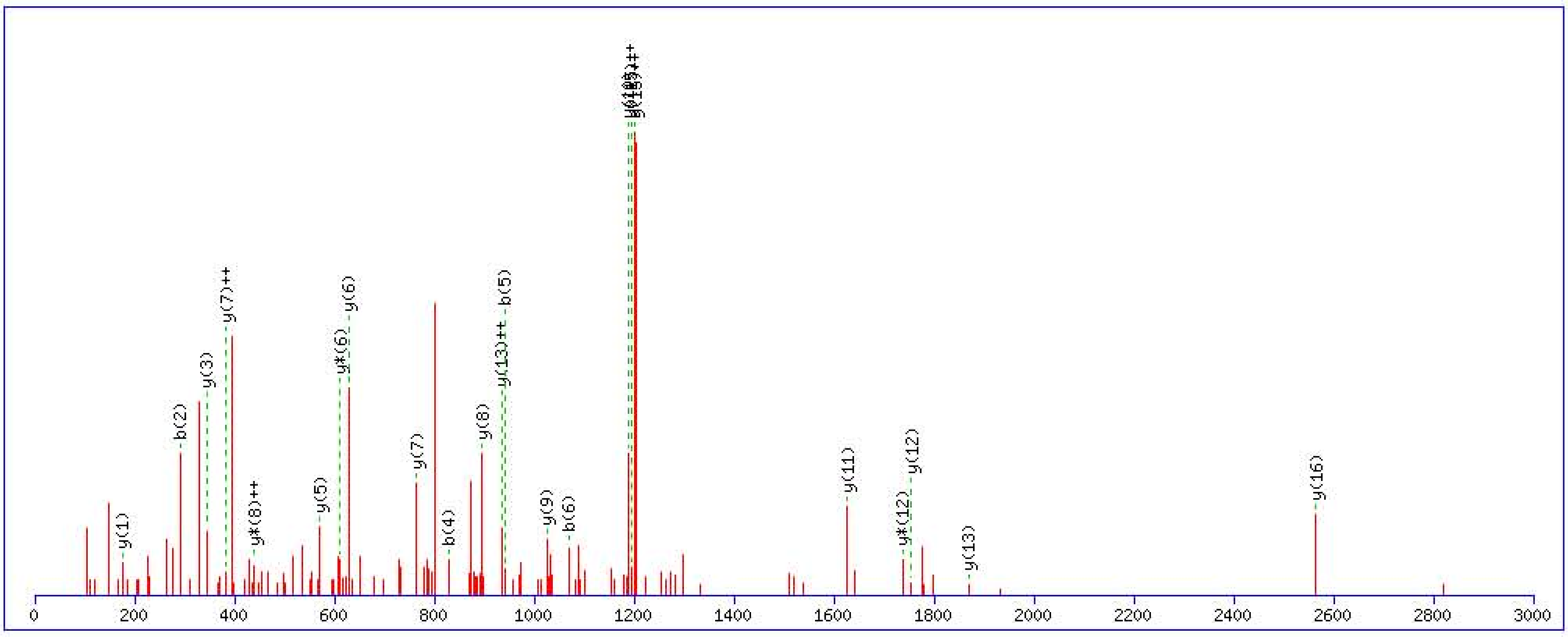
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MCPQLQQYEMHGPEGLR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

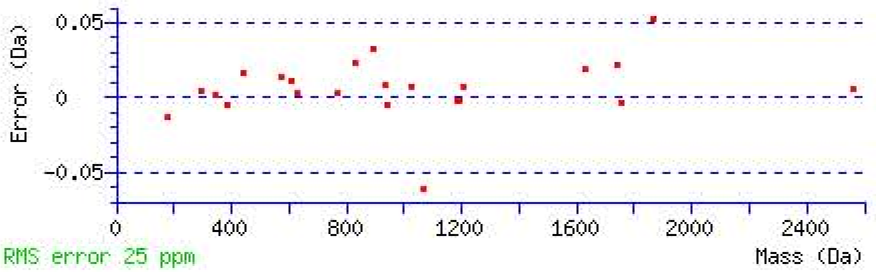
Match to Query 58296: 2695.265892 from(899.429240,3+) rtinseconds(2212) index(22970)
Title: Locus:1.1.1.772.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

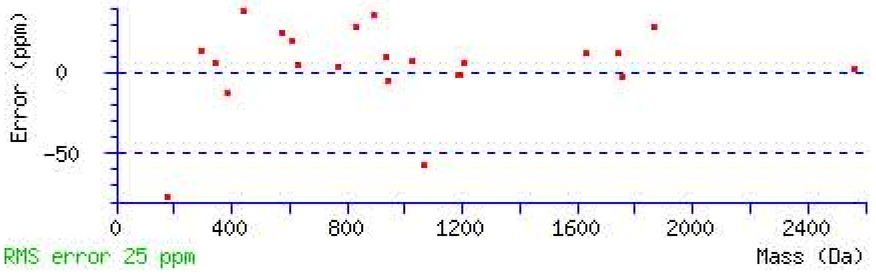
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2695.256516
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4     : Biotin:Thermo-21345 (Q)
Q7     : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.00064
Matches : 23/164 fragment ions using 62 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 17 |
| 2 | **292.078410** | 146.542843 | | | | | C | ***2565.223327*** | 1283.115301 | 2548.196778 | 1274.602027 | 2547.212762 | 1274.110019 | 16 |
| 3 | 389.131174 | 195.069225 | | | | | P | 2405.192678 | 1203.099977 | 2388.166129 | 1194.586702 | 2387.182113 | 1194.094694 | 15 |
| 4 | **828.356500** | 414.681888 | 811.329951 | 406.168614 | | | Q | 2308.139914 | 1154.573595 | 2291.113365 | 1146.060320 | 2290.129349 | 1145.568312 | 14 |
| 5 | **941.440564** | 471.223920 | 924.414015 | 462.710646 | | | L | ***1868.914588*** | 934.960932 | 1851.888039 | 926.447658 | 1850.904023 | 925.955650 | 13 |
| 6 | **1069.499142** | 535.253209 | 1052.472593 | 526.739935 | | | Q | ***1755.830524*** | 878.418900 | 1738.803975 | 869.905626 | 1737.819959 | 869.413618 | 12 |
| 7 | 1508.724468 | 754.865872 | 1491.697919 | 746.352598 | | | Q | ***1627.771946*** | 814.389611 | 1610.745397 | 805.876337 | 1609.761381 | 805.384329 | 11 |
| 8 | 1671.787797 | 836.397537 | 1654.761248 | 827.884262 | | | Y | ***1188.546620*** | 594.776948 | 1171.520071 | 586.263674 | 1170.536055 | 585.771666 | 10 |
| 9 | 1800.830390 | 900.918833 | 1783.803841 | 892.405559 | 1782.819825 | 891.913551 | E | ***1025.483291*** | 513.245284 | 1008.456742 | 504.732009 | 1007.472726 | 504.240001 | 9 |
| 10 | 1931.870875 | 966.439076 | 1914.844326 | 957.925801 | 1913.860310 | 957.433793 | M | ***896.440698*** | 448.723987 | 879.414149 | 440.210713 | 878.430133 | 439.718705 | 8 |
| 11 | 2068.929787 | 1034.968531 | 2051.903238 | 1026.455257 | 2050.919222 | 1025.963249 | H | ***765.400213*** | 383.203745 | 748.373664 | 374.690470 | 747.389648 | 374.198462 | 7 |
| 12 | 2125.951251 | 1063.479263 | 2108.924702 | 1054.965989 | 2107.940686 | 1054.473981 | G | ***628.341301*** | 314.674289 | 611.314752 | 306.161014 | 610.330736 | 305.669006 | 6 |
| 13 | 2223.004015 | 1112.005645 | 2205.977466 | 1103.492371 | 2204.993450 | 1103.000363 | P | ***571.319837*** | 286.163557 | 554.293288 | 277.650282 | 553.309272 | 277.158274 | 5 |
| 14 | 2352.046608 | 1176.526942 | 2335.020059 | 1168.013667 | 2334.036043 | 1167.521659 | E | 474.267073 | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 15 | 2409.068072 | 1205.037674 | 2392.041523 | 1196.524399 | 2391.057507 | 1196.032391 | G | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 16 | 2522.152136 | 1261.579706 | 2505.125587 | 1253.066431 | 2504.141571 | 1252.574424 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MCPQLQQYEMHGPEGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.4 | 2695.256516 | 0.009376 | MCPQLQQYEMHGPEGLR |
| 37.2 | 2695.256516 | 0.009376 | MCPQLQQYEMHGPEGLR |
| 30.7 | 2695.256516 | 0.009376 | MCPQLQQYEMHGPEGLR |

**Mascot:** http://www.matrixscience.com/

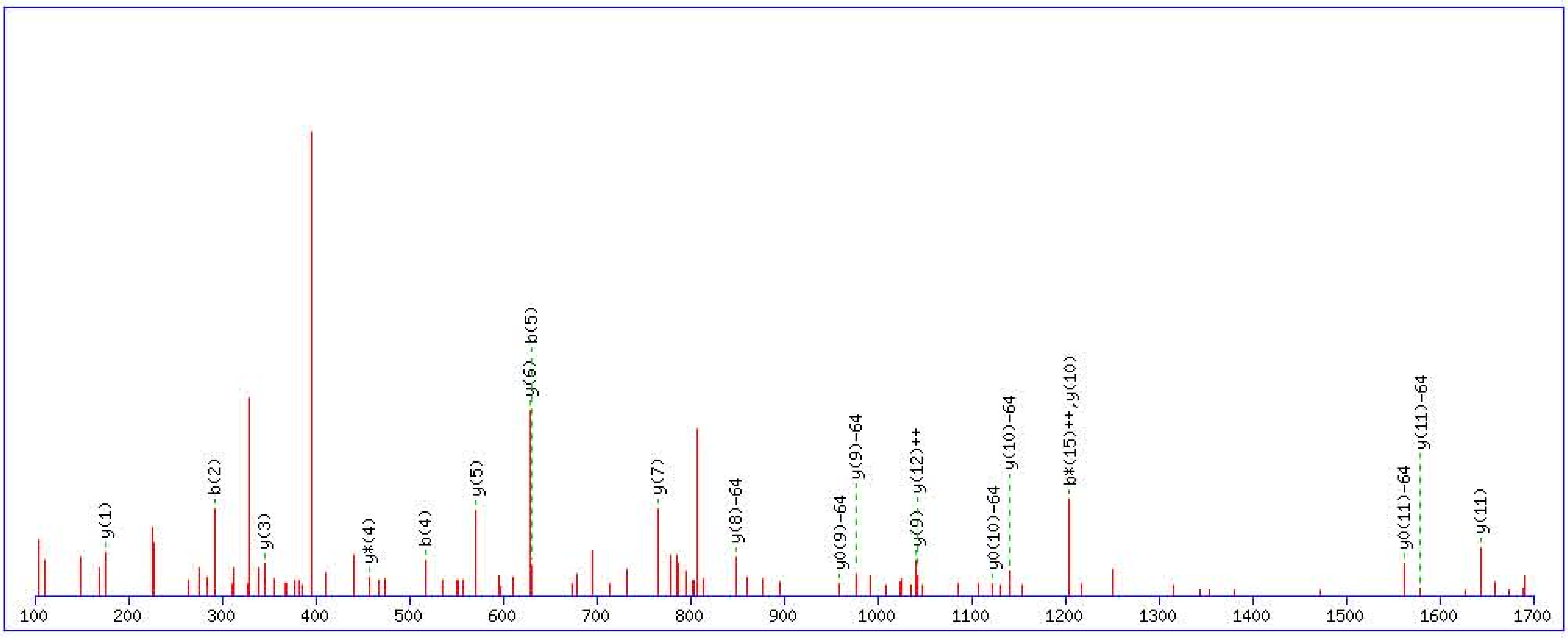
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **MCPQLQQYEMHGPEGLR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

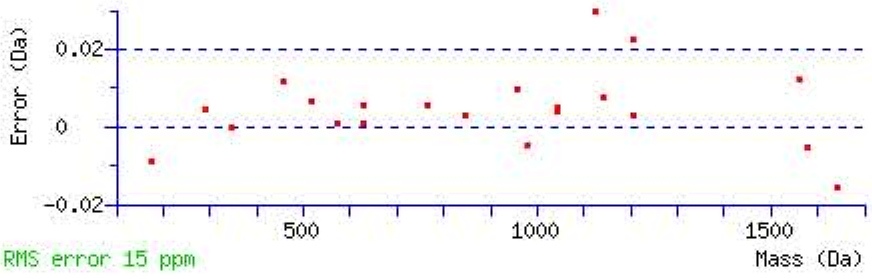
Match to Query 58427: 2711.253016 from(678.820530,4+) rtinseconds(2053) index(6150)
Title: Locus:1.1.1.1524.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

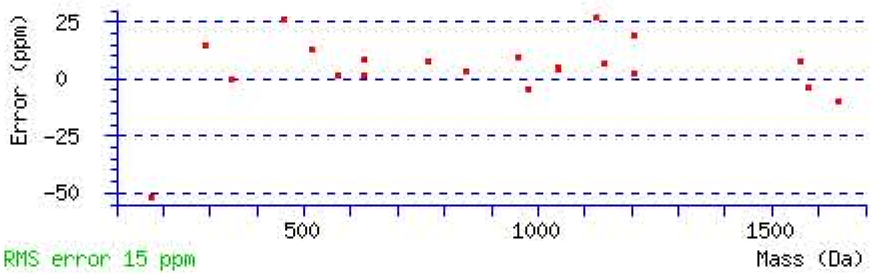
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] 100 to 1700 Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2711.251434
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Q7** : Biotin:Thermo-21345 (Q)
**M10** : Oxidation (M), with neutral losses 63.998285(shown in table), 0.000000
**Ions Score:** 28 **Expect:** 0.0027
**Matches :** 21/260 fragment ions using 45 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 17 |
| 2 | **292.078410** | 146.542843 | | | | | C | 2517.219957 | 1259.113616 | 2500.193408 | 1250.600342 | 2499.209392 | 1250.108334 | 16 |
| 3 | 389.131174 | 195.069225 | | | | | P | 2357.189308 | 1179.098292 | 2340.162759 | 1170.585017 | 2339.178743 | 1170.093009 | 15 |
| 4 | **517.189752** | 259.098514 | 500.163203 | 250.585240 | | | Q | 2260.136544 | 1130.571910 | 2243.109995 | 1122.058635 | 2242.125979 | 1121.566627 | 14 |
| 5 | **630.273816** | 315.640546 | 613.247267 | 307.127272 | | | L | 2132.077966 | 1066.542621 | 2115.051417 | 1058.029346 | 2114.067401 | 1057.537338 | 13 |
| 6 | 1069.499142 | 535.253209 | 1052.472593 | 526.739935 | | | Q | 2018.993902 | 1010.000589 | 2001.967353 | 1001.487315 | 2000.983337 | 1000.995307 | 12 |
| 7 | 1508.724468 | 754.865872 | 1491.697919 | 746.352598 | | | Q | ***1579.768576*** | 790.387926 | 1562.742027 | 781.874652 | 1561.758011 | 781.382644 | 11 |
| 8 | 1671.787797 | 836.397537 | 1654.761248 | 827.884262 | | | Y | ***1140.543250*** | 570.775263 | 1123.516701 | 562.261989 | 1122.532685 | 561.769981 | 10 |
| 9 | 1800.830390 | 900.918833 | 1783.803841 | 892.405559 | 1782.819825 | 891.913551 | E | ***977.479921*** | 489.243599 | 960.453372 | 480.730324 | 959.469356 | 480.238316 | 9 |
| 10 | 1883.867505 | 942.437391 | 1866.840956 | 933.924116 | 1865.856940 | 933.432108 | M | ***848.437328*** | 424.722302 | 831.410779 | 416.209028 | 830.426763 | 415.717020 | 8 |
| 11 | 2020.926417 | 1010.966847 | 2003.899868 | 1002.453572 | 2002.915852 | 1001.961564 | H | ***765.400213*** | 383.203745 | 748.373664 | 374.690470 | 747.389648 | 374.198462 | 7 |
| 12 | 2077.947881 | 1039.477578 | 2060.921332 | 1030.964304 | 2059.937316 | 1030.472296 | G | ***628.341301*** | 314.674289 | 611.314752 | 306.161014 | 610.330736 | 305.669006 | 6 |
| 13 | 2175.000645 | 1088.003960 | 2157.974096 | 1079.490686 | 2156.990080 | 1078.998678 | P | ***571.319837*** | 286.163557 | 554.293288 | 277.650282 | 553.309272 | 277.158274 | 5 |
| 14 | 2304.043238 | 1152.525257 | 2287.016689 | 1144.011982 | 2286.032673 | 1143.519975 | E | 474.267073 | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 15 | 2361.064702 | 1181.035989 | 2344.038153 | 1172.522714 | 2343.054137 | 1172.030707 | G | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 16 | 2474.148766 | 1237.578021 | 2457.122217 | 1229.064747 | 2456.138201 | 1228.572739 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MCPQLQQYEMHGPEGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

## All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.8 | 2711.251434 | 0.001582 | MCPQLQQYEMHGPEGLR |
| 24.8 | 2711.251434 | 0.001582 | MCPQLQQYEMHGPEGLR |
| 18.3 | 2711.251434 | 0.001582 | MCPQLQQYEMHGPEGLR |
| 9.0 | 2711.251434 | 0.001582 | MCPQLQQYEMHGPEGLR |
| 9.0 | 2711.251434 | 0.001582 | MCPQLQQYEMHGPEGLR |
| 5.1 | 2711.251434 | 0.001582 | MCPQLQQYEMHGPEGLR |
| 0.4 | 2711.226059 | 0.026957 | FHYGEKPYECKECGKAFSVYGR |

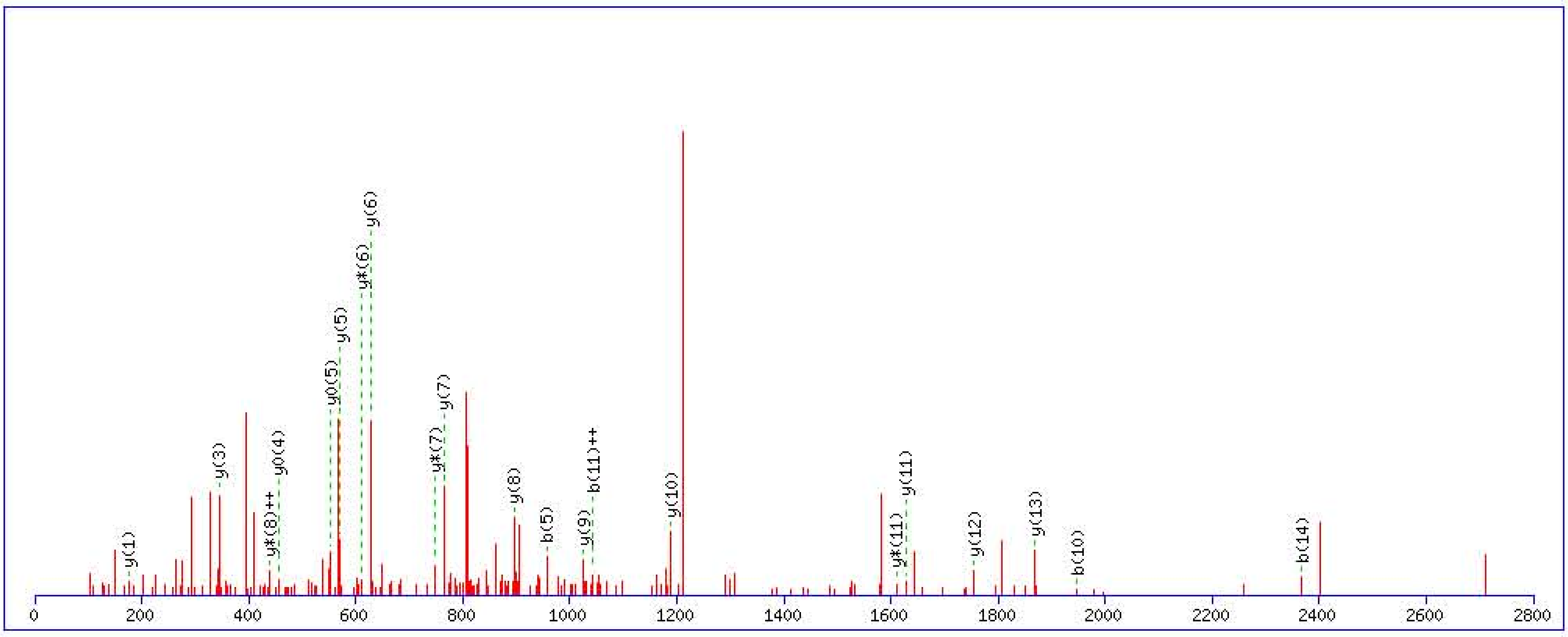
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MCPQLQQYEMHGPEGLR**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

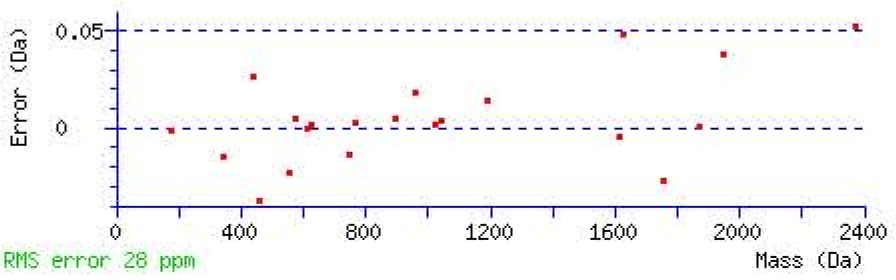
Match to Query 58448: 2711.264862 from(904.762230,3+) rtinseconds(2087) index(36932)
Title: Locus:1.1.1.3146.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

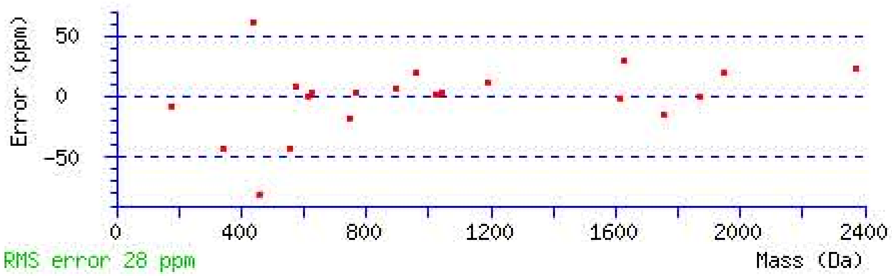


**Monoisotopic mass of neutral peptide Mr(calc):** 2711.251434
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**M1** : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
**Q4** : Biotin:Thermo-21345 (Q)
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 32 **Expect:** 0.0094
**Matches** : 21/238 fragment ions using 60 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.042676 | 74.524976 | | | | | M | | | | | | | 17 |
| 2 | 308.073325 | 154.540301 | | | | | C | 2565.223327 | 1283.115302 | 2548.196778 | 1274.602027 | 2547.212762 | 1274.110019 | 16 |
| 3 | 405.126089 | 203.066683 | | | | | P | 2405.192678 | 1203.099977 | 2388.166129 | 1194.586702 | 2387.182113 | 1194.094694 | 15 |
| 4 | 844.351415 | 422.679346 | 827.324866 | 414.166071 | | | Q | 2308.139914 | 1154.573595 | 2291.113365 | 1146.060320 | 2290.129349 | 1145.568312 | 14 |
| 5 | **957.435479** | 479.221378 | 940.408930 | 470.708103 | | | L | ***1868.914588*** | 934.960932 | 1851.888039 | 926.447658 | 1850.904023 | 925.955650 | 13 |
| 6 | 1085.494057 | 543.250667 | 1068.467508 | 534.737392 | | | Q | ***1755.830524*** | 878.418900 | 1738.803975 | 869.905626 | 1737.819959 | 869.413618 | 12 |
| 7 | 1524.719383 | 762.863330 | 1507.692834 | 754.350055 | | | Q | ***1627.771946*** | 814.389611 | 1610.745397 | 805.876337 | 1609.761381 | 805.384329 | 11 |
| 8 | 1687.782712 | 844.394994 | 1670.756163 | 835.881720 | | | Y | ***1188.546620*** | 594.776948 | 1171.520071 | 586.263674 | 1170.536055 | 585.771666 | 10 |
| 9 | 1816.825305 | 908.916291 | 1799.798756 | 900.403016 | 1798.814740 | 899.911008 | E | ***1025.483291*** | 513.245284 | 1008.456742 | 504.732009 | 1007.472726 | 504.240001 | 9 |
| 10 | **1947.865790** | 974.436533 | 1930.839241 | 965.923259 | 1929.855225 | 965.431251 | M | ***896.440698*** | 448.723987 | 879.414149 | 440.210713 | 878.430133 | 439.718705 | 8 |
| 11 | 2084.924702 | 1042.965989 | 2067.898153 | 1034.452715 | 2066.914137 | 1033.960707 | H | ***765.400213*** | 383.203745 | 748.373664 | 374.690470 | 747.389648 | 374.198462 | 7 |
| 12 | 2141.946166 | 1071.476721 | 2124.919617 | 1062.963446 | 2123.935601 | 1062.471439 | G | ***628.341301*** | 314.674289 | 611.314752 | 306.161014 | 610.330736 | 305.669006 | 6 |
| 13 | 2238.998930 | 1120.003103 | 2221.972381 | 1111.489828 | 2220.988365 | 1110.997821 | P | ***571.319837*** | 286.163557 | 554.293288 | 277.650282 | 553.309272 | 277.158274 | 5 |
| 14 | **2368.041523** | 1184.524400 | 2351.014974 | 1176.011125 | 2350.030958 | 1175.519117 | E | 474.267073 | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 15 | 2425.062987 | 1213.035132 | 2408.036438 | 1204.521857 | 2407.052422 | 1204.029849 | G | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 16 | 2538.147051 | 1269.577164 | 2521.120502 | 1261.063889 | 2520.136486 | 1260.571881 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 28 ppm



RMS error 28 ppm

NCBI **BLAST** search of MCPQLQQYEMHGPEGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.4 | 2711.251434 | 0.013428 | MCPQLQQYEMHGPEGLR |
| 25.0 | 2711.251434 | 0.013428 | MCPQLQQYEMHGPEGLR |
| 16.9 | 2711.251434 | 0.013428 | MCPQLQQYEMHGPEGLR |
| 9.4 | 2711.251434 | 0.013428 | MCPQLQQYEMHGPEGLR |
| 7.4 | 2711.251434 | 0.013428 | MCPQLQQYEMHGPEGLR |
| 6.2 | 2711.251434 | 0.013428 | MCPQLQQYEMHGPEGLR |

**Mascot:** http://www.matrixscience.com/

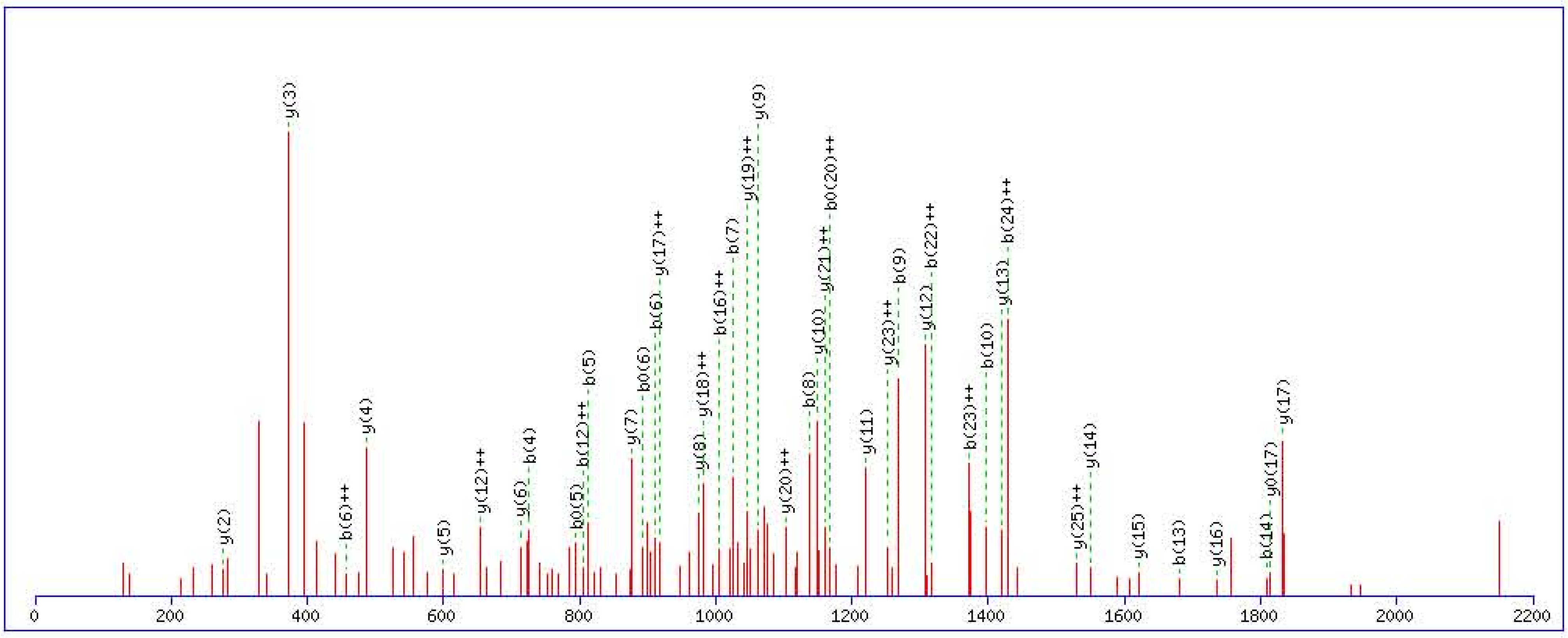
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AVDQSVLLMKPDAELSASSVYNLLPEK**
Found in **A2MG_HUMAN**, Alpha-2-macroglobulin OS=Homo sapiens GN=A2M PE=1 SV=3

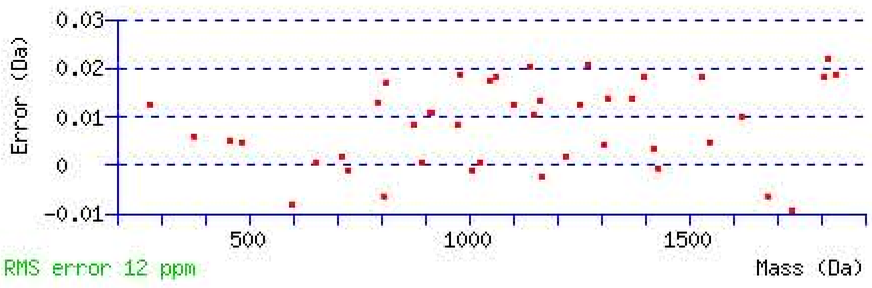
Match to Query 64174: 3227.705652 from(1076.909160,3+) rtinseconds(2761) index(26239)
Title: Locus:1.1.1.962.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

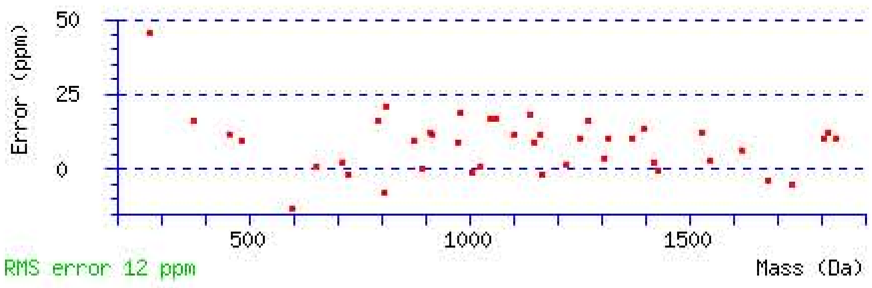
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3227.682129
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 91  Expect: 1.4e-008
Matches : 43/300 fragment ions using 80 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 27 |
| 2 | 171.112804 | 86.060040 | | | | | V | 3157.652336 | 1579.329806 | 3140.625787 | 1570.816531 | 3139.641771 | 1570.324523 | 26 |
| 3 | 286.139747 | 143.573512 | | | 268.129182 | 134.568229 | D | 3058.583922 | 1529.795599 | 3041.557373 | 1521.282324 | 3040.573357 | 1520.790316 | 25 |
| 4 | ***725.365073*** | 363.186175 | 708.338524 | 354.672900 | 707.354508 | 354.180892 | Q | 2943.556979 | 1472.282127 | 2926.530430 | 1463.768853 | 2925.546414 | 1463.276845 | 24 |
| 5 | ***812.397101*** | 406.702189 | 795.370552 | 398.188914 | 794.386536 | 397.696906 | S | 2504.331653 | 1252.669464 | 2487.305104 | 1244.156190 | 2486.321088 | 1243.664182 | 23 |
| 6 | ***911.465515*** | **456.236396** | 894.438966 | 447.723121 | 893.454950 | 447.231113 | V | 2417.299625 | 1209.153451 | 2400.273076 | 1200.640176 | 2399.289060 | 1200.148168 | 22 |
| 7 | ***1024.549579*** | 512.778427 | 1007.523030 | 504.265153 | 1006.539014 | 503.773145 | L | 2318.231211 | 1159.619243 | 2301.204662 | 1151.105969 | 2300.220646 | 1150.613961 | 21 |
| 8 | ***1137.633643*** | 569.320459 | 1120.607094 | 560.807185 | 1119.623078 | 560.315177 | L | 2205.147147 | 1103.077212 | 2188.120598 | 1094.563937 | 2187.136582 | 1094.071929 | 20 |
| 9 | ***1268.674128*** | 634.840702 | 1251.647579 | 626.327428 | 1250.663563 | 625.835419 | M | 2092.063083 | 1046.535179 | 2075.036534 | 1038.021905 | 2074.052518 | 1037.529897 | 19 |
| 10 | ***1396.769091*** | 698.888183 | 1379.742542 | 690.374909 | 1378.758526 | 689.882901 | K | 1961.022598 | 981.014937 | 1943.996049 | 972.501663 | 1943.012033 | 972.009655 | 18 |
| 11 | 1493.821855 | 747.414565 | 1476.795306 | 738.901291 | 1475.811290 | 738.409283 | P | ***1832.927635*** | 916.967456 | 1815.901086 | 908.454181 | 1814.917070 | 907.962173 | 17 |
| 12 | 1608.848798 | **804.928037** | 1591.822249 | 796.414763 | 1590.838233 | 795.922755 | D | ***1735.874871*** | 868.441074 | 1718.848322 | 859.927799 | 1717.864306 | 859.435791 | 16 |
| 13 | ***1679.885912*** | 840.446594 | 1662.859363 | 831.933320 | 1661.875347 | 831.441311 | A | ***1620.847928*** | 810.927602 | 1603.821379 | 802.414328 | 1602.837363 | 801.922320 | 15 |
| 14 | ***1808.928505*** | 904.967891 | 1791.901956 | 896.454616 | 1790.917940 | 895.962608 | E | ***1549.810814*** | 775.409045 | 1532.784265 | 766.895771 | 1531.800249 | 766.403763 | 14 |
| 15 | 1922.012569 | 961.509923 | 1904.986020 | 952.996648 | 1904.002004 | 952.504640 | L | ***1420.768221*** | 710.887749 | 1403.741672 | 702.374474 | 1402.757656 | 701.882466 | 13 |
| 16 | 2009.044597 | **1005.025937** | 1992.018048 | 996.512662 | 1991.034032 | 996.020654 | S | ***1307.684157*** | 654.345717 | 1290.657608 | 645.832442 | 1289.673592 | 645.340434 | 12 |
| 17 | 2080.081711 | 1040.544493 | 2063.055162 | 1032.031219 | 2062.071146 | 1031.539211 | A | ***1220.652129*** | 610.829703 | 1203.625580 | 602.316428 | 1202.641564 | 601.824420 | 11 |
| 18 | 2167.113739 | 1084.060507 | 2150.087190 | 1075.547233 | 2149.103174 | 1075.055225 | S | ***1149.615015*** | 575.311146 | 1132.588466 | 566.797871 | 1131.604450 | 566.305863 | 10 |
| 19 | 2254.145767 | 1127.576521 | 2237.119218 | 1119.063247 | 2236.135202 | 1118.571239 | S | ***1062.582987*** | 531.795132 | 1045.556438 | 523.281857 | 1044.572422 | 522.789849 | 9 |
| 20 | 2353.214181 | 1177.110728 | 2336.187632 | 1168.597454 | 2335.203616 | 1168.105446 | V | ***975.550959*** | 488.279118 | 958.524410 | 479.765843 | 957.540394 | 479.273835 | 8 |
| 21 | 2516.277510 | 1258.642393 | 2499.250961 | 1250.129118 | 2498.266945 | 1249.637110 | Y | ***876.482545*** | 438.744911 | 859.455996 | 430.231636 | 858.471980 | 429.739628 | 7 |
| 22 | 2630.320437 | **1315.663856** | 2613.293888 | 1307.150582 | 2612.309872 | 1306.658574 | N | ***713.419216*** | 357.213246 | 696.392667 | 348.699972 | 695.408651 | 348.207964 | 6 |
| 23 | 2743.404501 | **1372.205888** | 2726.377952 | 1363.692614 | 2725.393936 | 1363.200606 | L | ***599.376289*** | 300.191783 | 582.349740 | 291.678508 | 581.365724 | 291.186500 | 5 |
| 24 | 2856.488565 | **1428.747921** | 2839.462016 | 1420.234646 | 2838.478000 | 1419.742638 | L | ***486.292225*** | 243.649751 | 469.265676 | 235.136476 | 468.281660 | 234.644468 | 4 |
| 25 | 2953.541329 | 1477.274303 | 2936.514780 | 1468.761028 | 2935.530764 | 1468.269020 | P | ***373.208161*** | 187.107719 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 26 | 3082.583922 | 1541.795599 | 3065.557373 | 1533.282325 | 3064.573357 | 1532.790317 | E | ***276.155397*** | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 27 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AVDQSVLLMKPDAELSASSVYNLLPEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 91.4 | 3227.682129 | 0.023523 | AVDQSVLLMKPDAELSASSVYNLLPEK |

**Mascot:** http://www.matrixscience.com/

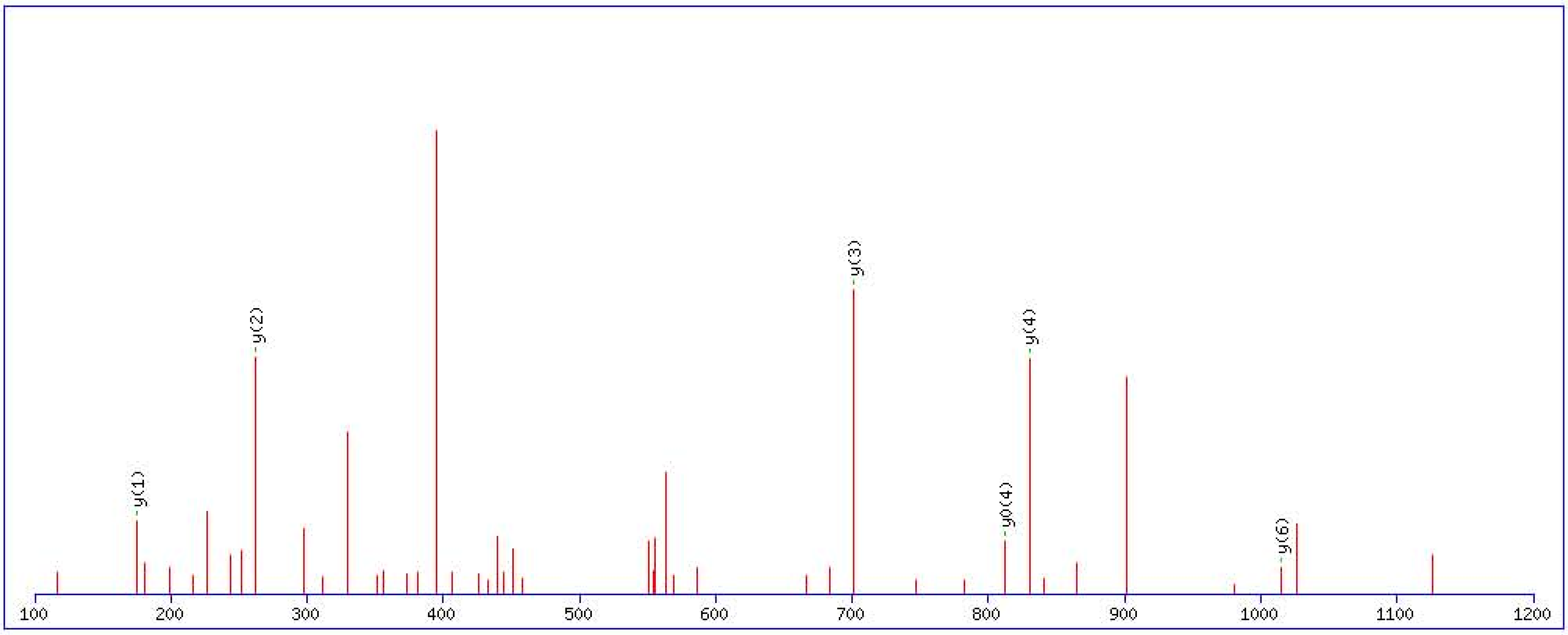
{MATRIX SCIENCE} **Mascot Search Results**

### Peptide View

MS/MS Fragmentation of **ENAEQSR**
Found in **ANT3_HUMAN**, Antithrombin-III OS=Homo sapiens GN=SERPINC1 PE=1 SV=1

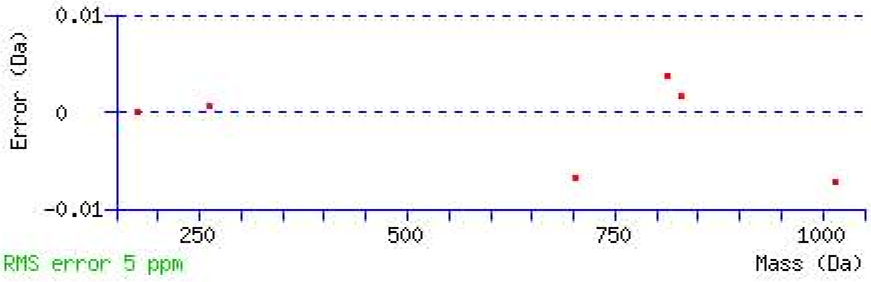
Match to Query 21427: 1143.530328 from(572.772440,2+) rtinseconds(1132) index(31086)
Title: Locus:1.1.1.2813.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

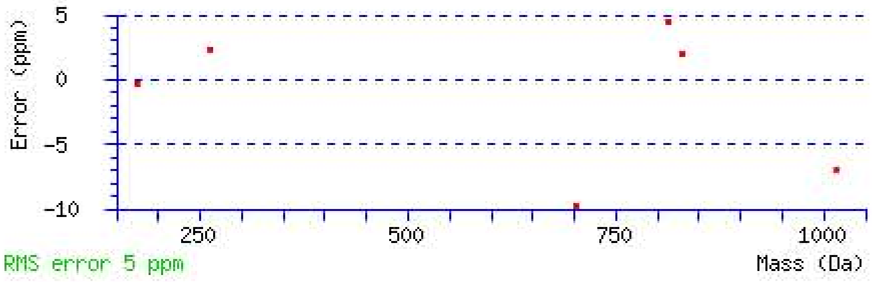
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1143.534225
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q5** : Biotin:Thermo-21345 (Q)
**Ions Score:** 36 **Expect:** 0.0021
**Matches :** 6/68 fragment ions using 11 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 7 |
| 2 | 244.092796 | 122.550036 | 227.066247 | 114.036762 | 226.082231 | 113.544754 | N | ***1015.498940*** | 508.253108 | 998.472391 | 499.739834 | 997.488375 | 499.247826 | 6 |
| 3 | 315.129910 | 158.068593 | 298.103361 | 149.555319 | 297.119345 | 149.063311 | A | 901.456013 | 451.231645 | 884.429464 | 442.718370 | 883.445448 | 442.226362 | 5 |
| 4 | 444.172503 | 222.589890 | 427.145954 | 214.076615 | 426.161938 | 213.584607 | E | ***830.418899*** | 415.713088 | 813.392350 | 407.199813 | 812.408334 | 406.707805 | 4 |
| 5 | 883.397829 | 442.202553 | 866.371280 | 433.689278 | 865.387264 | 433.197270 | Q | ***701.376306*** | 351.191791 | 684.349757 | 342.678517 | 683.365741 | 342.186509 | 3 |
| 6 | 970.429857 | 485.718567 | 953.403308 | 477.205292 | 952.419292 | 476.713284 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065853 | 244.140415 | 122.573845 | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ENAEQSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.4 | 1143.534225 | -0.003897 | ENAEQSR |
| 10.6 | 1143.526840 | 0.003488 | EGEGASAPRDR |
| 1.4 | 1143.515625 | 0.014703 | SYSVGASGSSSR |

**Mascot:** http://www.matrixscience.com/

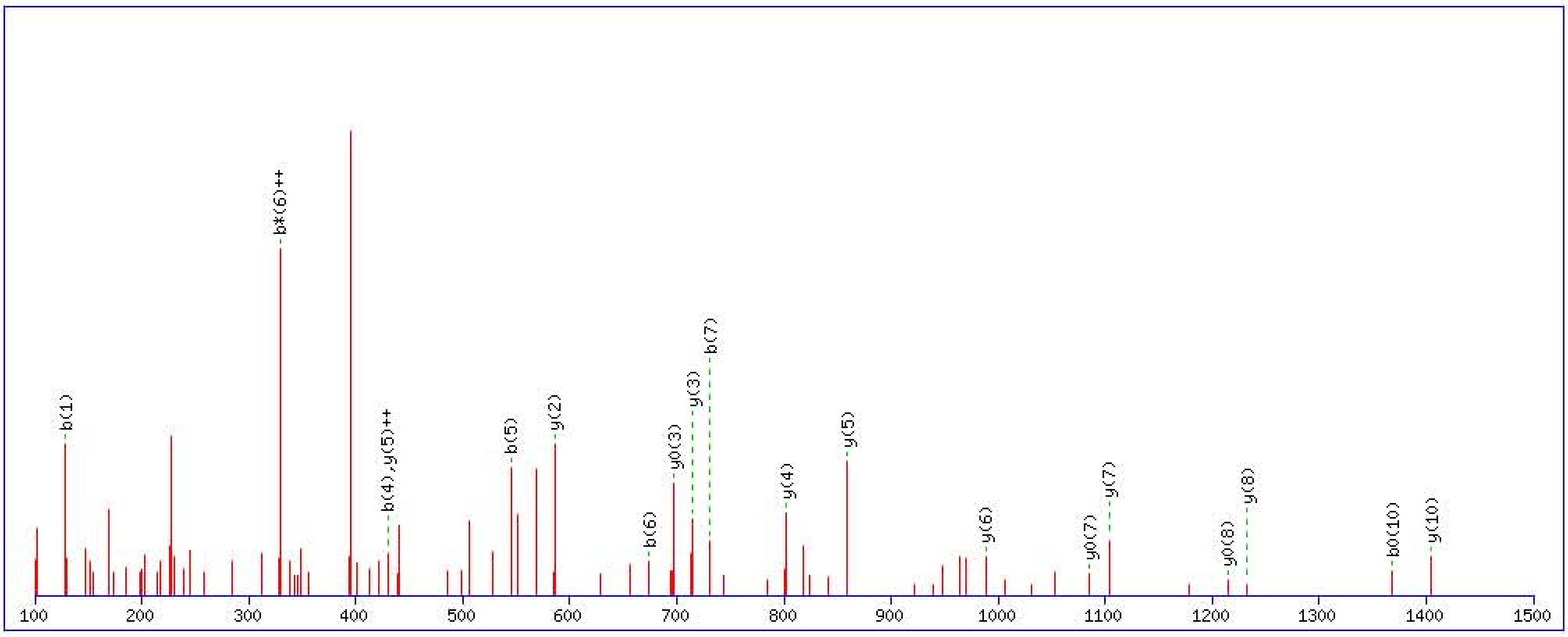
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KATEDEGSEQK**
Found in **ANT3_HUMAN**, Antithrombin-III OS=Homo sapiens GN=SERPINC1 PE=1 SV=1

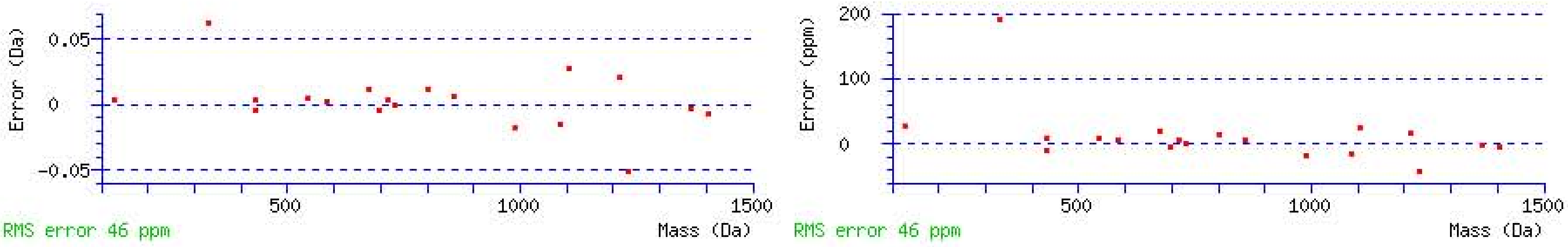
Match to Query 34703: 1531.713552 from(511.578460,3+) rtinseconds(1023) index(16161)
Title: Locus:1.1.1.358.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1531.718796
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 2.8e-005
Matches : 19/112 fragment ions using 26 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 11 |
| 2 | 200.139353 | 100.573315 | 183.112804 | 92.060040 | | | A | ***1404.631137*** | 702.819207 | 1387.604588 | 694.305932 | 1386.620572 | 693.813924 | 10 |
| 3 | 301.187032 | 151.097154 | 284.160483 | 142.583879 | 283.176467 | 142.091872 | T | 1333.594023 | 667.300650 | 1316.567474 | 658.787375 | 1315.583458 | 658.295367 | 9 |
| 4 | **430.229625** | 215.618450 | 413.203076 | 207.105176 | 412.219060 | 206.613168 | E | ***1232.546344*** | 616.776810 | 1215.519795 | 608.263536 | 1214.535779 | 607.771528 | 8 |
| 5 | **545.256568** | 273.131922 | 528.230019 | 264.618648 | 527.246003 | 264.126640 | D | ***1103.503751*** | 552.255514 | 1086.477202 | 543.742239 | 1085.493186 | 543.250231 | 7 |
| 6 | **674.299161** | 337.653219 | 657.272612 | 329.139944 | 656.288596 | 328.647936 | E | ***988.476808*** | 494.742042 | 971.450259 | 486.228768 | 970.466243 | 485.736760 | 6 |
| 7 | **731.320625** | 366.163951 | 714.294076 | 357.650676 | 713.310060 | 357.158668 | G | ***859.434215*** | 430.220746 | 842.407666 | 421.707471 | 841.423650 | 421.215463 | 5 |
| 8 | 818.352653 | 409.679965 | 801.326104 | 401.166690 | 800.342088 | 400.674682 | S | ***802.412751*** | 401.710014 | 785.386202 | 393.196739 | 784.402186 | 392.704731 | 4 |
| 9 | 947.395246 | 474.201261 | 930.368697 | 465.687987 | 929.384681 | 465.195979 | E | ***715.380723*** | 358.194000 | 698.354174 | 349.680725 | 697.370158 | 349.188717 | 3 |
| 10 | 1386.620572 | 693.813924 | 1369.594023 | 685.300650 | 1368.610007 | 684.808642 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 11 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of KATEDEGSEQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.2 | 1531.718796 | -0.005244 | KATEDEGSEQK |
| 13.1 | 1531.716309 | -0.002757 | QVDSMWAEQK |
| 7.2 | 1531.734055 | -0.020503 | VNPQEESYQK |
| 7.0 | 1531.715454 | -0.001902 | EWNGVVSESDSPVK |
| 2.9 | 1531.701523 | 0.012029 | EGFDPQGASQLNNR |
| 2.3 | 1531.730072 | -0.016520 | DGQQSGTVSSQK |
| 1.9 | 1531.722626 | -0.009074 | EAQQATETQRNEK |

**Mascot:** http://www.matrixscience.com/

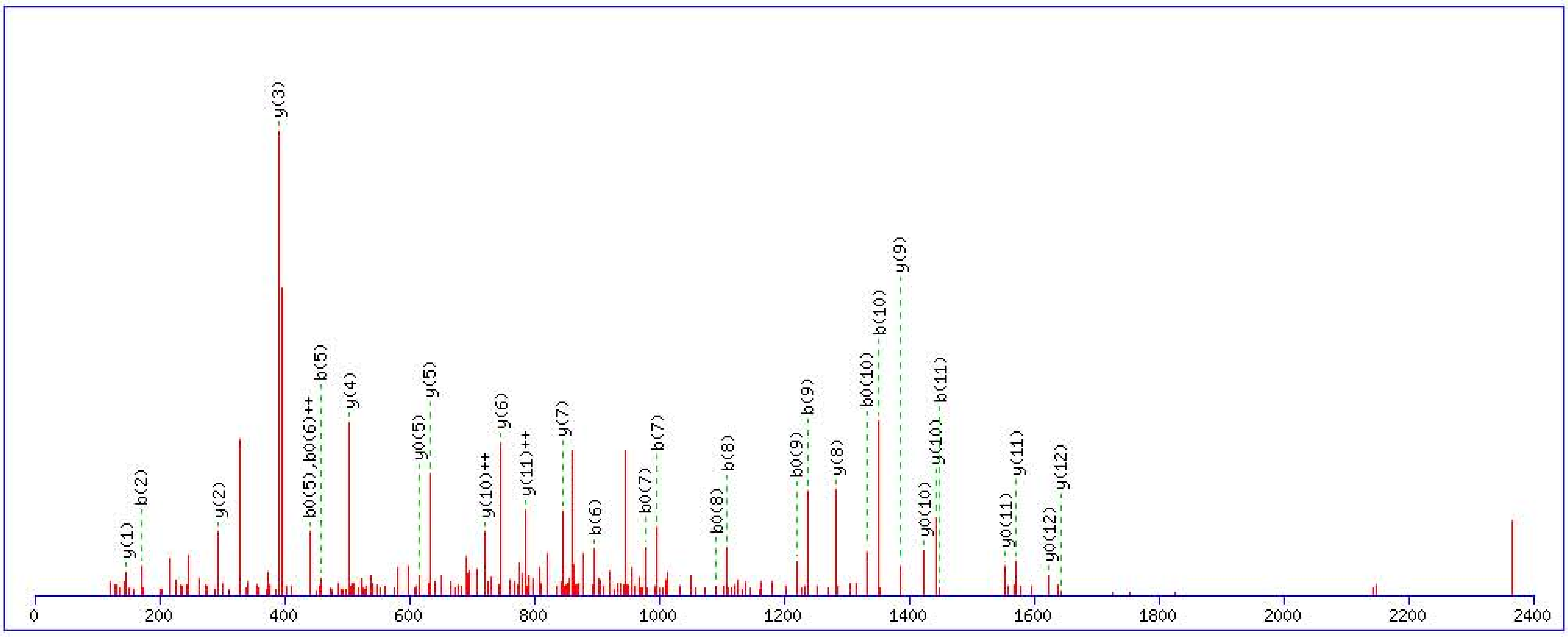
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VAEGTQVLELPFK**
Found in **ANT3_HUMAN**, Antithrombin-III OS=Homo sapiens GN=SERPINC1 PE=1 SV=1

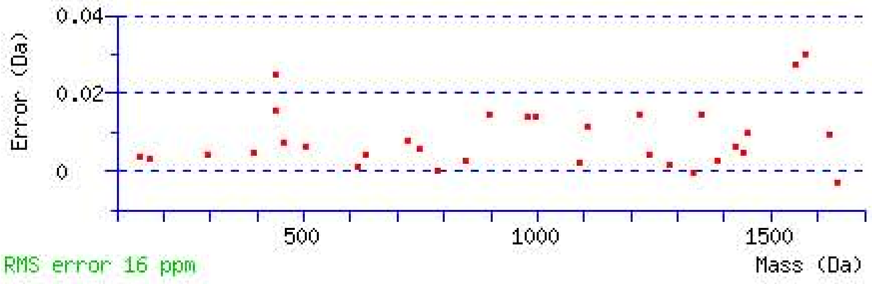
Match to Query 41310: 1740.957428 from(871.485990,2+) rtinseconds(2545) index(24773)
Title: Locus:1.1.1.888.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

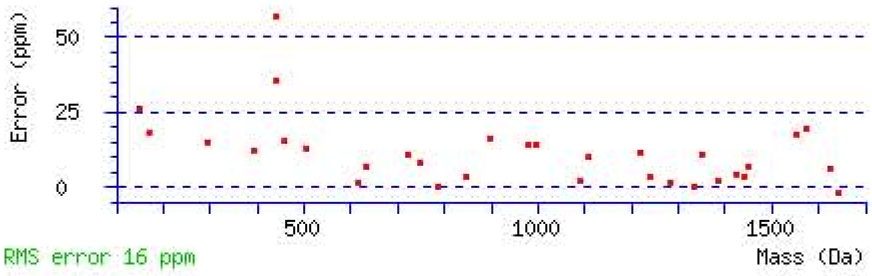
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1740.948425
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 90  Expect: 1.7e-008
Matches : 32/122 fragment ions using 49 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 13 |
| 2 | **171.112804** | 86.060040 | | | | | A | ***1642.887293*** | 821.947284 | 1625.860744 | 813.434010 | 1624.876728 | 812.942002 | 12 |
| 3 | 300.155397 | 150.581336 | | | 282.144832 | 141.576054 | E | ***1571.850179*** | 786.428727 | 1554.823630 | 777.915453 | 1553.839614 | 777.423445 | 11 |
| 4 | 357.176861 | 179.092068 | | | 339.166296 | 170.086786 | G | ***1442.807586*** | 721.907431 | 1425.781037 | 713.394157 | 1424.797021 | 712.902148 | 10 |
| 5 | **458.224540** | 229.615908 | | | 440.213975 | 220.610626 | T | ***1385.786122*** | 693.396699 | 1368.759573 | 684.883424 | 1367.775557 | 684.391416 | 9 |
| 6 | **897.449866** | 449.228571 | 880.423317 | 440.715297 | 879.439301 | 440.223289 | Q | ***1284.738443*** | 642.872860 | 1267.711894 | 634.359585 | 1266.727878 | 633.867577 | 8 |
| 7 | **996.518280** | 498.762778 | 979.491731 | 490.249504 | 978.507715 | 489.757496 | V | ***845.513117*** | 423.260196 | 828.486568 | 414.746922 | 827.502552 | 414.254914 | 7 |
| 8 | **1109.602344** | 555.304810 | 1092.575795 | 546.791536 | 1091.591779 | 546.299527 | L | ***746.444703*** | 373.725989 | 729.418154 | 365.212715 | 728.434138 | 364.720707 | 6 |
| 9 | **1238.644937** | 619.826106 | 1221.618388 | 611.312832 | 1220.634372 | 610.820824 | E | ***633.360639*** | 317.183958 | 616.334090 | 308.670683 | 615.350074 | 308.178675 | 5 |
| 10 | **1351.729001** | 676.368138 | 1334.702452 | 667.854864 | 1333.718436 | 667.362856 | L | ***504.318046*** | 252.662661 | 487.291497 | 244.149386 | | | 4 |
| 11 | **1448.781765** | 724.894520 | 1431.755216 | 716.381246 | 1430.771200 | 715.889238 | P | ***391.233982*** | 196.120629 | 374.207433 | 187.607355 | | | 3 |
| 12 | 1595.850179 | 798.428727 | 1578.823630 | 789.915453 | 1577.839614 | 789.423445 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VAEGTQVLELPFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 89.9 | 1740.948425 | 0.009003 | VAEGTQVLELPFK |
| 6.9 | 1740.962982 | -0.005554 | ISRQLAEEILMK |

**Mascot:** http://www.matrixscience.com/

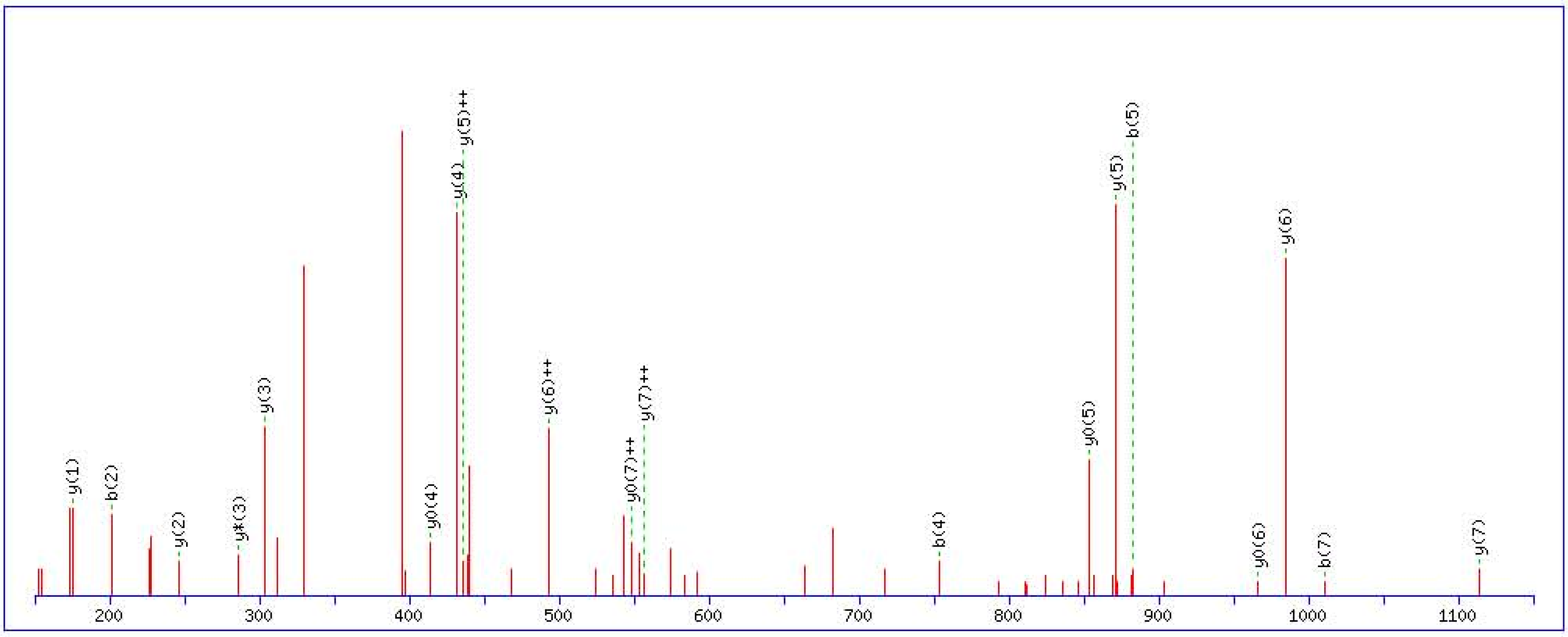
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AELQEGAR**
Found in **APOA1_HUMAN**, Apolipoprotein A-I OS=Homo sapiens GN=APOA1 PE=1 SV=1

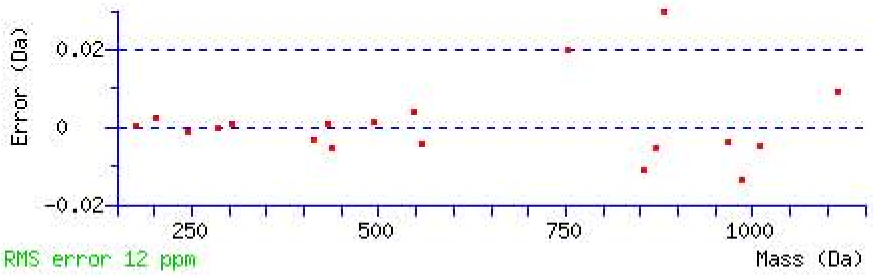
Match to Query 22870: 1183.598148 from(592.806350,2+) rtinseconds(1454) index(32954)
Title: Locus:1.1.1.2925.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 150 to 1150 Da Full range
Label all possible matches ○ Label matches used for scoring ●

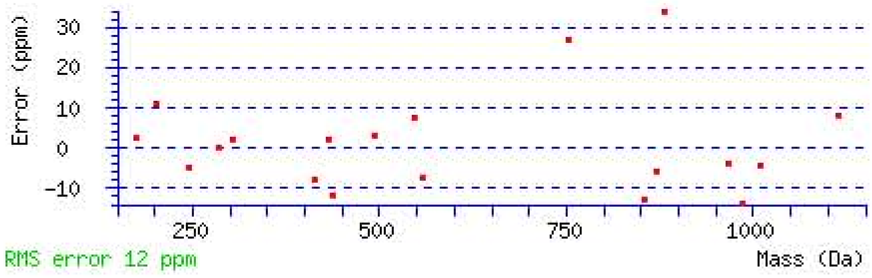


```
Monoisotopic mass of neutral peptide Mr(calc): 1183.601913
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 35  Expect: 0.0054
Matches : 19/70 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 8 |
| 2 | **201.086983** | 101.047130 | | | 183.076418 | 92.041847 | E | ***1113.572106*** | 557.289691 | 1096.545557 | 548.776417 | 1095.561541 | 548.284409 | 7 |
| 3 | 314.171047 | 157.589161 | | | 296.160482 | 148.583879 | L | ***984.529513*** | 492.768395 | 967.502964 | 484.255120 | 966.518948 | 483.763112 | 6 |
| 4 | **753.396373** | 377.201825 | 736.369824 | 368.688550 | 735.385808 | 368.196542 | Q | ***871.445449*** | 436.226363 | 854.418900 | 427.713088 | 853.434884 | 427.221080 | 5 |
| 5 | **882.438966** | 441.723121 | 865.412417 | 433.209847 | 864.428401 | 432.717839 | E | ***432.220123*** | 216.613699 | 415.193574 | 208.100425 | 414.209558 | 207.608417 | 4 |
| 6 | 939.460430 | 470.233853 | 922.433881 | 461.720579 | 921.449865 | 461.228571 | G | ***303.177530*** | 152.092403 | 286.150981 | 143.579128 | | | 3 |
| 7 | **1010.497544** | 505.752410 | 993.470995 | 497.239136 | 992.486979 | 496.747128 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068396 | | | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 12 ppm



RMS error 12 ppm

NCBI **BLAST** search of AELQEGAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 35.0 | 1183.601913 | -0.003765 | AELQEGAR |
| 11.9 | 1183.601913 | -0.003765 | EALEQQR |
| 10.6 | 1183.601913 | -0.003765 | QLAEQER |
| 10.0 | 1183.601913 | -0.003765 | LQEAQER |
| 9.5 | 1183.601913 | -0.003765 | EALEQQR |
| 9.4 | 1183.613815 | -0.015667 | FHFEALPPAR |
| 7.8 | 1183.601913 | -0.003765 | ELQAEAGR |
| 7.1 | 1183.587997 | 0.010151 | EAKLDHCRR |
| 5.6 | 1183.609802 | -0.011654 | ATPHFSGLAAGR |
| 3.7 | 1183.601913 | -0.003765 | LEQEAGAR |

**Mascot:** http://www.matrixscience.com/

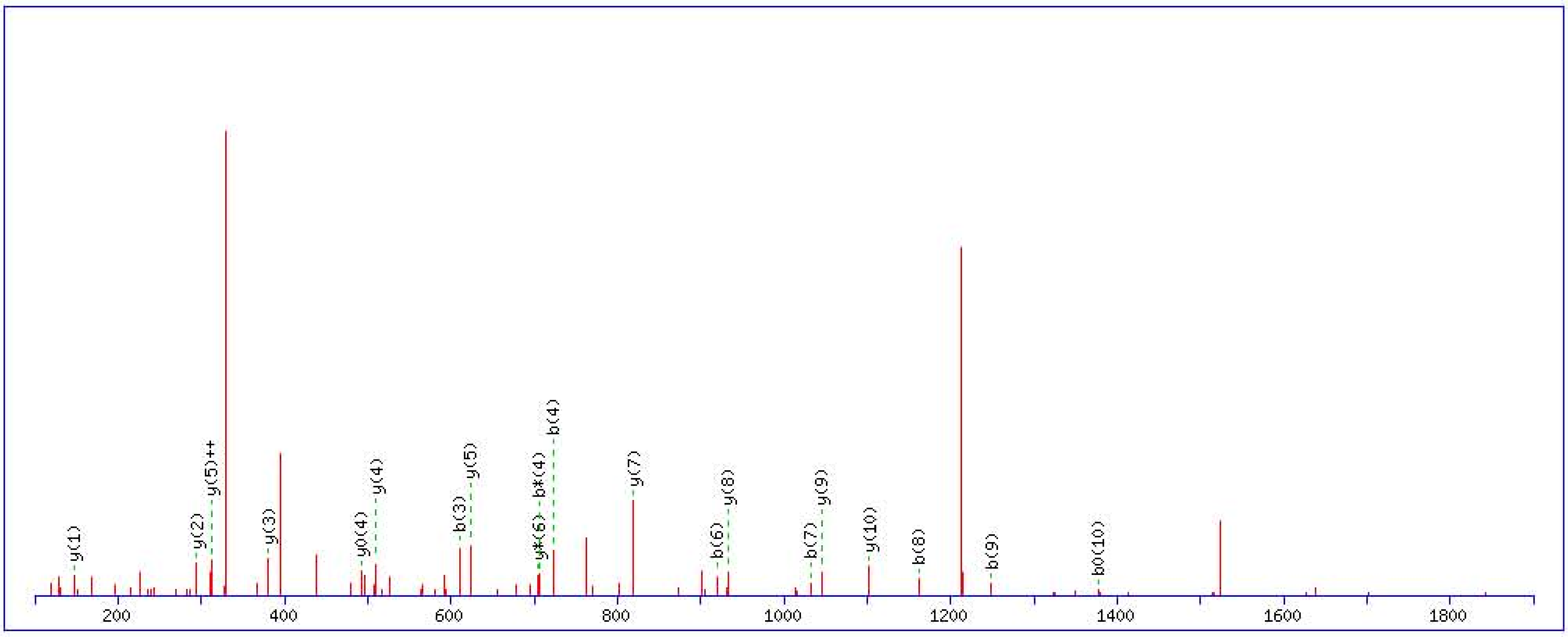
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of QGLLPVLESFK
Found in APOA1_HUMAN, Apolipoprotein A-I OS=Homo sapiens GN=APOA1 PE=1 SV=1

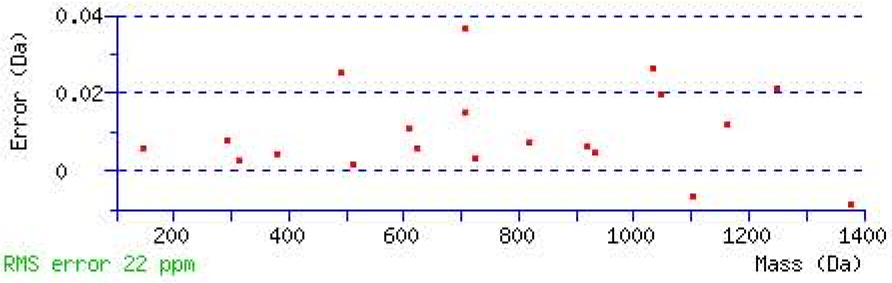
Match to Query 34898: 1540.870848 from(771.442700,2+) rtinseconds(2823) index(73793)
Title: Locus:1.1.1.1919.8 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●

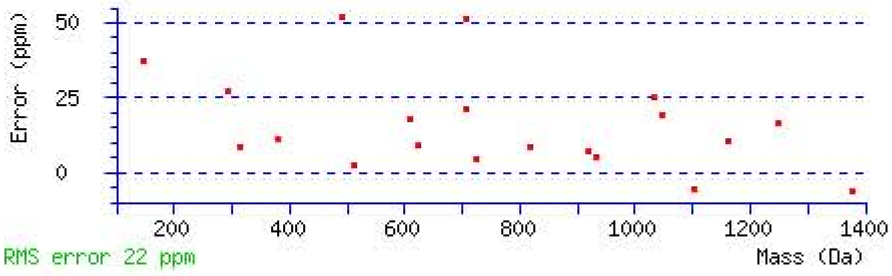


```
Monoisotopic mass of neutral peptide Mr(calc): 1540.868713
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 3.1e-005
Matches : 20/102 fragment ions using 41 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 11 |
| 2 | 497.254066 | 249.130671 | 480.227517 | 240.617396 | | | G | ***1102.650673*** | 551.828975 | 1085.624124 | 543.315700 | 1084.640108 | 542.823692 | 10 |
| 3 | **610.338130** | 305.672703 | 593.311581 | 297.159428 | | | L | ***1045.629209*** | 523.318243 | 1028.602660 | 514.804968 | 1027.618644 | 514.312960 | 9 |
| 4 | **723.422194** | 362.214735 | 706.395645 | 353.701461 | | | L | ***932.545145*** | 466.776211 | 915.518596 | 458.262936 | 914.534580 | 457.770928 | 8 |
| 5 | 820.474958 | 410.741117 | 803.448409 | 402.227843 | | | P | ***819.461081*** | 410.234179 | 802.434532 | 401.720904 | 801.450516 | 401.228896 | 7 |
| 6 | **919.543372** | 460.275324 | 902.516823 | 451.762049 | | | V | 722.408317 | 361.707797 | 705.381768 | 353.194522 | 704.397752 | 352.702514 | 6 |
| 7 | **1032.627436** | 516.817356 | 1015.600887 | 508.304082 | | | L | ***623.339903*** | 312.173590 | 606.313354 | 303.660315 | 605.329338 | 303.168307 | 5 |
| 8 | **1161.670029** | 581.338653 | 1144.643480 | 572.825378 | 1143.659464 | 572.333370 | E | ***510.255839*** | 255.631558 | 493.229290 | 247.118283 | 492.245274 | 246.626275 | 4 |
| 9 | **1248.702057** | 624.854667 | 1231.675508 | 616.341392 | 1230.691492 | 615.849384 | S | ***381.213246*** | 191.110261 | 364.186697 | 182.596987 | 363.202681 | 182.104979 | 3 |
| 10 | 1395.770471 | 698.388874 | 1378.743922 | 689.875599 | 1377.759906 | 689.383591 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 11 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 22 ppm



RMS error 22 ppm

NCBI **BLAST** search of QGLLPVLESFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.8 | 1540.868713 | 0.002135 | QGLLPVLESFK |
| 2.6 | 1540.872559 | -0.001711 | GALHKTVQNLVFSK |
| 1.2 | 1540.887146 | -0.016298 | KTVRVGLNAPSMLR |
| 0.8 | 1540.864700 | 0.006148 | KVTVGKDDIQK |
| 0.6 | 1540.893677 | -0.022829 | LKSVDVGLQGLREK |
| 0.6 | 1540.858139 | 0.012709 | LTNLRLQNMK |

**Mascot:** http://www.matrixscience.com/

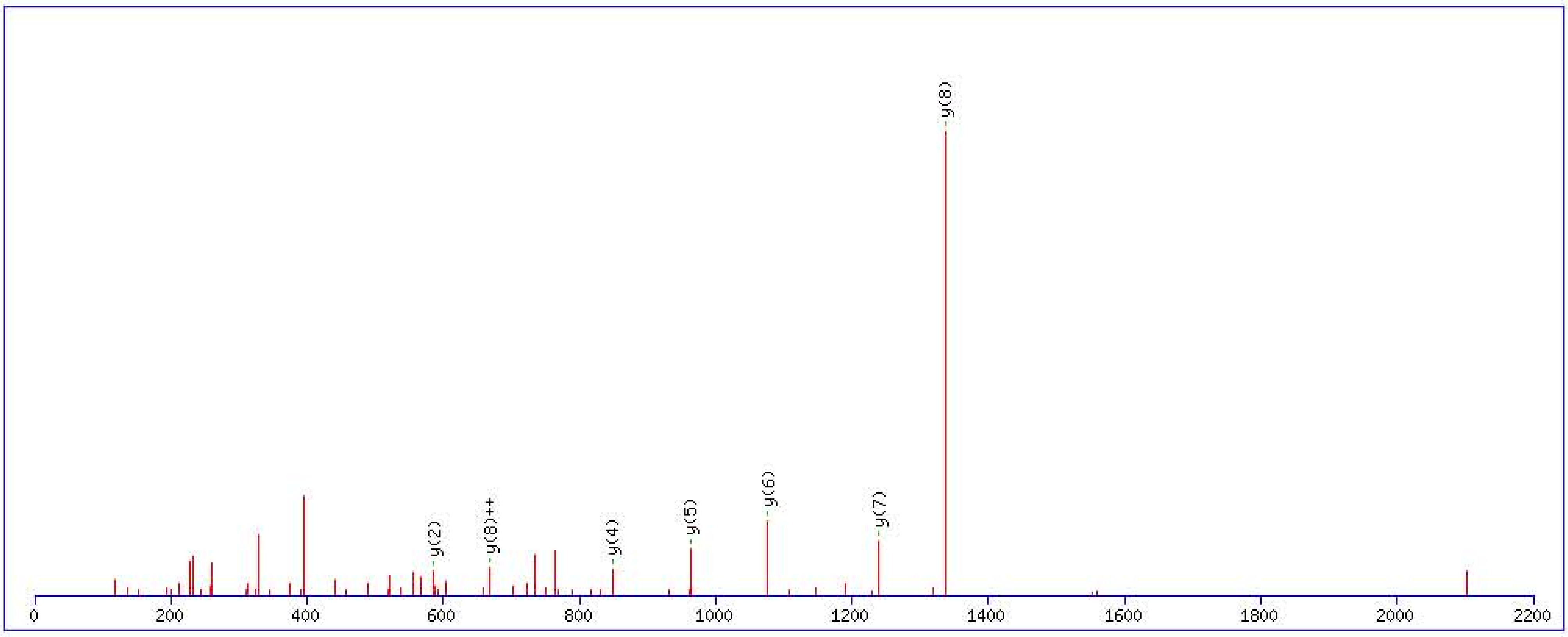
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VQPYLDDFQK**
Found in **APOA1_HUMAN**, Apolipoprotein A-I OS=Homo sapiens GN=APOA1 PE=1 SV=1

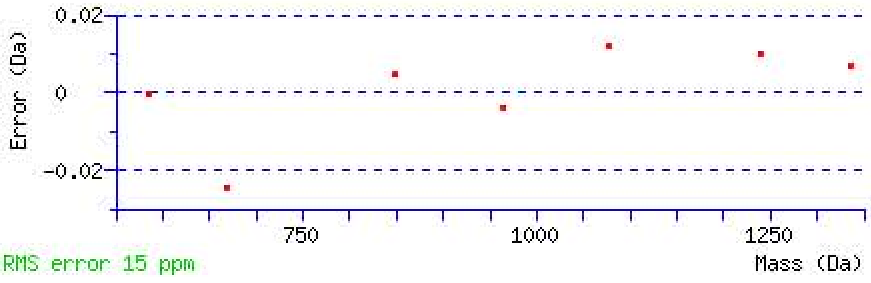
Match to Query 35478: 1562.791308 from(782.402930,2+) rtinseconds(2184) index(37540)
Title: Locus:1.1.1.3180.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

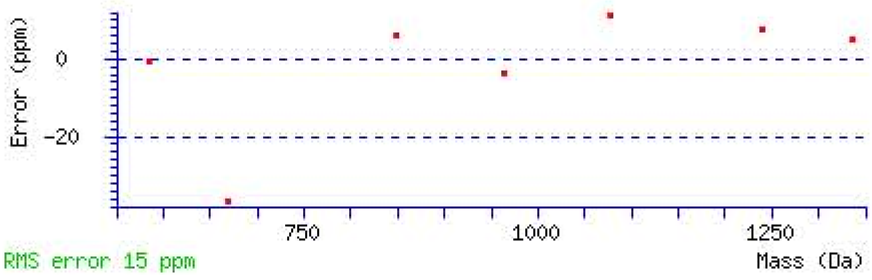
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1562.780304
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q9** : Biotin:Thermo-21345 (Q)
**Ions Score:** 34 **Expect:** 0.0031
**Matches :** 7/90 fragment ions using 14 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 10 |
| 2 | 228.134268 | 114.570772 | 211.107719 | 106.057498 | | | Q | 1464.719165 | 732.863221 | 1447.692616 | 724.349946 | 1446.708600 | 723.857938 | 9 |
| 3 | 325.187032 | 163.097154 | 308.160483 | 154.583879 | | | P | ***1336.660587*** | 668.833932 | 1319.634038 | 660.320657 | 1318.650022 | 659.828649 | 8 |
| 4 | 488.250361 | 244.628818 | 471.223812 | 236.115544 | | | Y | ***1239.607823*** | 620.307550 | 1222.581274 | 611.794275 | 1221.597258 | 611.302267 | 7 |
| 5 | 601.334425 | 301.170851 | 584.307876 | 292.657576 | | | L | ***1076.544494*** | 538.775885 | 1059.517945 | 530.262611 | 1058.533929 | 529.770603 | 6 |
| 6 | 716.361368 | 358.684322 | 699.334819 | 350.171047 | 698.350803 | 349.679039 | D | ***963.460430*** | 482.233853 | 946.433881 | 473.720579 | 945.449865 | 473.228571 | 5 |
| 7 | 831.388311 | 416.197793 | 814.361762 | 407.684519 | 813.377746 | 407.192511 | D | ***848.433487*** | 424.720382 | 831.406938 | 416.207107 | 830.422922 | 415.715099 | 4 |
| 8 | 978.456725 | 489.732000 | 961.430176 | 481.218726 | 960.446160 | 480.726718 | F | 733.406544 | 367.206910 | 716.379995 | 358.693636 | | | 3 |
| 9 | 1417.682051 | 709.344664 | 1400.655502 | 700.831389 | 1399.671486 | 700.339381 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 10 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VQPYLDDFQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 34.3 | 1562.780304 | 0.011004 | VQPYLDDFQK |
| 7.1 | 1562.808624 | -0.017316 | LNSPTTTSQIMARK |
| 5.6 | 1562.804764 | -0.013456 | QVEELLMAMEKVK |
| 1.6 | 1562.768875 | 0.022433 | VQQGERDFEQISK |
| 1.4 | 1562.780960 | 0.010348 | MERHMVRGQLYK |
| 1.2 | 1562.787521 | 0.003787 | VQLVDNVYCIGQR |
| 1.1 | 1562.804764 | -0.013456 | QVEELLMAMEKVK |
| 0.7 | 1562.769714 | 0.021594 | YAVMRAAEMHQLK |

**Mascot:** http://www.matrixscience.com/

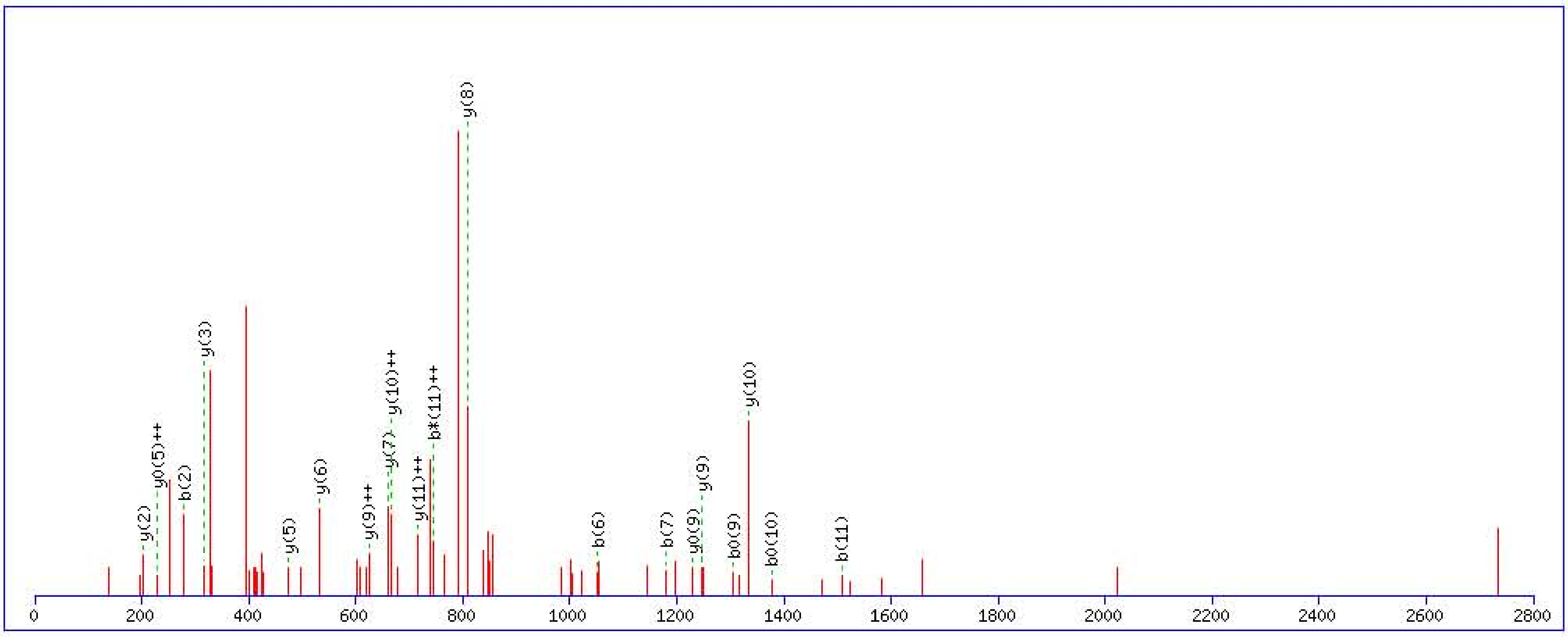
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DYVSQFEGSALGK**
Found in **APOA1_HUMAN**, Apolipoprotein A-I OS=Homo sapiens GN=APOA1 PE=1 SV=1

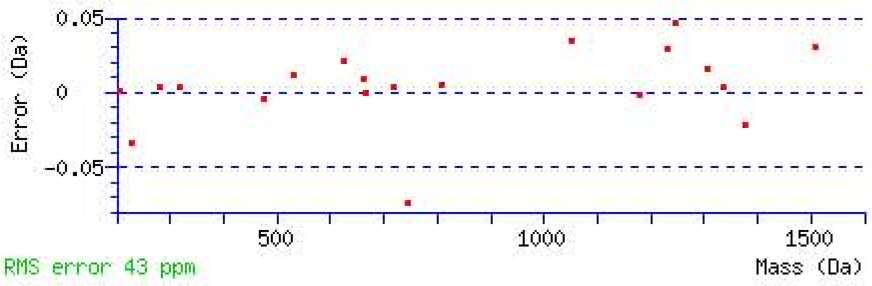
Match to Query 40698: 1710.849728 from(856.432140,2+) rtinseconds(2432) index(55595)
Title: Locus:1.1.1.1461.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

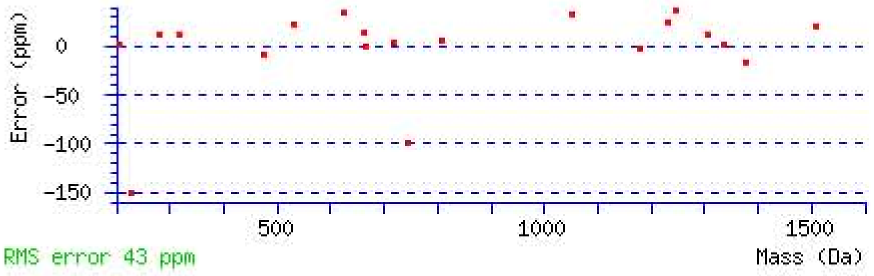
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1710.828705
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 32  Expect: 0.0015
Matches : 20/128 fragment ions using 51 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 13 |
| 2 | **279.097548** | 140.052412 | | | 261.086983 | 131.047130 | Y | 1596.809042 | 798.908159 | 1579.782493 | 790.394884 | 1578.798477 | 789.902876 | 12 |
| 3 | 378.165962 | 189.586619 | | | 360.155397 | 180.581337 | V | 1433.745713 | 717.376495 | 1416.719164 | 708.863220 | 1415.735148 | 708.371212 | 11 |
| 4 | 465.197990 | 233.102633 | | | 447.187425 | 224.097351 | S | ***1334.677299*** | 667.842288 | 1317.650750 | 659.329013 | 1316.666734 | 658.837005 | 10 |
| 5 | 904.423316 | 452.715296 | 887.396767 | 444.202022 | 886.412751 | 443.710014 | Q | ***1247.645271*** | 624.326273 | 1230.618722 | 615.812999 | 1229.634706 | 615.320991 | 9 |
| 6 | **1051.491730** | 526.249503 | 1034.465181 | 517.736229 | 1033.481165 | 517.244221 | F | ***808.419945*** | 404.713610 | 791.393396 | 396.200336 | 790.409380 | 395.708328 | 8 |
| 7 | **1180.534323** | 590.770800 | 1163.507774 | 582.257525 | 1162.523758 | 581.765517 | E | ***661.351531*** | 331.179403 | 644.324982 | 322.666129 | 643.340966 | 322.174121 | 7 |
| 8 | 1237.555787 | 619.281532 | 1220.529238 | 610.768257 | 1219.545222 | 610.276249 | G | ***532.308938*** | 266.658107 | 515.282389 | 258.144832 | 514.298373 | 257.652824 | 6 |
| 9 | 1324.587815 | 662.797546 | 1307.561266 | 654.284271 | 1306.577250 | 653.792263 | S | ***475.287474*** | 238.147375 | 458.260925 | 229.634100 | 457.276909 | 229.142092 | 5 |
| 10 | 1395.624929 | 698.316103 | 1378.598380 | 689.802828 | 1377.614364 | 689.310820 | A | 388.255446 | 194.631361 | 371.228897 | 186.118086 | | | 4 |
| 11 | **1508.708993** | 754.858135 | 1491.682444 | 746.344860 | 1490.698428 | 745.852852 | L | ***317.218332*** | 159.112804 | 300.191783 | 150.599529 | | | 3 |
| 12 | 1565.730457 | 783.368866 | 1548.703908 | 774.855592 | 1547.719892 | 774.363584 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of DYVSQFEGSALGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.0 | 1710.828705 | 0.021023 | DYVSQFEGSALGK |
| 1.7 | 1710.833420 | 0.016308 | YDPVWMTVTRKCR |

**Mascot:** http://www.matrixscience.com/

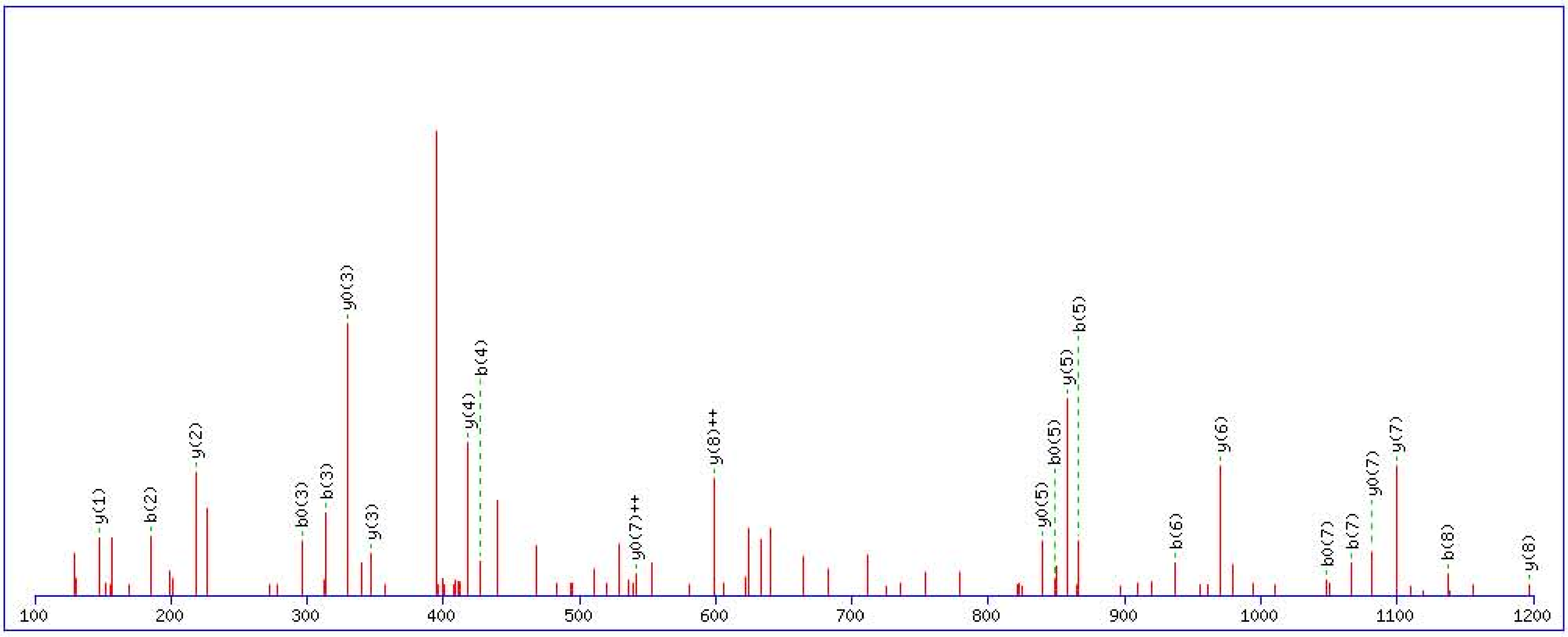
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SPELQAEAK**
Found in **APOA2_HUMAN**, Apolipoprotein A-II OS=Homo sapiens GN=APOA2 PE=1 SV=1

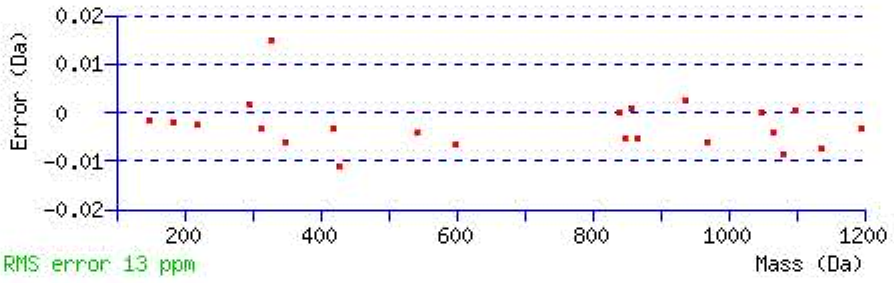
Match to Query 25787: 1282.654828 from(642.334690,2+) rtinseconds(1531) index(33483)
Title: Locus:1.1.1.2952.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

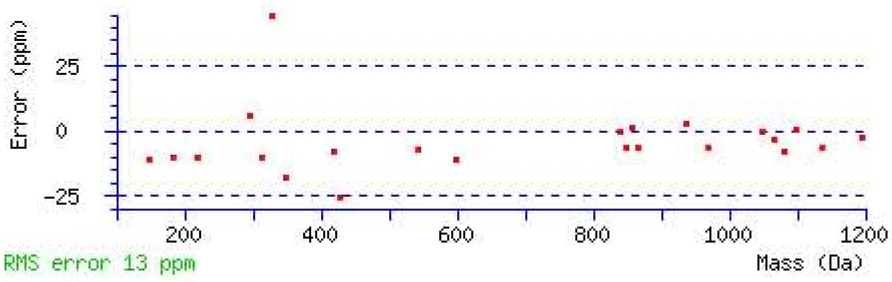
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1282.659088
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.0022
Matches : 23/84 fragment ions using 54 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 9 |
| 2 | **185.092068** | 93.049672 | | | 167.081503 | 84.044389 | P | ***1196.634372*** | 598.820824 | 1179.607823 | 590.307550 | 1178.623807 | 589.815541 | 8 |
| 3 | **314.134661** | 157.570968 | | | 296.124096 | 148.565686 | E | ***1099.581608*** | 550.294442 | 1082.555059 | 541.781168 | 1081.571043 | 541.289160 | 7 |
| 4 | **427.218725** | 214.113001 | | | 409.208160 | 205.107718 | L | ***970.539015*** | 485.773146 | 953.512466 | 477.259871 | 952.528450 | 476.767863 | 6 |
| 5 | **866.444051** | 433.725664 | 849.417502 | 425.212389 | 848.433486 | 424.720381 | Q | ***857.454951*** | 429.231114 | 840.428402 | 420.717839 | 839.444386 | 420.225831 | 5 |
| 6 | **937.481165** | 469.244221 | 920.454616 | 460.730946 | 919.470600 | 460.238938 | A | ***418.229625*** | 209.618450 | 401.203076 | 201.105176 | 400.219060 | 200.613168 | 4 |
| 7 | **1066.523758** | 533.765517 | 1049.497209 | 525.252243 | 1048.513193 | 524.760235 | E | ***347.192511*** | 174.099893 | 330.165962 | 165.586619 | 329.181946 | 165.094611 | 3 |
| 8 | **1137.560872** | 569.284074 | 1120.534323 | 560.770800 | 1119.550307 | 560.278792 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SPELQAEAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.6 | 1282.659088 | -0.004260 | SPELQAEAK |
| 12.5 | 1282.637802 | 0.017026 | KGHETLRDGDR |
| 3.1 | 1282.670334 | -0.015506 | EPIQASTAR |
| 1.3 | 1282.655716 | -0.000888 | ALEAEKYGFQK |
| 1.1 | 1282.662949 | -0.008121 | DLSDTQRHLAK |
| 0.8 | 1282.645203 | 0.009625 | AAGPGLGNVAMGPR |
| 0.7 | 1282.645187 | 0.009641 | KCGHENLQLGK |
| 0.6 | 1282.641830 | 0.012998 | SYPGHVQPATAR |

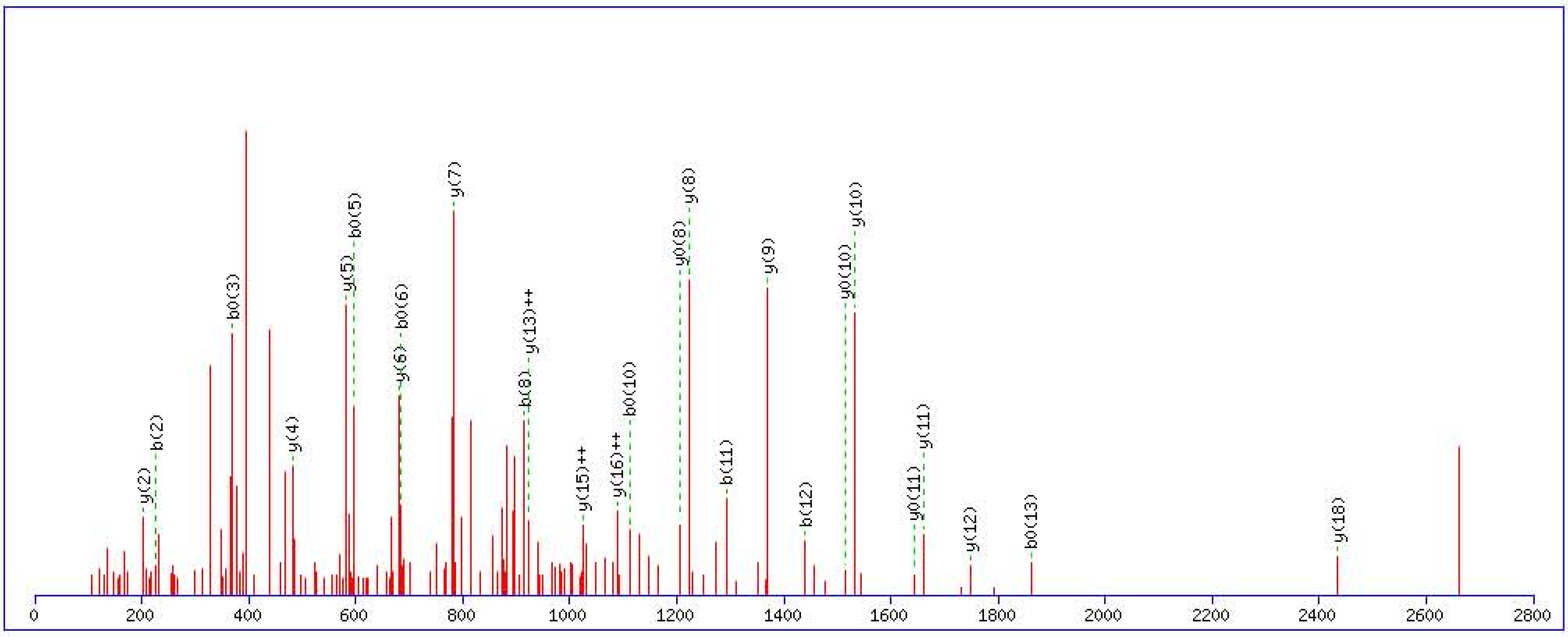
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EPCVESLVSQYFQTVTDYGK**
Found in **APOA2_HUMAN**, Apolipoprotein A-II OS=Homo sapiens GN=APOA2 PE=1 SV=1

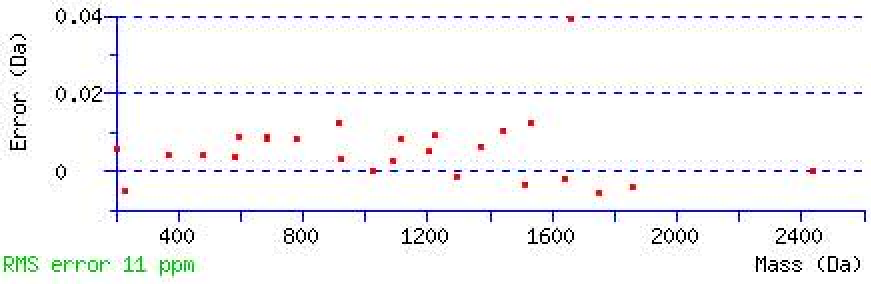
Match to Query 58048: 2660.263062 from(887.761630,3+) rtinseconds(3114) index(28264)
Title: Locus:1.1.1.1083.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

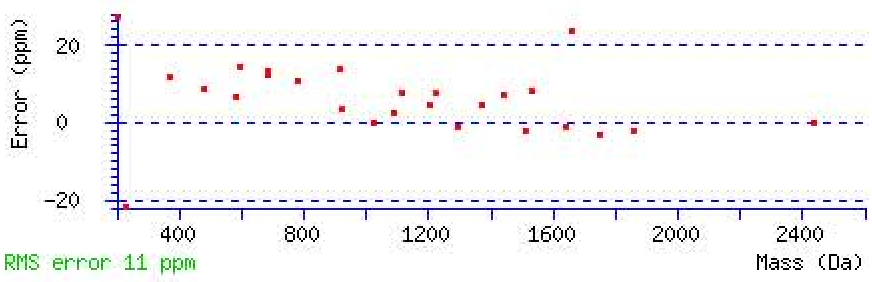
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2660.250244
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 75  Expect: 7.3e-007
Matches : 26/204 fragment ions using 36 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 20 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 2532.214913 | 1266.611094 | 2515.188364 | 1258.097820 | 2514.204348 | 1257.605812 | 19 |
| 3 | 387.133282 | 194.070279 | | | 369.122717 | 185.064997 | C | ***2435.162149*** | 1218.084712 | 2418.135600 | 1209.571438 | 2417.151584 | 1209.079430 | 18 |
| 4 | 486.201696 | 243.604486 | | | 468.191131 | 234.599204 | V | 2275.131500 | 1138.069388 | 2258.104951 | 1129.556113 | 2257.120935 | 1129.064105 | 17 |
| 5 | 615.244289 | 308.125783 | | | 597.233724 | 299.120500 | E | 2176.063086 | 1088.535181 | 2159.036537 | 1080.021906 | 2158.052521 | 1079.529898 | 16 |
| 6 | 702.276317 | 351.641797 | | | 684.265752 | 342.636514 | S | 2047.020493 | 1024.013885 | 2029.993944 | 1015.500610 | 2029.009928 | 1015.008602 | 15 |
| 7 | 815.360381 | 408.183829 | | | 797.349816 | 399.178546 | L | 1959.988465 | 980.497871 | 1942.961916 | 971.984596 | 1941.977900 | 971.492588 | 14 |
| 8 | **914.428795** | 457.718036 | | | 896.418230 | 448.712753 | V | 1846.904401 | 923.955839 | 1829.877852 | 915.442564 | 1828.893836 | 914.950556 | 13 |
| 9 | 1001.460823 | 501.234050 | | | 983.450258 | 492.228767 | S | ***1747.835987*** | 874.421632 | 1730.809438 | 865.908357 | 1729.825422 | 865.416349 | 12 |
| 10 | 1129.519401 | 565.263339 | 1112.492852 | 556.750064 | 1111.508836 | 556.258056 | Q | ***1660.803959*** | 830.905618 | 1643.777410 | 822.392343 | 1642.793394 | 821.900335 | 11 |
| 11 | **1292.582730** | 646.795003 | 1275.556181 | 638.281729 | 1274.572165 | 637.789721 | Y | ***1532.745381*** | 766.876329 | 1515.718832 | 758.363054 | 1514.734816 | 757.871046 | 10 |
| 12 | **1439.651144** | 720.329210 | 1422.624595 | 711.815936 | 1421.640579 | 711.323928 | F | ***1369.682052*** | 685.344664 | 1352.655503 | 676.831390 | 1351.671487 | 676.339382 | 9 |
| 13 | 1878.876470 | 939.941873 | 1861.849921 | 931.428599 | 1860.865905 | 930.936591 | Q | ***1222.613638*** | 611.810457 | 1205.587089 | 603.297183 | 1204.603073 | 602.805175 | 8 |
| 14 | 1979.924149 | 990.465713 | 1962.897600 | 981.952438 | 1961.913584 | 981.460430 | T | ***783.388312*** | 392.197794 | 766.361763 | 383.684519 | 765.377747 | 383.192511 | 7 |
| 15 | 2078.992563 | 1039.999920 | 2061.966014 | 1031.486645 | 2060.981998 | 1030.994637 | V | ***682.340633*** | 341.673954 | 665.314084 | 333.160680 | 664.330068 | 332.668672 | 6 |
| 16 | 2180.040242 | 1090.523759 | 2163.013693 | 1082.010484 | 2162.029677 | 1081.518476 | T | ***583.272219*** | 292.139747 | 566.245670 | 283.626473 | 565.261654 | 283.134465 | 5 |
| 17 | 2295.067185 | 1148.037230 | 2278.040636 | 1139.523956 | 2277.056620 | 1139.031948 | D | ***482.224540*** | 241.615908 | 465.197991 | 233.102633 | 464.213975 | 232.610625 | 4 |
| 18 | 2458.130514 | 1229.568895 | 2441.103965 | 1221.055620 | 2440.119949 | 1220.563612 | Y | 367.197597 | 184.102436 | 350.171048 | 175.589162 | | | 3 |
| 19 | 2515.151978 | 1258.079627 | 2498.125429 | 1249.566352 | 2497.141413 | 1249.074344 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 20 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EPCVESLVSQYFQTVTDYGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 74.8 | 2660.250244 | 0.012818 | EPCVESLVSQYFQTVTDYGK |
| 33.1 | 2660.250244 | 0.012818 | EPCVESLVSQYFQTVTDYGK |

**Mascot:** http://www.matrixscience.com/

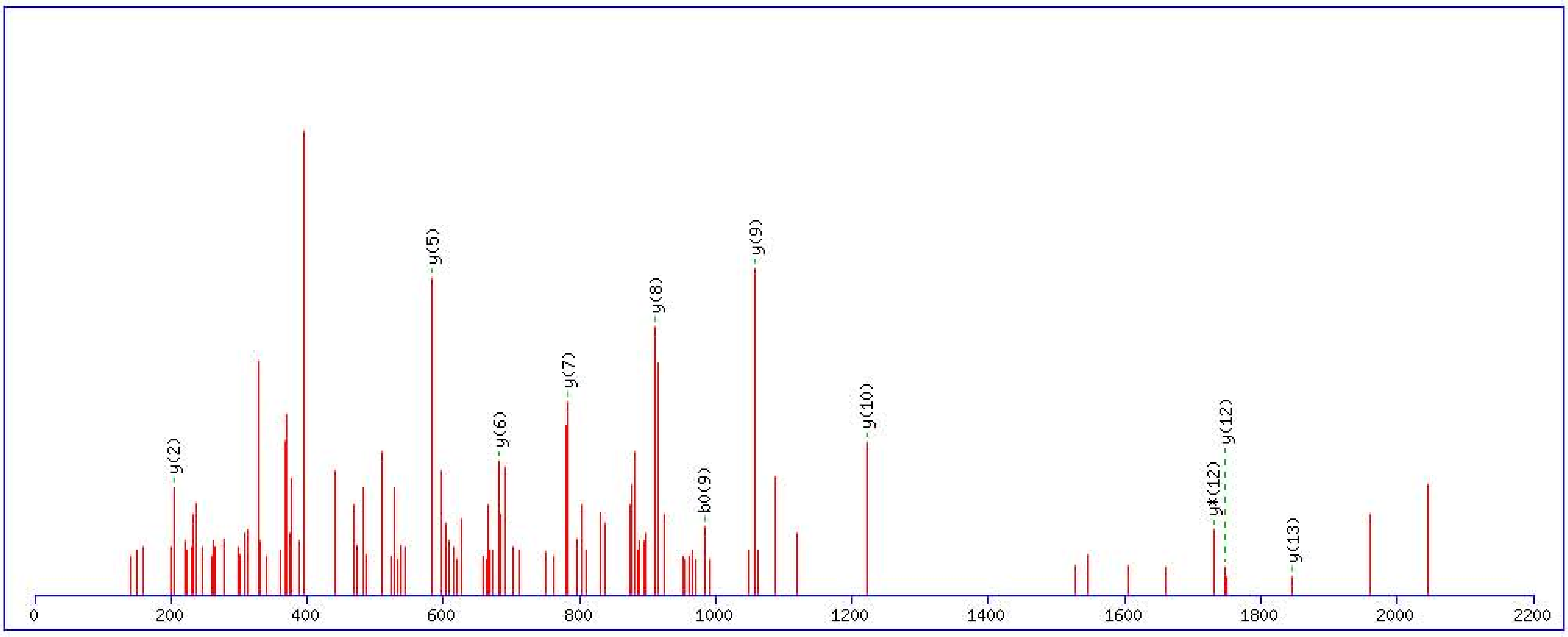
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EPCVESLVSQYFQTVTDYGK**
Found in **APOA2_HUMAN**, Apolipoprotein A-II OS=Homo sapiens GN=APOA2 PE=1 SV=1

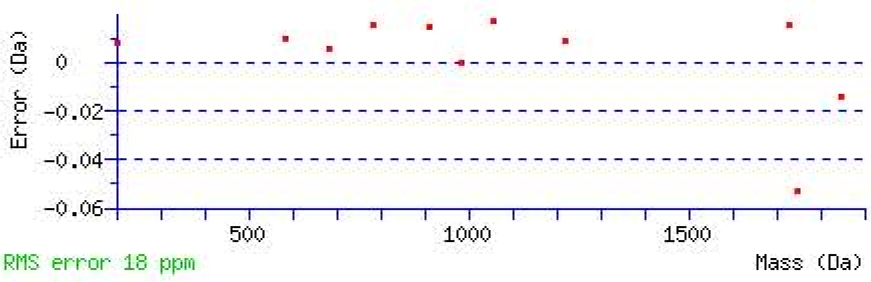
Match to Query 58051: 2660.265912 from(887.762580,3+) rtinseconds(3178) index(28557)
Title: Locus:1.1.1.1105.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

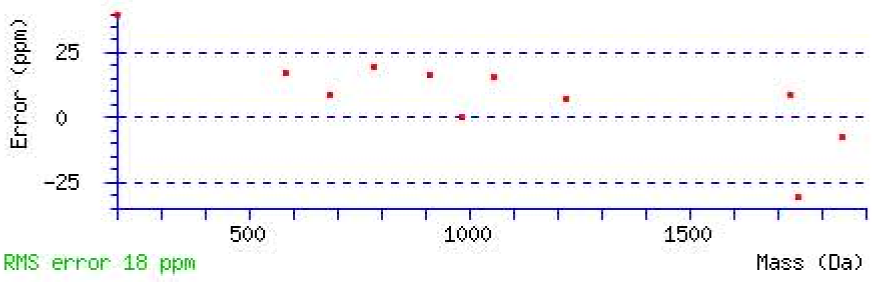
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2660.250244
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 0.00023
Matches : 11/204 fragment ions using 18 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 20 |
| 2 | 227.102633 | 114.054954 | | | 209.092068 | 105.049672 | P | 2532.214913 | 1266.611094 | 2515.188364 | 1258.097820 | 2514.204348 | 1257.605812 | 19 |
| 3 | 387.133282 | 194.070279 | | | 369.122717 | 185.064997 | C | 2435.162149 | 1218.084712 | 2418.135600 | 1209.571438 | 2417.151584 | 1209.079430 | 18 |
| 4 | 486.201696 | 243.604486 | | | 468.191131 | 234.599204 | V | 2275.131500 | 1138.069388 | 2258.104951 | 1129.556113 | 2257.120935 | 1129.064105 | 17 |
| 5 | 615.244289 | 308.125783 | | | 597.233724 | 299.120500 | E | 2176.063086 | 1088.535181 | 2159.036537 | 1080.021906 | 2158.052521 | 1079.529898 | 16 |
| 6 | 702.276317 | 351.641797 | | | 684.265752 | 342.636514 | S | 2047.020493 | 1024.013884 | 2029.993944 | 1015.500610 | 2029.009928 | 1015.008602 | 15 |
| 7 | 815.360381 | 408.183829 | | | 797.349816 | 399.178546 | L | 1959.988465 | 980.497870 | 1942.961916 | 971.984596 | 1941.977900 | 971.492588 | 14 |
| 8 | 914.428795 | 457.718036 | | | 896.418230 | 448.712753 | V | ***1846.904401*** | 923.955838 | 1829.877852 | 915.442564 | 1828.893836 | 914.950556 | 13 |
| 9 | 1001.460823 | 501.234050 | | | 983.450258 | 492.228767 | S | ***1747.835987*** | 874.421631 | 1730.809438 | 865.908357 | 1729.825422 | 865.416349 | 12 |
| 10 | 1440.686149 | 720.846712 | 1423.659600 | 712.333438 | 1422.675584 | 711.841430 | Q | 1660.803959 | 830.905617 | 1643.777410 | 822.392343 | 1642.793394 | 821.900335 | 11 |
| 11 | 1603.749478 | 802.378377 | 1586.722929 | 793.865103 | 1585.738913 | 793.373094 | Y | ***1221.578633*** | 611.292954 | 1204.552084 | 602.779680 | 1203.568068 | 602.287672 | 10 |
| 12 | 1750.817892 | 875.912584 | 1733.791343 | 867.399310 | 1732.807327 | 866.907302 | F | ***1058.515304*** | 529.761290 | 1041.488755 | 521.248015 | 1040.504739 | 520.756007 | 9 |
| 13 | 1878.876470 | 939.941873 | 1861.849921 | 931.428599 | 1860.865905 | 930.936590 | Q | ***911.446890*** | 456.227083 | 894.420341 | 447.713808 | 893.436325 | 447.221800 | 8 |
| 14 | 1979.924149 | 990.465713 | 1962.897600 | 981.952438 | 1961.913584 | 981.460430 | T | ***783.388312*** | 392.197794 | 766.361763 | 383.684519 | 765.377747 | 383.192511 | 7 |
| 15 | 2078.992563 | 1039.999919 | 2061.966014 | 1031.486645 | 2060.981998 | 1030.994637 | V | ***682.340633*** | 341.673954 | 665.314084 | 333.160680 | 664.330068 | 332.668672 | 6 |
| 16 | 2180.040242 | 1090.523759 | 2163.013693 | 1082.010484 | 2162.029677 | 1081.518476 | T | ***583.272219*** | 292.139747 | 566.245670 | 283.626473 | 565.261654 | 283.134465 | 5 |
| 17 | 2295.067185 | 1148.037230 | 2278.040636 | 1139.523956 | 2277.056620 | 1139.031948 | D | 482.224540 | 241.615908 | 465.197991 | 233.102633 | 464.213975 | 232.610625 | 4 |
| 18 | 2458.130514 | 1229.568895 | 2441.103965 | 1221.055620 | 2440.119949 | 1220.563612 | Y | 367.197597 | 184.102436 | 350.171048 | 175.589162 | | | 3 |
| 19 | 2515.151978 | 1258.079627 | 2498.125429 | 1249.566352 | 2497.141413 | 1249.074344 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 20 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EPCVESLVSQYFQTVTDYGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.0 | 2660.250244 | 0.015668 | EPCVESLVSQYFQTVTDYGK |
| 28.6 | 2660.250244 | 0.015668 | EPCVESLVSQYFQTVTDYGK |

**Mascot:** http://www.matrixscience.com/

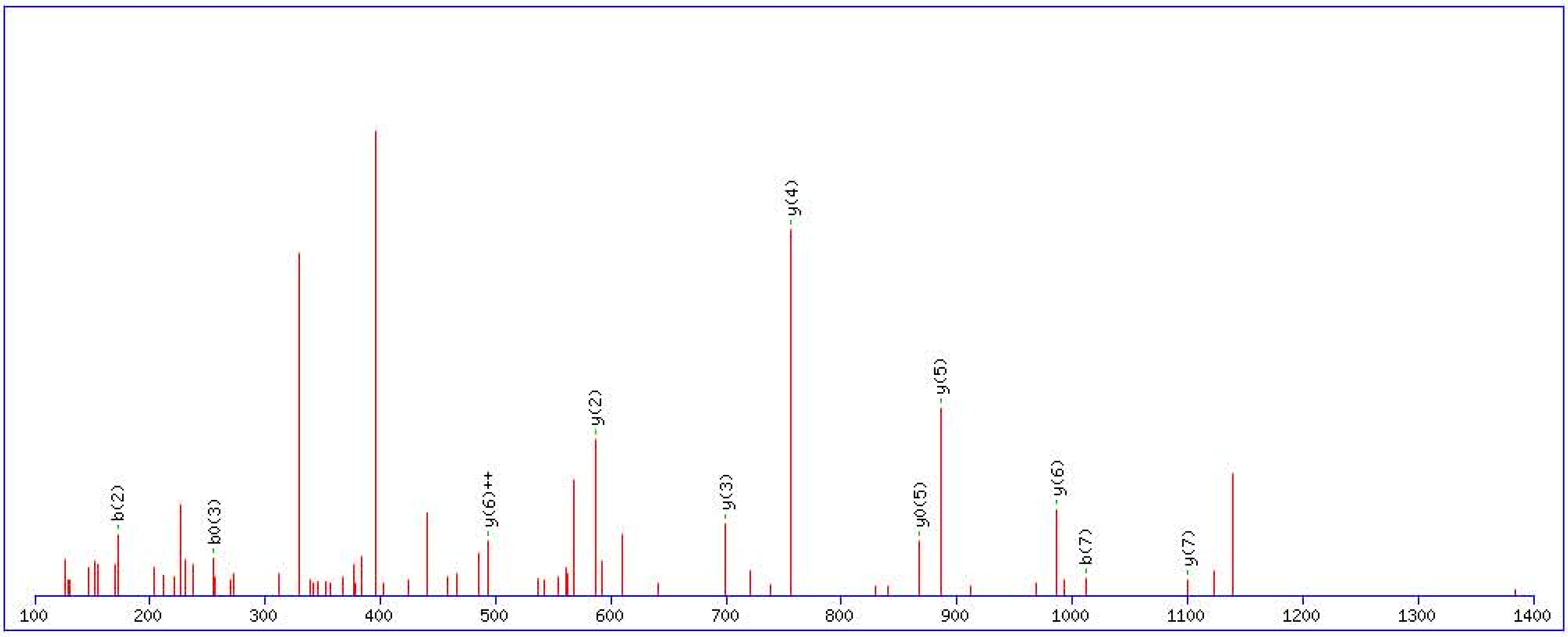
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GNTEGLQK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

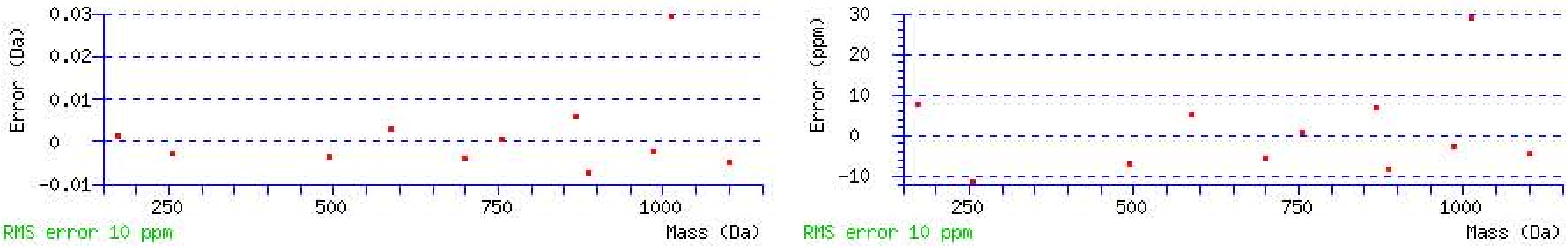
Match to Query 21820: 1156.585268 from(579.299910,2+) rtinseconds(1399) index(32517)
Title: Locus:1.1.1.2906.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1156.591034
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 37 **Expect:** 0.004
**Matches :** 11/70 fragment ions using 21 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 8 |
| 2 | **172.071667** | 86.539471 | 155.045118 | 78.026197 | | | N | ***1100.576857*** | 550.792067 | 1083.550308 | 542.278792 | 1082.566292 | 541.786784 | 7 |
| 3 | 273.119346 | 137.063311 | 256.092797 | 128.550037 | 255.108781 | 128.058029 | T | ***986.533930*** | 493.770603 | 969.507381 | 485.257329 | 968.523365 | 484.765321 | 6 |
| 4 | 402.161939 | 201.584608 | 385.135390 | 193.071333 | 384.151374 | 192.579325 | E | ***885.486251*** | 443.246764 | 868.459702 | 434.733489 | 867.475686 | 434.241481 | 5 |
| 5 | 459.183403 | 230.095339 | 442.156854 | 221.582065 | 441.172838 | 221.090057 | G | ***756.443658*** | 378.725467 | 739.417109 | 370.212193 | | | 4 |
| 6 | 572.267467 | 286.637372 | 555.240918 | 278.124097 | 554.256902 | 277.632089 | L | ***699.422194*** | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 7 | **1011.492793** | 506.250035 | 994.466244 | 497.736760 | 993.482228 | 497.244752 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 8 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546766 | | | 1 |



NCBI **BLAST** search of GNTEGLQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.7 | 1156.591034 | -0.005766 | GNTEGLQK |
| 12.7 | 1156.572418 | 0.012850 | GPQTSTSPASPK |
| 7.2 | 1156.598923 | -0.013655 | GDRGGPGIPGFK |
| 6.0 | 1156.577118 | 0.008150 | QLSTRCHQK |
| 3.1 | 1156.591019 | -0.005751 | SQLENQK |
| 2.3 | 1156.576416 | 0.008852 | IKSQDFYEK |
| 2.1 | 1156.595047 | -0.009779 | CDYFLAKIK |
| 1.3 | 1156.602249 | -0.016981 | MVHKEKGANK |
| 1.0 | 1156.591034 | -0.005766 | TQVEQNK |

**Mascot:** http://www.matrixscience.com/

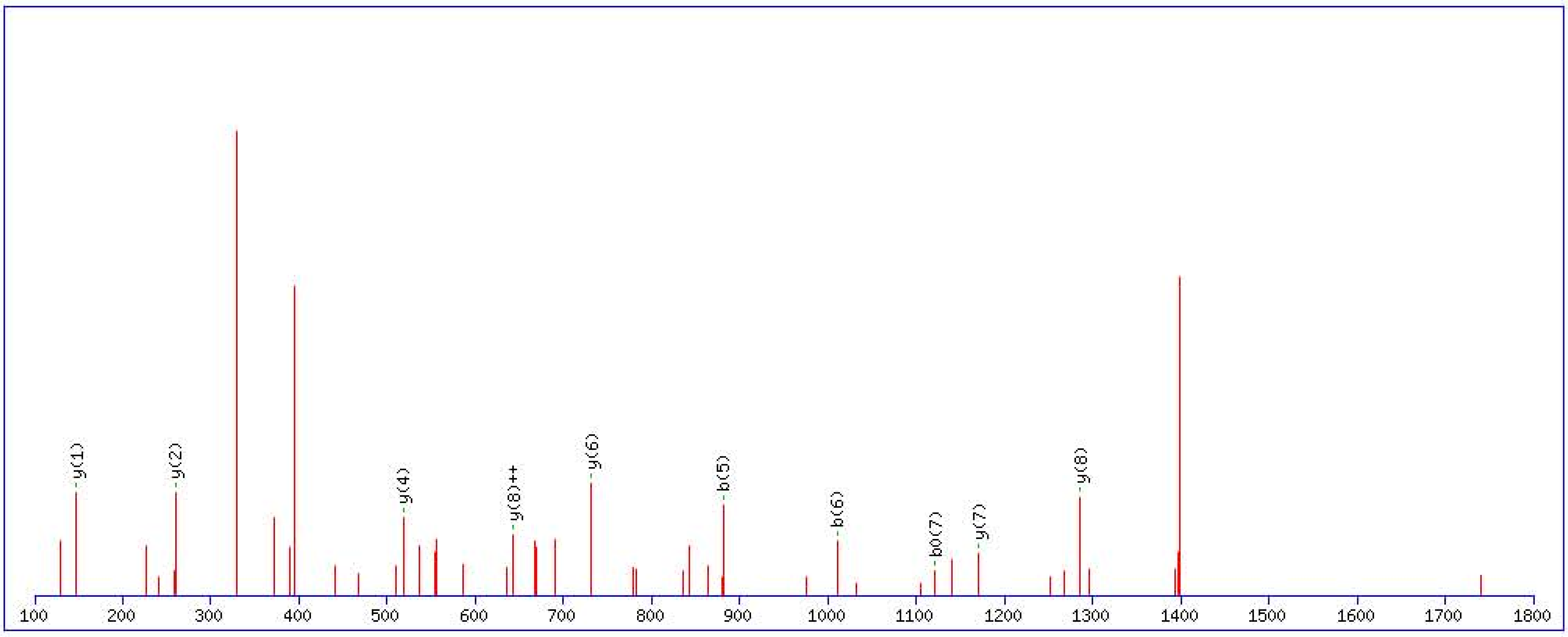
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IDQNVEELK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

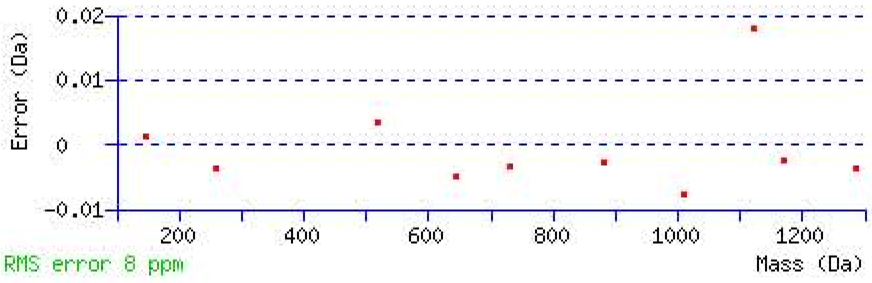
Match to Query 30079: 1397.714368 from(699.864460,2+) rtinseconds(1817) index(35136)
Title: Locus:1.1.1.3052.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

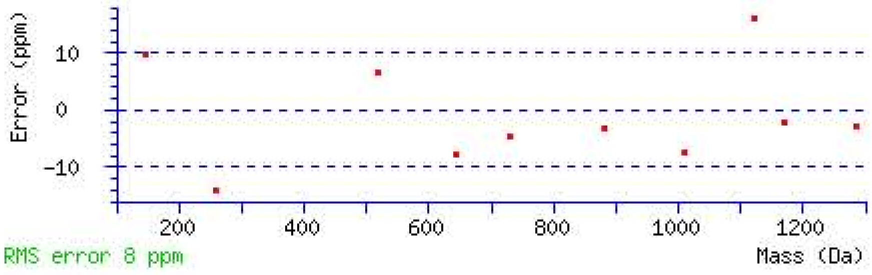
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1397.722427
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 0.00086
Matches : 10/86 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 9 |
| 2 | 229.118283 | 115.062779 | | | 211.107718 | 106.057497 | D | ***1285.645664*** | 643.326470 | 1268.619115 | 634.813196 | 1267.635099 | 634.321187 | 8 |
| 3 | 668.343609 | 334.675443 | 651.317060 | 326.162168 | 650.333044 | 325.670160 | Q | ***1170.618721*** | 585.812998 | 1153.592172 | 577.299724 | 1152.608156 | 576.807716 | 7 |
| 4 | 782.386536 | 391.696906 | 765.359987 | 383.183631 | 764.375971 | 382.691623 | N | ***731.393395*** | 366.200335 | 714.366846 | 357.687061 | 713.382830 | 357.195053 | 6 |
| 5 | **881.454950** | 441.231113 | 864.428401 | 432.717838 | 863.444385 | 432.225830 | V | 617.350468 | 309.178872 | 600.323919 | 300.665597 | 599.339903 | 300.173589 | 5 |
| 6 | **1010.497543** | 505.752410 | 993.470994 | 497.239135 | 992.486978 | 496.747127 | E | ***518.282054*** | 259.644665 | 501.255505 | 251.131390 | 500.271489 | 250.639382 | 4 |
| 7 | 1139.540136 | 570.273706 | 1122.513587 | 561.760431 | 1121.529571 | 561.268423 | E | 389.239461 | 195.123368 | 372.212912 | 186.610094 | 371.228896 | 186.118086 | 3 |
| 8 | 1252.624200 | 626.815738 | 1235.597651 | 618.302463 | 1234.613635 | 617.810455 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IDQNVEELK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.5 | 1397.722427 | -0.008059 | IDQNVEELK |
| 13.5 | 1397.704681 | 0.009687 | EQVDPLQMK |
| 8.9 | 1397.733658 | -0.019290 | QNITNQLEK |
| 8.8 | 1397.722427 | -0.008059 | EQKDTYVMKIK |
| 8.4 | 1397.722412 | -0.008044 | EELEQAQIK |
| 7.4 | 1397.697296 | 0.017072 | LPNTESHQVVMK |
| 4.8 | 1397.722412 | -0.008044 | QLEAQLEEK |
| 4.7 | 1397.712540 | 0.001828 | LMFDAFNQRLK |
| 4.3 | 1397.719070 | -0.004702 | EFATSQLSFLQK |
| 3.7 | 1397.723785 | -0.009417 | LFVSHMIDKHR |

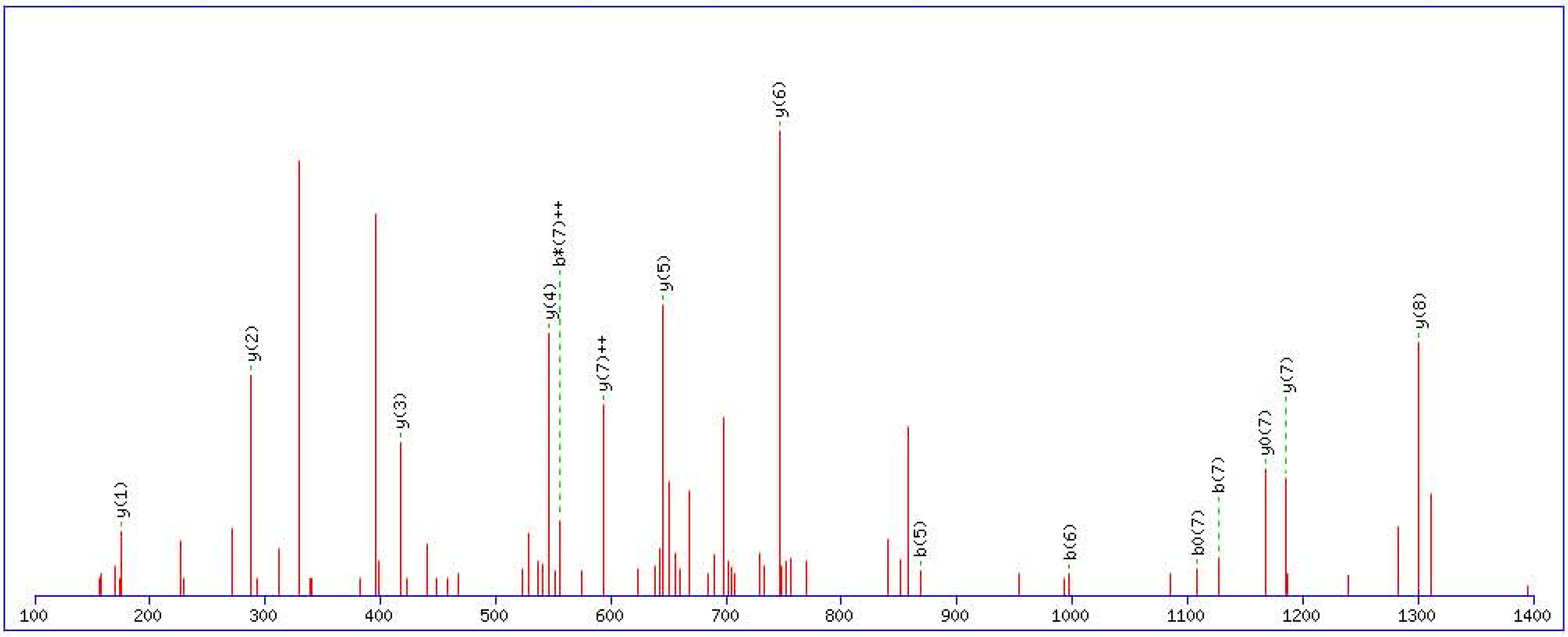
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IDQTVEELR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

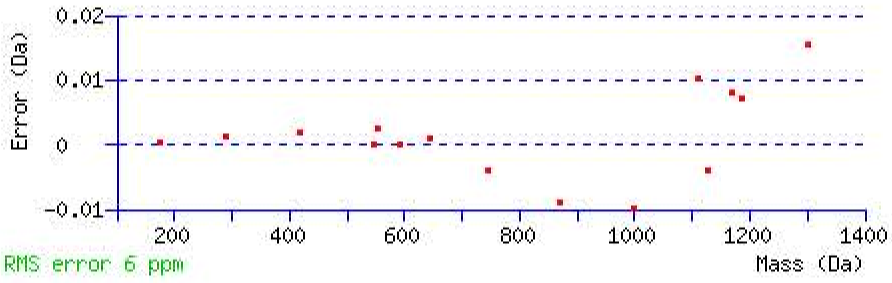
Match to Query 31041: 1412.731008 from(707.372780,2+) rtinseconds(1889) index(35570)
Title: Locus:1.1.1.3077.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

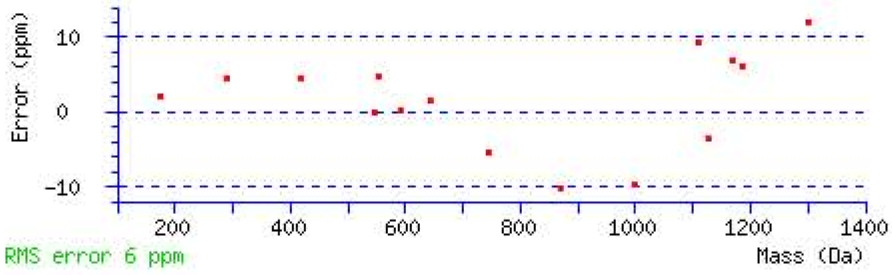
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1412.733337
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 4e-005
Matches : 15/86 fragment ions using 25 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 9 |
| 2 | 229.118283 | 115.062779 | | | 211.107718 | 106.057497 | D | ***1300.656564*** | 650.831920 | 1283.630015 | 642.318646 | 1282.645999 | 641.826638 | 8 |
| 3 | 668.343609 | 334.675443 | 651.317060 | 326.162168 | 650.333044 | 325.670160 | Q | ***1185.629621*** | 593.318449 | 1168.603072 | 584.805174 | 1167.619056 | 584.313166 | 7 |
| 4 | 769.391288 | 385.199282 | 752.364739 | 376.686008 | 751.380723 | 376.194000 | T | ***746.404295*** | 373.705786 | 729.377746 | 365.192511 | 728.393730 | 364.700503 | 6 |
| 5 | **868.459702** | 434.733489 | 851.433153 | 426.220215 | 850.449137 | 425.728207 | V | ***645.356616*** | 323.181946 | 628.330067 | 314.668672 | 627.346051 | 314.176664 | 5 |
| 6 | **997.502295** | 499.254786 | 980.475746 | 490.741511 | 979.491730 | 490.249503 | E | ***546.288202*** | 273.647739 | 529.261653 | 265.134465 | 528.277637 | 264.642457 | 4 |
| 7 | **1126.544888** | 563.776082 | 1109.518339 | 555.262808 | 1108.534323 | 554.770800 | E | ***417.245609*** | 209.126442 | 400.219060 | 200.613168 | 399.235044 | 200.121160 | 3 |
| 8 | 1239.628952 | 620.318114 | 1222.602403 | 611.804840 | 1221.618387 | 611.312832 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of IDQTVEELR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.4 | 1412.733337 | -0.002329 | IDQTVEELR |
| 9.9 | 1412.744537 | -0.013529 | IPPEKMRELER |
| 7.2 | 1412.734665 | -0.003657 | MPADWRQQLLR |
| 6.3 | 1412.741211 | -0.010203 | KVTIYSFTGNQR |
| 5.8 | 1412.737167 | -0.006159 | ARPEDVISEGRGK |
| 4.9 | 1412.741196 | -0.010188 | SSLHYKPTPDLR |
| 2.5 | 1412.730621 | 0.000387 | ARMEHSRELLR |
| 1.9 | 1412.719421 | 0.011587 | VSTLHCKADNIR |
| 1.9 | 1412.716034 | 0.014974 | SWRESHLTEIR |
| 1.9 | 1412.741180 | -0.010172 | WQQQELIAELR |

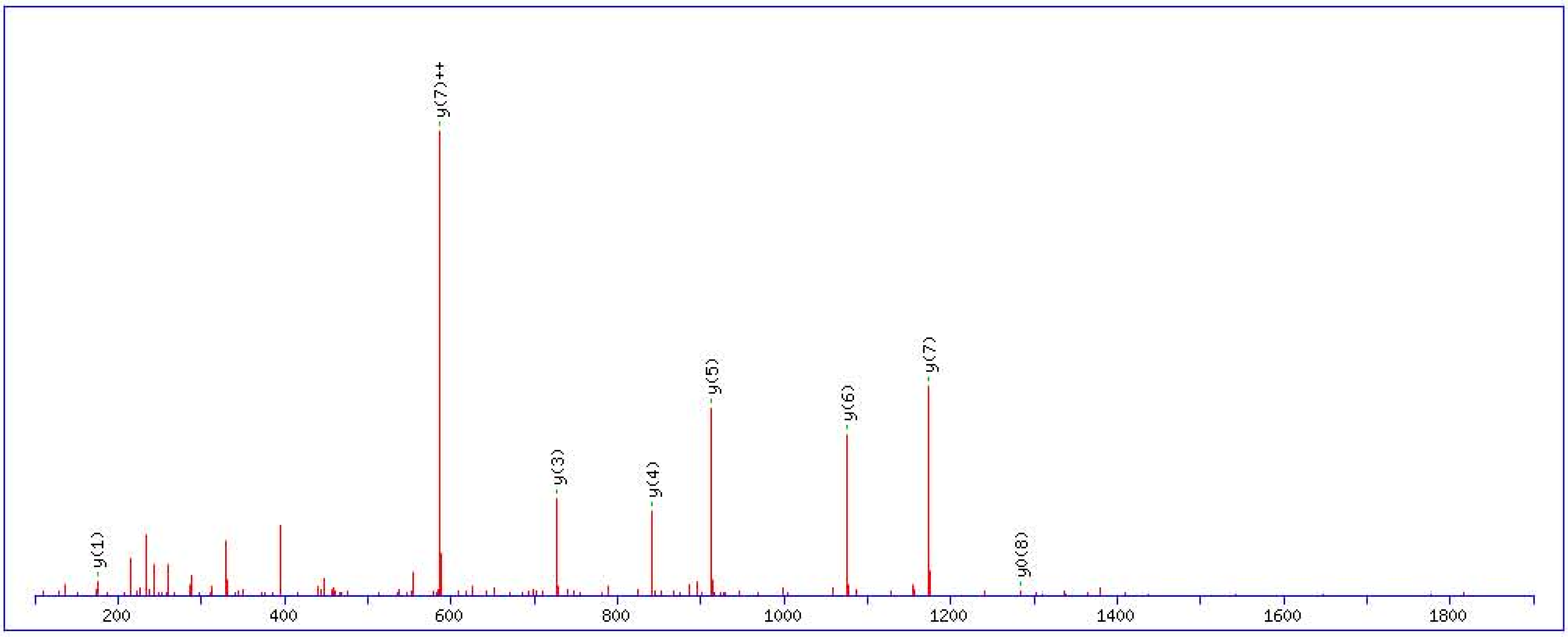
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LEPYADQLR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

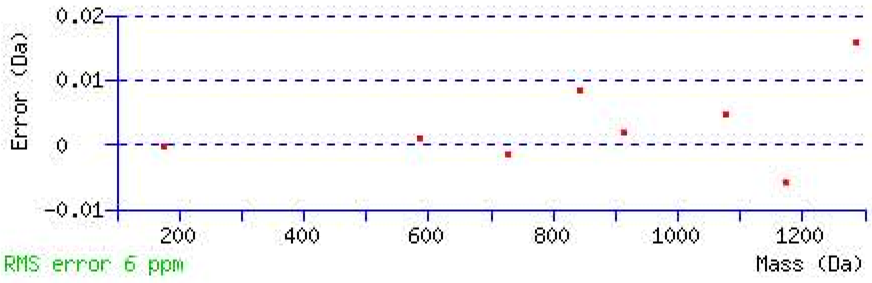
Match to Query 31067: 1414.726348 from(708.370450,2+) rtinseconds(1990) index(68722)
Title: Locus:1.1.1.1630.12 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

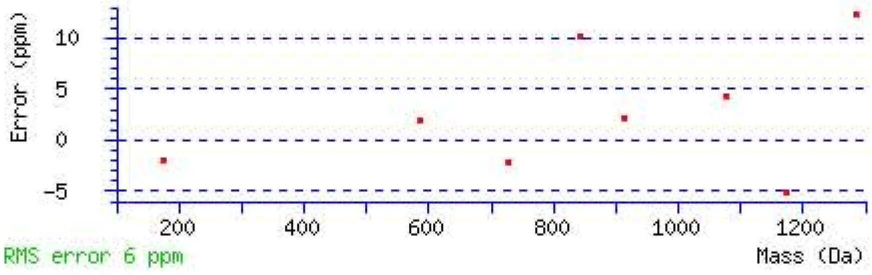
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1414.727844
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.001
Matches : 8/76 fragment ions using 14 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 9 |
| 2 | 243.133933 | 122.070605 | | | 225.123368 | 113.065322 | E | 1302.651085 | 651.829181 | 1285.624536 | 643.315906 | 1284.640520 | 642.823898 | 8 |
| 3 | 340.186697 | 170.596987 | | | 322.176132 | 161.591704 | P | ***1173.608492*** | 587.307884 | 1156.581943 | 578.794610 | 1155.597927 | 578.302602 | 7 |
| 4 | 503.250026 | 252.128651 | | | 485.239461 | 243.123369 | Y | ***1076.555728*** | 538.781502 | 1059.529179 | 530.268228 | 1058.545163 | 529.776220 | 6 |
| 5 | 574.287140 | 287.647208 | | | 556.276575 | 278.641926 | A | ***913.492399*** | 457.249838 | 896.465850 | 448.736563 | 895.481834 | 448.244555 | 5 |
| 6 | 689.314083 | 345.160680 | | | 671.303518 | 336.155397 | D | ***842.455285*** | 421.731281 | 825.428736 | 413.218006 | 824.444720 | 412.725998 | 4 |
| 7 | 1128.539409 | 564.773343 | 1111.512860 | 556.260068 | 1110.528844 | 555.768060 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 8 | 1241.623473 | 621.315375 | 1224.596924 | 612.802100 | 1223.612908 | 612.310092 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LEPYADQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.5 | 1414.727844 | -0.001496 | LEPYADQLR |
| 7.3 | 1414.712585 | 0.013763 | EISTEEQLR |
| 6.5 | 1414.713943 | 0.012405 | KLQCIADQFHR |
| 5.0 | 1414.735931 | -0.009583 | LMRGLLHCMIR |
| 1.8 | 1414.731216 | -0.004868 | LMELQEAVR |
| 1.5 | 1414.731689 | -0.005341 | NKAEFHQSVISR |
| 0.8 | 1414.735077 | -0.008729 | SSMSGLHLVKQGR |
| 0.4 | 1414.741577 | -0.015229 | ELDVEVSRLEAR |
| 0.3 | 1414.716400 | 0.009948 | LEEDARLEERR |
| 0.1 | 1414.717789 | 0.008559 | GKGAAGGSWQQRGR |

**Mascot:** http://www.matrixscience.com/

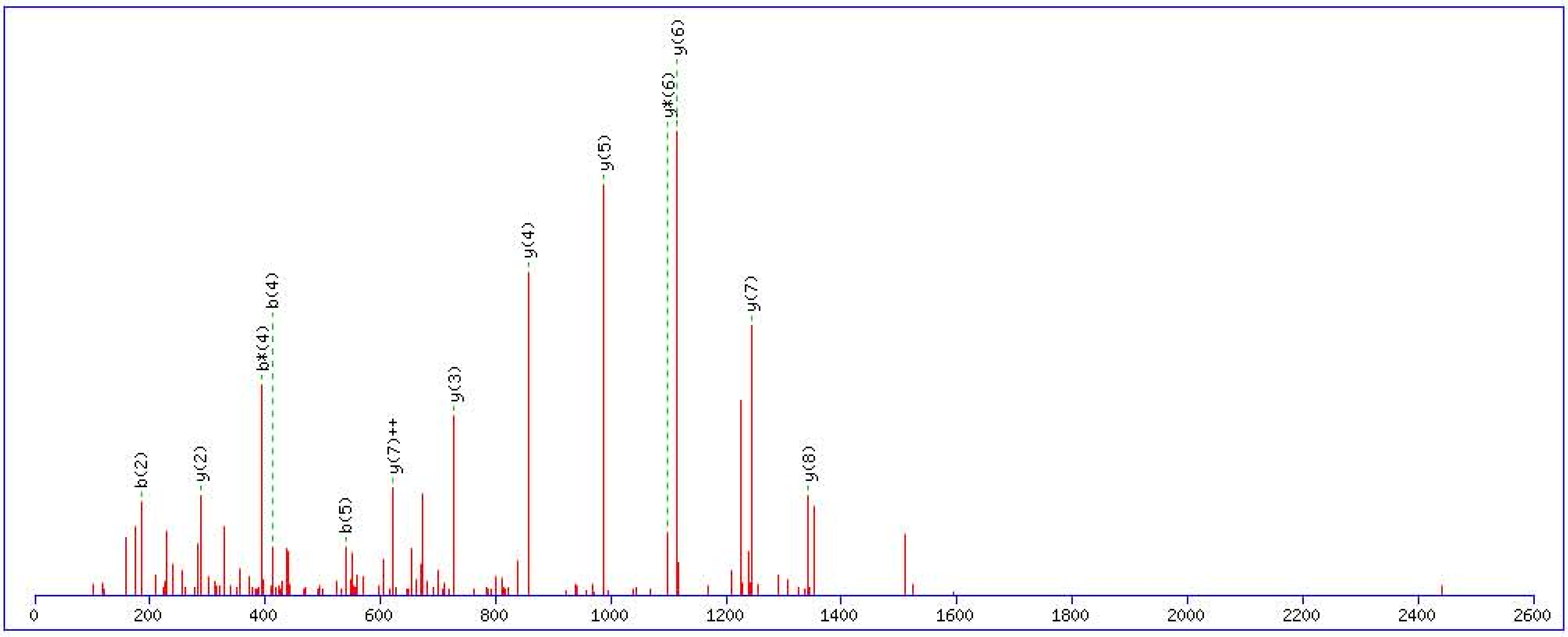
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ALVQQMEQLR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

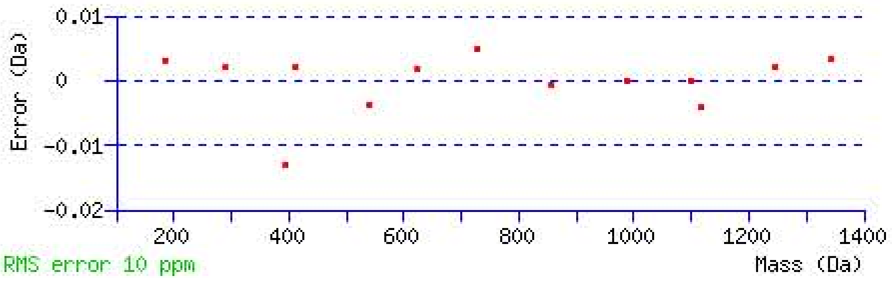
Match to Query 34589: 1525.813928 from(763.914240,2+) rtinseconds(2097) index(6396)
Title: Locus:1.1.1.1539.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

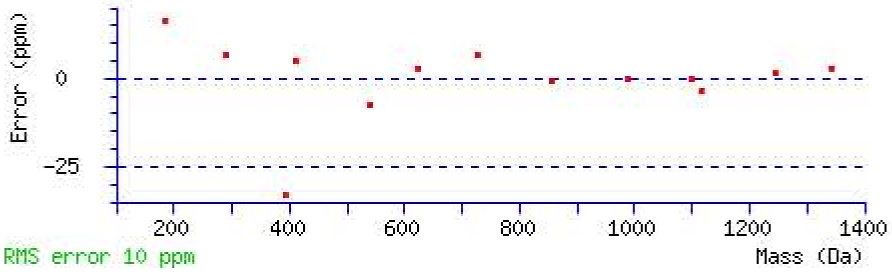
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1525.810867
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q8** : Biotin:Thermo-21345 (Q)
**Ions Score:** 71 **Expect:** 2.1e-006
**Matches :** 13/84 fragment ions using 14 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 10 |
| 2 | **185.128454** | 93.067865 | | | | | L | 1455.781054 | 728.394165 | 1438.754505 | 719.880890 | 1437.770489 | 719.388882 | 9 |
| 3 | 284.196868 | 142.602072 | | | | | V | ***1342.696990*** | 671.852133 | 1325.670441 | 663.338858 | 1324.686425 | 662.846850 | 8 |
| 4 | **412.255446** | 206.631361 | 395.228897 | 198.118087 | | | Q | ***1243.628576*** | 622.317926 | 1226.602027 | 613.804651 | 1225.618011 | 613.312643 | 7 |
| 5 | **540.314024** | 270.660650 | 523.287475 | 262.147376 | | | Q | ***1115.569998*** | 558.288637 | 1098.543449 | 549.775362 | 1097.559433 | 549.283354 | 6 |
| 6 | 671.354509 | 336.180893 | 654.327960 | 327.667618 | | | M | ***987.511420*** | 494.259348 | 970.484871 | 485.746073 | 969.500855 | 485.254065 | 5 |
| 7 | 800.397102 | 400.702189 | 783.370553 | 392.188915 | 782.386537 | 391.696907 | E | ***856.470935*** | 428.739105 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 8 | 1239.622428 | 620.314852 | 1222.595879 | 611.801578 | 1221.611863 | 611.309569 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704534 | | | 3 |
| 9 | 1352.706492 | 676.856884 | 1335.679943 | 668.343609 | 1334.695927 | 667.851601 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 10 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ALVQQMEQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 71.4 | 1525.810867 | 0.003061 | ALVQQMEQLR |
| 23.1 | 1525.810867 | 0.003061 | ALVQQMEQLR |
| 16.7 | 1525.798752 | 0.015176 | SPVKEEEKPQEVK |
| 14.9 | 1525.792236 | 0.021692 | ALTEQQEQLR |
| 10.3 | 1525.800064 | 0.013864 | ARALQSYYEAKAR |
| 9.9 | 1525.810867 | 0.003061 | ALVQQMEQLR |
| 7.7 | 1525.803467 | 0.010461 | SPPSPRSSMAAVALR |
| 5.5 | 1525.803482 | 0.010446 | VNTPAGSSQKAR |
| 5.2 | 1525.807495 | 0.006433 | WPPQQLMLSAALR |
| 4.9 | 1525.814682 | -0.000754 | LARASEQERR |

**Mascot:** http://www.matrixscience.com/

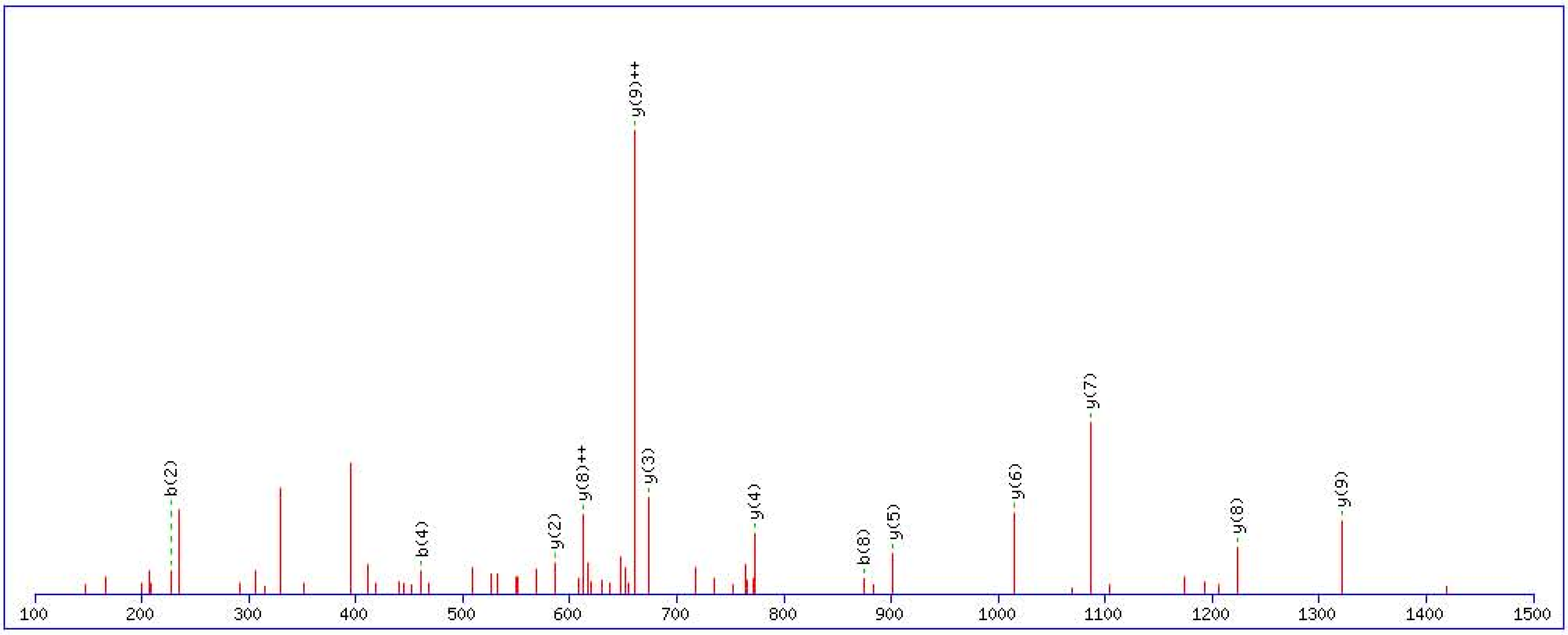
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LLPHANEVSQK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

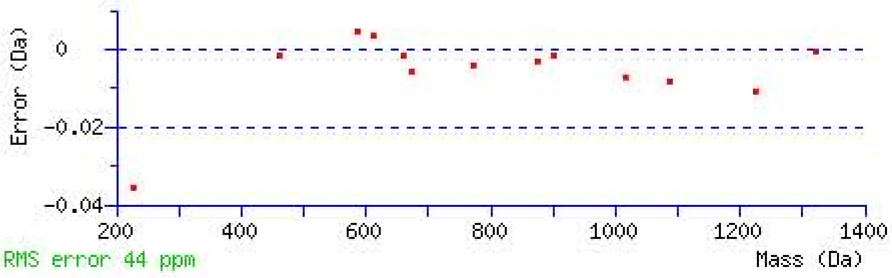
Match to Query 35002: 1545.829928 from(773.922240,2+) rtinseconds(1531) index(66052)
Title: Locus:1.1.1.1470.18 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

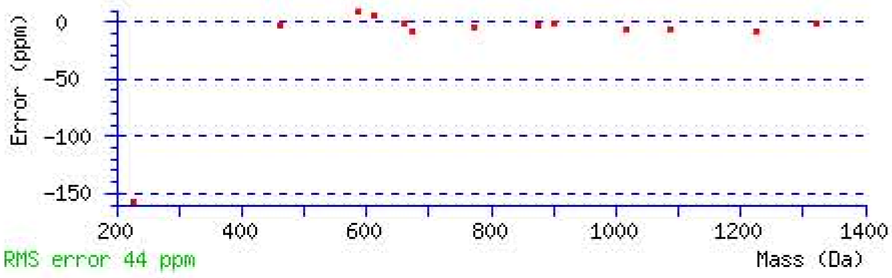
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1545.833710
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 56 **Expect:** 9.2e-006
**Matches :** 13/94 fragment ions using 23 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 11 |
| 2 | **227.175404** | 114.091340 | | | | | L | 1433.756946 | 717.382111 | 1416.730397 | 708.868837 | 1415.746381 | 708.376828 | 10 |
| 3 | 324.228168 | 162.617722 | | | | | P | ***1320.672882*** | 660.840079 | 1303.646333 | 652.326804 | 1302.662317 | 651.834796 | 9 |
| 4 | **461.287080** | 231.147178 | | | | | H | ***1223.620118*** | 612.313697 | 1206.593569 | 603.800422 | 1205.609553 | 603.308414 | 8 |
| 5 | 532.324194 | 266.665735 | | | | | A | ***1086.561206*** | 543.784241 | 1069.534657 | 535.270966 | 1068.550641 | 534.778958 | 7 |
| 6 | 646.367121 | 323.687199 | 629.340572 | 315.173924 | | | N | ***1015.524092*** | 508.265684 | 998.497543 | 499.752409 | 997.513527 | 499.260401 | 6 |
| 7 | 775.409714 | 388.208495 | 758.383165 | 379.695221 | 757.399149 | 379.203213 | E | ***901.481165*** | 451.244220 | 884.454616 | 442.730946 | 883.470600 | 442.238938 | 5 |
| 8 | **874.478128** | 437.742702 | 857.451579 | 429.229427 | 856.467563 | 428.737419 | V | ***772.438572*** | 386.722924 | 755.412023 | 378.209649 | 754.428007 | 377.717641 | 4 |
| 9 | 961.510156 | 481.258716 | 944.483607 | 472.745441 | 943.499591 | 472.253433 | S | ***673.370158*** | 337.188717 | 656.343609 | 328.675442 | 655.359593 | 328.183434 | 3 |
| 10 | 1400.735482 | 700.871379 | 1383.708933 | 692.358104 | 1382.724917 | 691.866096 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159428 | | | 2 |
| 11 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LLPHANEVSQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.6 | 1545.833710 | -0.003782 | LLPHANEVSQK |
| 1.8 | 1545.837738 | -0.007810 | LIPGQEYIFR |
| 0.9 | 1545.832352 | -0.002424 | LLSEVMEELEKVK |

**Mascot:** http://www.matrixscience.com/

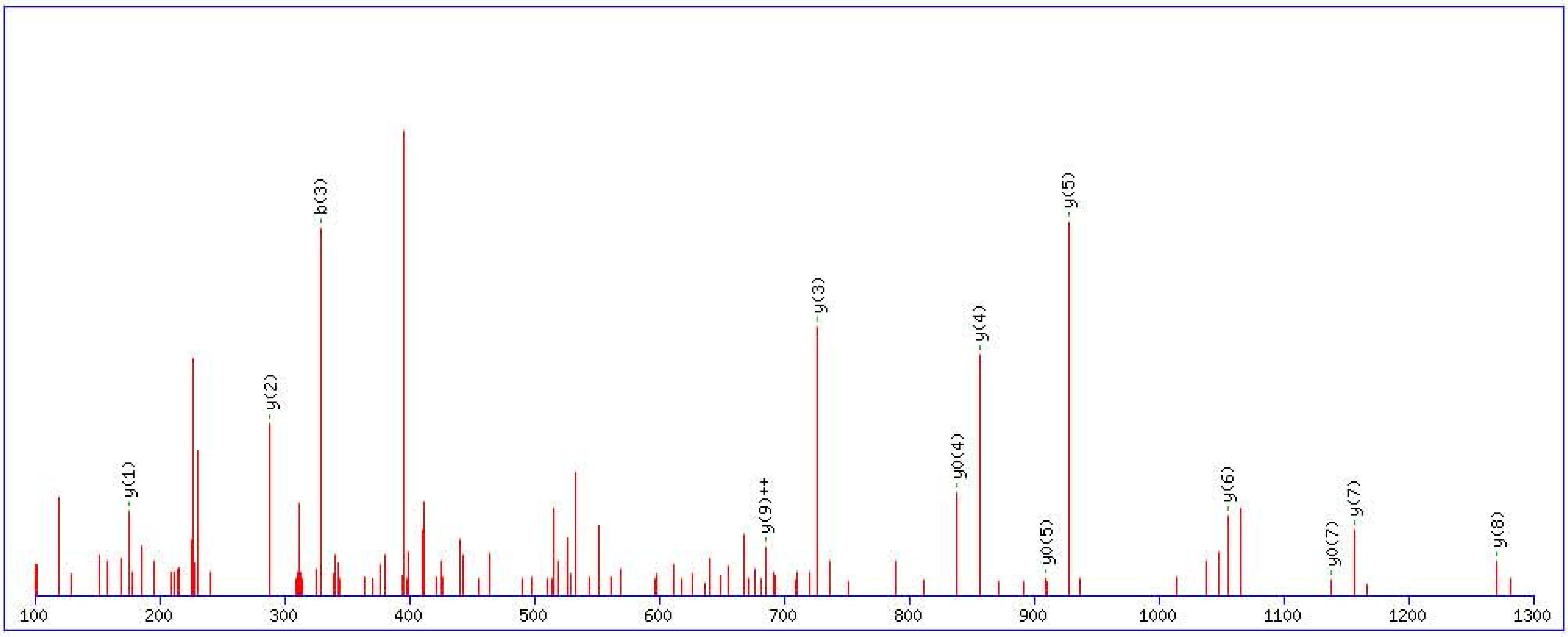
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TQVNTQAEQLR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

Match to Query 37125: 1597.818132 from(533.613320,3+) rtinseconds(1582) index(66370)
Title: Locus:1.1.1.1488.10 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1597.824615

**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)

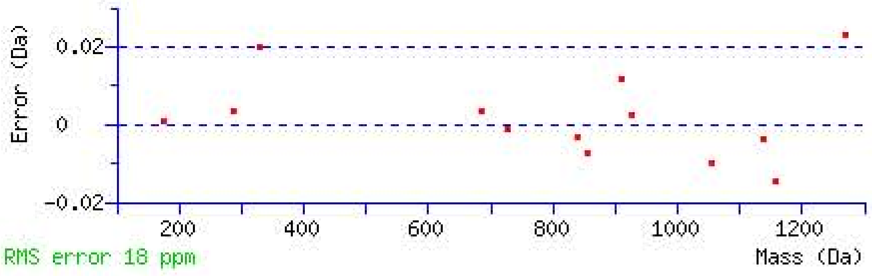
**Variable modifications:**

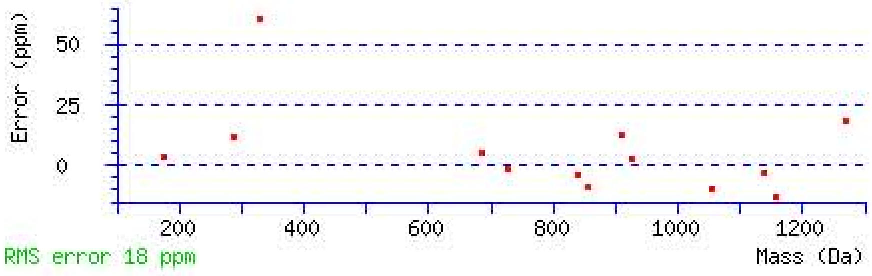
Q9 : Biotin:Thermo-21345 (Q)

**Ions Score:** 44 **Expect:** 0.00015

**Matches :** 13/112 fragment ions using 24 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 11 |
| 2 | 230.113533 | 115.560405 | 213.086984 | 107.047130 | 212.102968 | 106.555122 | Q | 1497.784225 | 749.395751 | 1480.757676 | 740.882476 | 1479.773660 | 740.390468 | 10 |
| 3 | 329.181947 | 165.094612 | 312.155398 | 156.581337 | 311.171382 | 156.089329 | V | 1369.725647 | 685.366462 | 1352.699098 | 676.853187 | 1351.715082 | 676.361179 | 9 |
| 4 | 443.224874 | 222.116075 | 426.198325 | 213.602801 | 425.214309 | 213.110793 | N | ***1270.657233*** | 635.832255 | 1253.630684 | 627.318980 | 1252.646668 | 626.826972 | 8 |
| 5 | 544.272553 | 272.639915 | 527.246004 | 264.126640 | 526.261988 | 263.634632 | T | ***1156.614306*** | 578.810791 | 1139.587757 | 570.297517 | 1138.603741 | 569.805509 | 7 |
| 6 | 672.331131 | 336.669204 | 655.304582 | 328.155929 | 654.320566 | 327.663921 | Q | ***1055.566627*** | 528.286951 | 1038.540078 | 519.773677 | 1037.556062 | 519.281669 | 6 |
| 7 | 743.368245 | 372.187761 | 726.341696 | 363.674486 | 725.357680 | 363.182478 | A | ***927.508049*** | 464.257663 | 910.481500 | 455.744388 | 909.497484 | 455.252380 | 5 |
| 8 | 872.410838 | 436.709057 | 855.384289 | 428.195783 | 854.400273 | 427.703775 | E | ***856.470935*** | 428.739106 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 9 | 1311.636164 | 656.321720 | 1294.609615 | 647.808446 | 1293.625599 | 647.316438 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 10 | 1424.720228 | 712.863752 | 1407.693679 | 704.350478 | 1406.709663 | 703.858470 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of TQVNTQAEQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.6 | 1597.824615 | -0.006483 | TQVNTQAEQLR |
| 9.0 | 1597.824615 | -0.006483 | TQVNTQAEQLR |
| 2.8 | 1597.828400 | -0.010268 | RALQEEERAAAQAR |
| 2.5 | 1597.835846 | -0.017714 | TKAAATAGGQGGAAR |
| 0.6 | 1597.828629 | -0.010497 | AWDILSGEQLR |

**Mascot:** http://www.matrixscience.com/

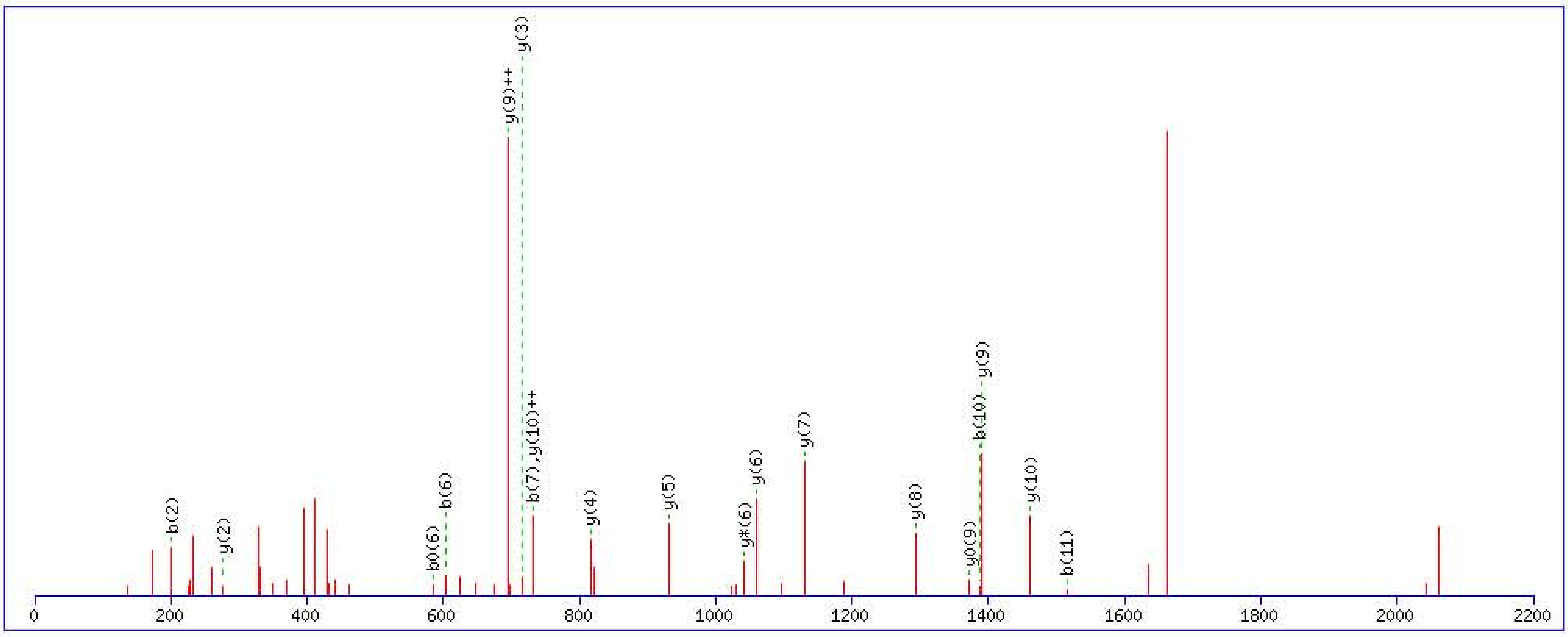
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SLAPYAQDTQEK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

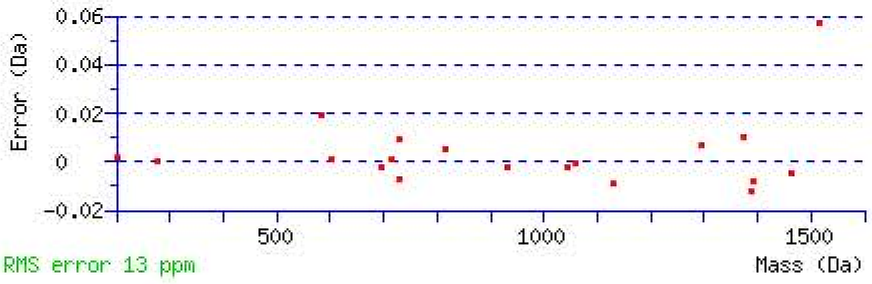
Match to Query 39610: 1660.812208 from(831.413380,2+) rtinseconds(1720) index(4209)
Title: Locus:1.1.1.1408.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

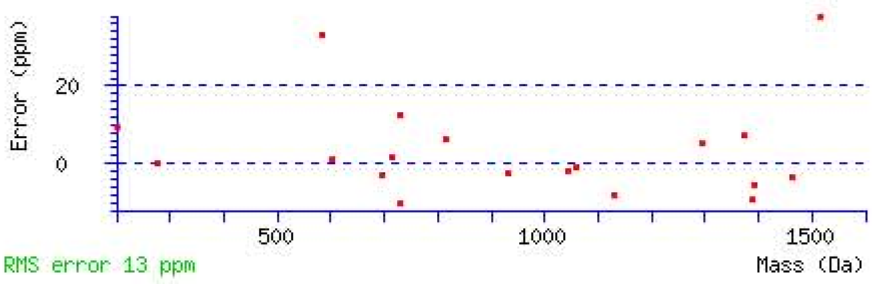
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1660.813034
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 52  Expect: 6.7e-005
Matches : 19/118 fragment ions using 38 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 12 |
| 2 | **201.123368** | 101.065322 | | | 183.112803 | 92.060039 | L | 1574.788308 | 787.897792 | 1557.761759 | 779.384518 | 1556.777743 | 778.892510 | 11 |
| 3 | 272.160482 | 136.583879 | | | 254.149917 | 127.578596 | A | ***1461.704244*** | 731.355760 | 1444.677695 | 722.842486 | 1443.693679 | 722.350478 | 10 |
| 4 | 369.213246 | 185.110261 | | | 351.202681 | 176.104978 | P | ***1390.667130*** | 695.837203 | 1373.640581 | 687.323929 | 1372.656565 | 686.831921 | 9 |
| 5 | 532.276575 | 266.641926 | | | 514.266010 | 257.636643 | Y | ***1293.614366*** | 647.310821 | 1276.587817 | 638.797547 | 1275.603801 | 638.305539 | 8 |
| 6 | **603.313689** | 302.160483 | | | 585.303124 | 293.155200 | A | ***1130.551037*** | 565.779157 | 1113.524488 | 557.265882 | 1112.540472 | 556.773874 | 7 |
| 7 | **731.372267** | 366.189772 | 714.345718 | 357.676497 | 713.361702 | 357.184489 | Q | ***1059.513923*** | 530.260600 | 1042.487374 | 521.747325 | 1041.503358 | 521.255317 | 6 |
| 8 | 846.399210 | 423.703243 | 829.372661 | 415.189969 | 828.388645 | 414.697961 | D | ***931.455345*** | 466.231311 | 914.428796 | 457.718036 | 913.444780 | 457.226028 | 5 |
| 9 | 947.446889 | 474.227083 | 930.420340 | 465.713808 | 929.436324 | 465.221800 | T | ***816.428402*** | 408.717839 | 799.401853 | 400.204565 | 798.417837 | 399.712557 | 4 |
| 10 | **1386.672215** | 693.839746 | 1369.645666 | 685.326471 | 1368.661650 | 684.834463 | Q | ***715.380723*** | 358.194000 | 698.354174 | 349.680725 | 697.370158 | 349.188717 | 3 |
| 11 | **1515.714808** | 758.361042 | 1498.688259 | 749.847768 | 1497.704243 | 749.355760 | E | ***276.155397*** | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 12 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SLAPYAQDTQEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.3 | 1660.813034 | -0.000826 | SLAPYAQDTQEK |
| 28.1 | 1660.813034 | -0.000826 | SLAPYAQDTQEK |
| 7.4 | 1660.820908 | -0.008700 | SLARAGFYYTGVNDK |
| 2.1 | 1660.826782 | -0.014574 | EAATQAQQTLGSTIDK |

**Mascot:** http://www.matrixscience.com/

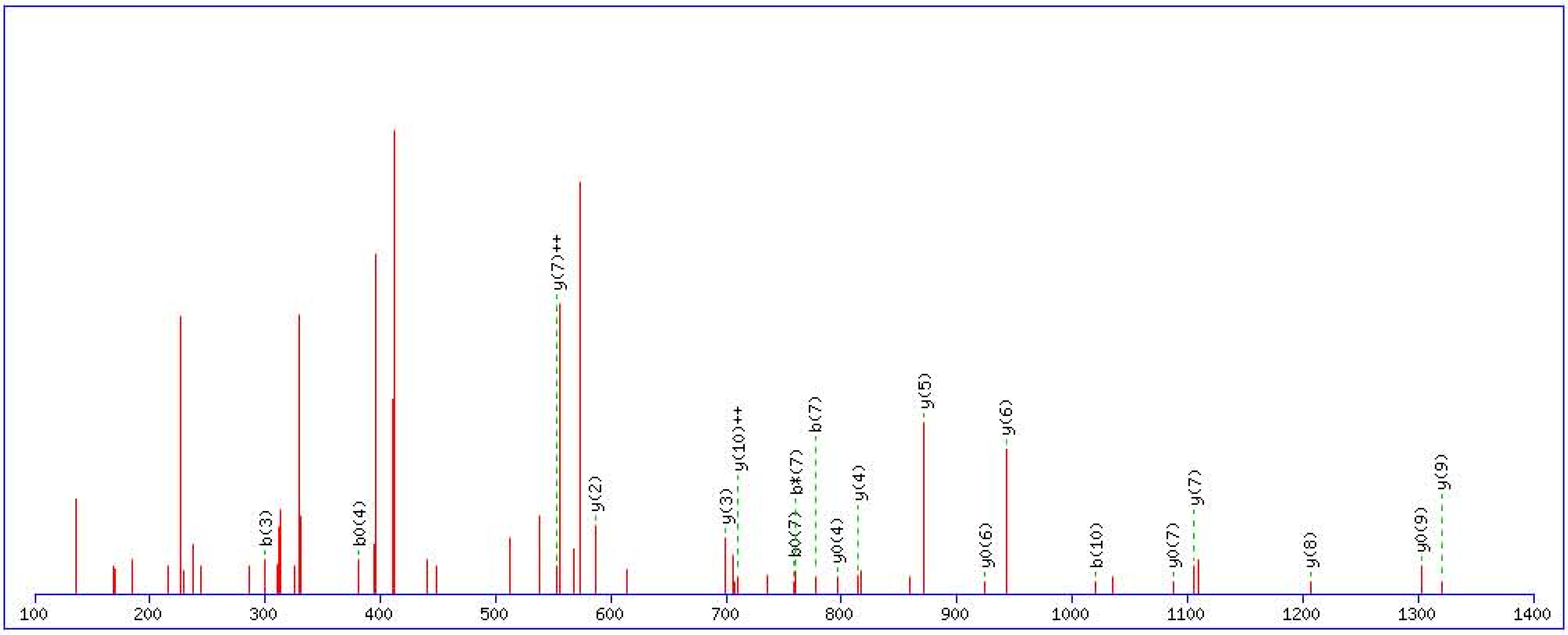
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LGEVNTYAGDLQK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

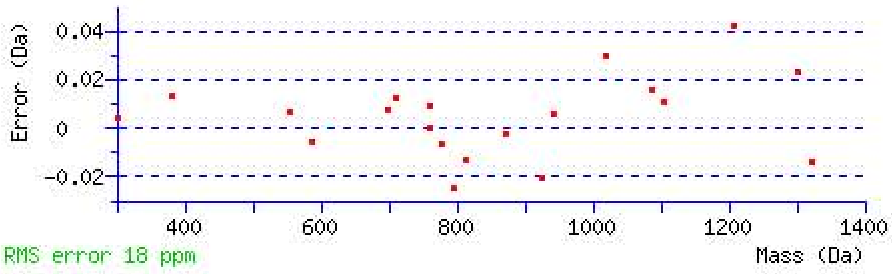
Match to Query 40840: 1717.866492 from(573.629440,3+) rtinseconds(1999) index(68793)
Title: Locus:1.1.1.1633.20 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

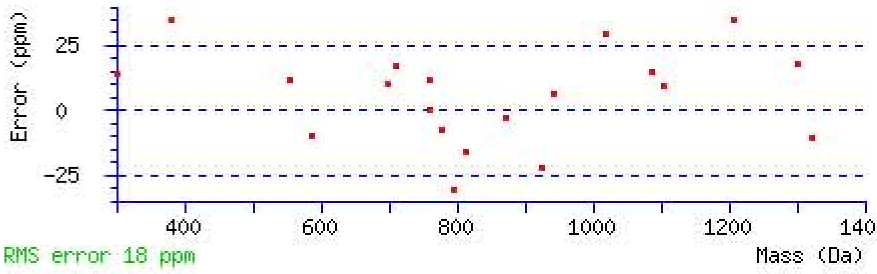
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1717.870895
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.041
Matches : 20/126 fragment ions using 49 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 13 |
| 2 | 171.112804 | 86.060040 | | | | | G | 1605.794121 | 803.400699 | 1588.767572 | 794.887424 | 1587.783556 | 794.395416 | 12 |
| 3 | **300.155397** | 150.581336 | | | 282.144832 | 141.576054 | E | 1548.772657 | 774.889967 | 1531.746108 | 766.376692 | 1530.762092 | 765.884684 | 11 |
| 4 | 399.223811 | 200.115544 | | | 381.213246 | 191.110261 | V | 1419.730064 | 710.368670 | 1402.703515 | 701.855396 | 1401.719499 | 701.363388 | 10 |
| 5 | 513.266738 | 257.137007 | 496.240189 | 248.623733 | 495.256173 | 248.131725 | N | ***1320.661650*** | 660.834463 | 1303.635101 | 652.321189 | 1302.651085 | 651.829181 | 9 |
| 6 | 614.314417 | 307.660847 | 597.287868 | 299.147572 | 596.303852 | 298.655564 | T | ***1206.618723*** | 603.813000 | 1189.592174 | 595.299725 | 1188.608158 | 594.807717 | 8 |
| 7 | **777.377746** | 389.192511 | 760.351197 | 380.679237 | 759.367181 | 380.187229 | Y | ***1105.571044*** | 553.289160 | 1088.544495 | 544.775886 | 1087.560479 | 544.283878 | 7 |
| 8 | 848.414860 | 424.711068 | 831.388311 | 416.197794 | 830.404295 | 415.705786 | A | ***942.507715*** | 471.757496 | 925.481166 | 463.244221 | 924.497150 | 462.752213 | 6 |
| 9 | 905.436324 | 453.221800 | 888.409775 | 444.708526 | 887.425759 | 444.216518 | G | ***871.470601*** | 436.238939 | 854.444052 | 427.725664 | 853.460036 | 427.233656 | 5 |
| 10 | **1020.463267** | 510.735272 | 1003.436718 | 502.221997 | 1002.452702 | 501.729989 | D | ***814.449137*** | 407.728207 | 797.422588 | 399.214932 | 796.438572 | 398.722924 | 4 |
| 11 | 1133.547331 | 567.277304 | 1116.520782 | 558.764029 | 1115.536766 | 558.272021 | L | ***699.422194*** | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 12 | 1572.772657 | 786.889967 | 1555.746108 | 778.376692 | 1554.762092 | 777.884684 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LGEVNTYAGDLQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 28.0 | 1717.870895 | -0.004403 | LGEVNTYAGDLQK |

**Mascot:** http://www.matrixscience.com/

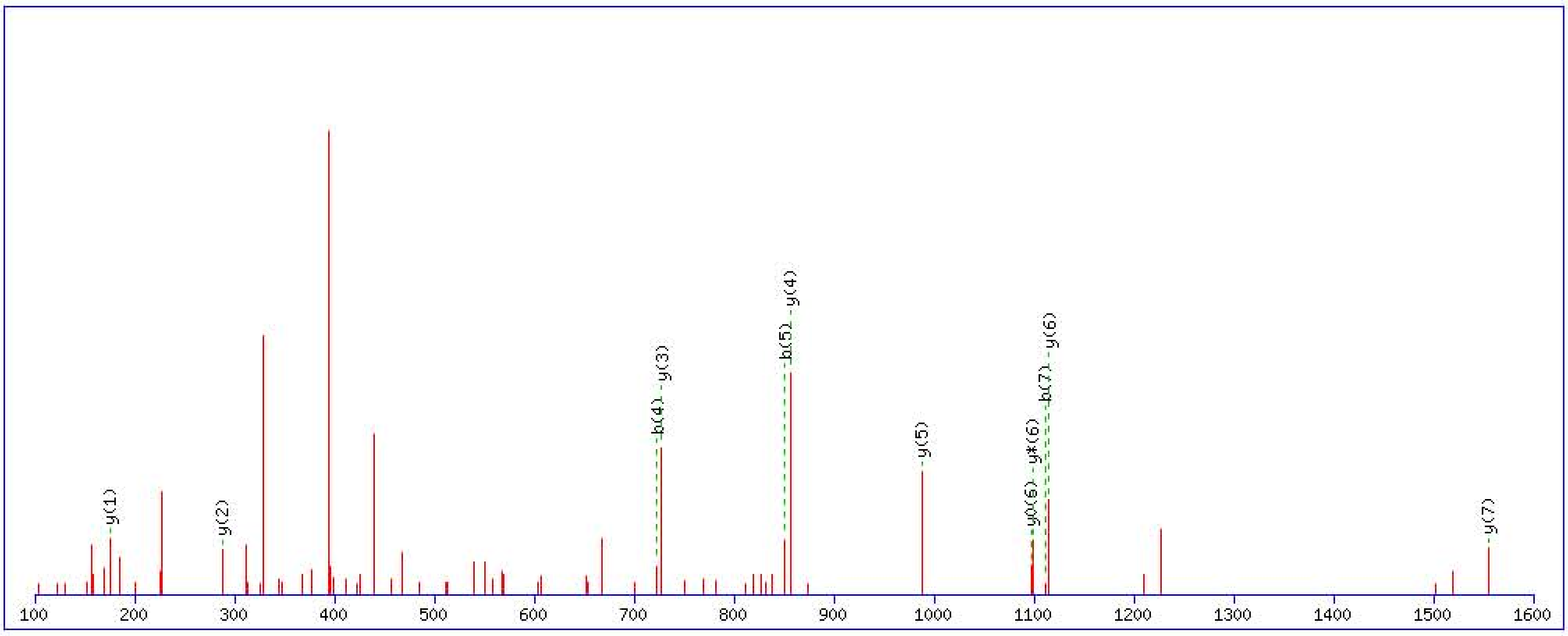
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ALVQQMEQLR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

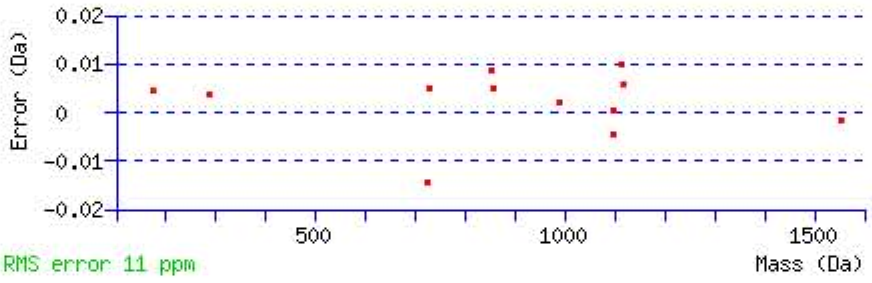
Match to Query 43403: 1836.982512 from(613.334780,3+) rtinseconds(2342) index(70733)
Title: Locus:1.1.1.1753.6 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

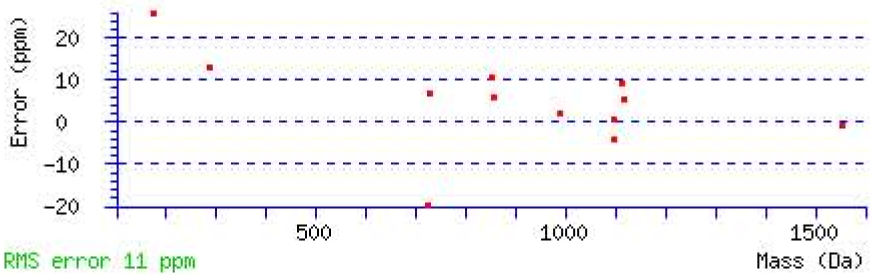
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1836.977615
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q4** : Biotin:Thermo-21345 (Q)
**Q8** : Biotin:Thermo-21345 (Q)
**Ions Score:** 31 **Expect:** 0.0042
**Matches** : 12/84 fragment ions using 26 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 10 |
| 2 | 185.128454 | 93.067865 | | | | | L | 1766.947802 | 883.977539 | 1749.921253 | 875.464265 | 1748.937237 | 874.972256 | 9 |
| 3 | 284.196868 | 142.602072 | | | | | V | 1653.863738 | 827.435507 | 1636.837189 | 818.922232 | 1635.853173 | 818.430224 | 8 |
| 4 | **723.422194** | 362.214735 | 706.395645 | 353.701461 | | | Q | ***1554.795324*** | 777.901300 | 1537.768775 | 769.388026 | 1536.784759 | 768.896017 | 7 |
| 5 | **851.480772** | 426.244024 | 834.454223 | 417.730750 | | | Q | ***1115.569998*** | 558.288637 | 1098.543449 | 549.775363 | 1097.559433 | 549.283354 | 6 |
| 6 | 982.521257 | 491.764267 | 965.494708 | 483.250992 | | | M | ***987.511420*** | 494.259348 | 970.484871 | 485.746073 | 969.500855 | 485.254065 | 5 |
| 7 | **1111.563850** | 556.285563 | 1094.537301 | 547.772289 | 1093.553285 | 547.280281 | E | ***856.470935*** | 428.739105 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 8 | 1550.789176 | 775.898226 | 1533.762627 | 767.384952 | 1532.778611 | 766.892944 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704534 | | | 3 |
| 9 | 1663.873240 | 832.440258 | 1646.846691 | 823.926984 | 1645.862675 | 823.434975 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ALVQQMEQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.3 | 1836.977615 | 0.004897 | ALVQQMEQLR |
| 20.2 | 1836.977615 | 0.004897 | ALVQQMEQLR |
| 5.8 | 1836.999207 | -0.016695 | QQSLQRQLEQLR |
| 5.5 | 1837.004578 | -0.022066 | RHSWRQQIFLR |
| 2.3 | 1836.969360 | 0.013152 | EPSPAAGGLETTRLVSPR |

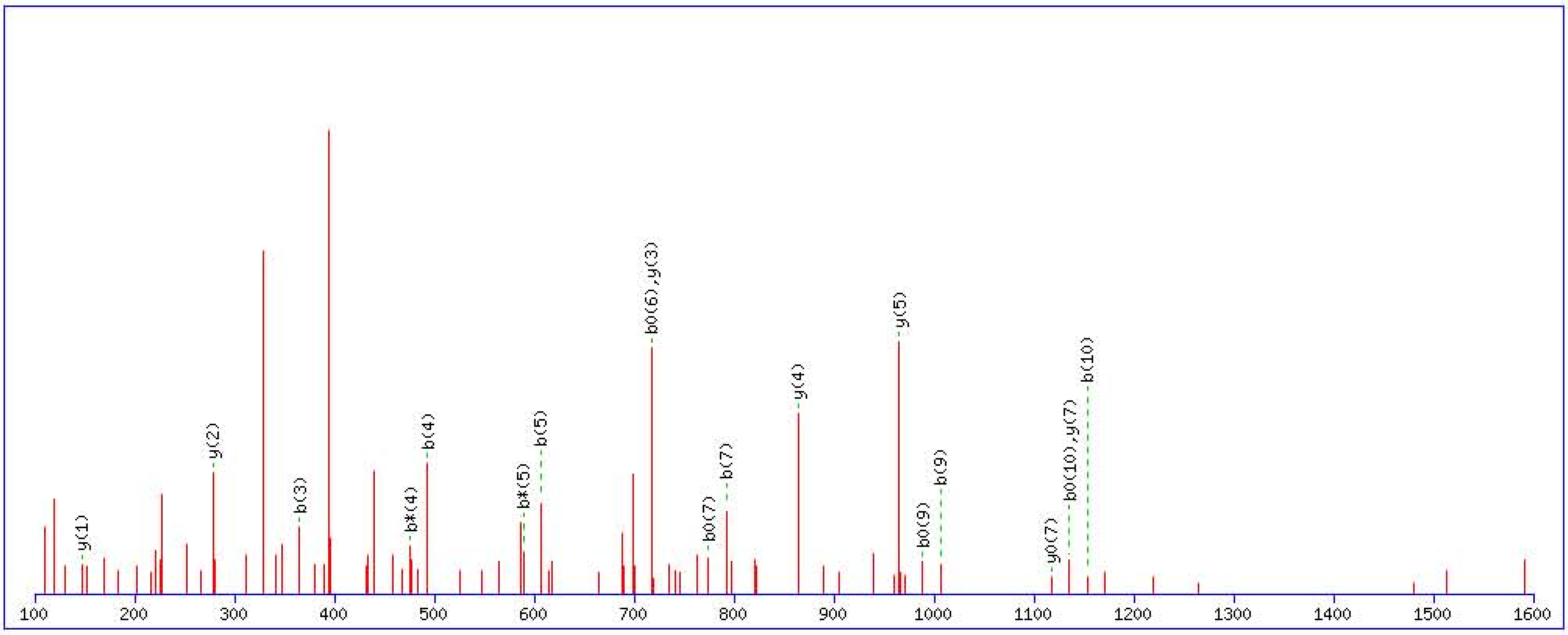
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LNHQLEGLTFQMK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

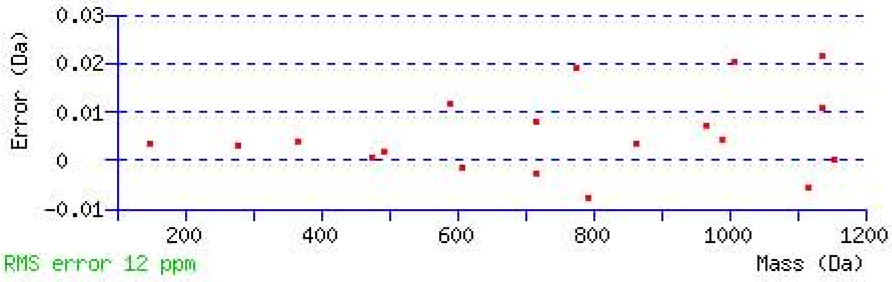
Match to Query 44101: 1868.962812 from(623.994880,3+) rtinseconds(2153) index(69686)
Title: Locus:1.1.1.1687.14 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

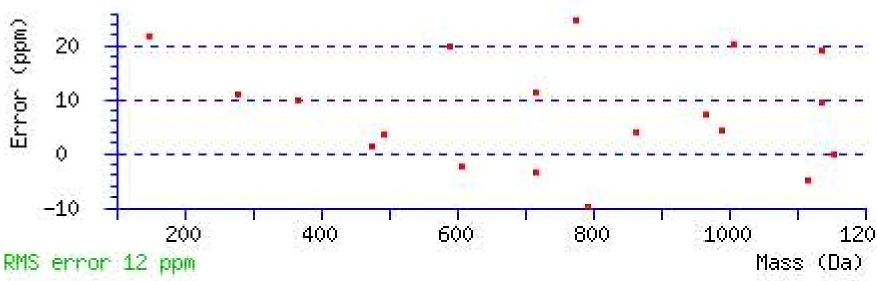
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1600] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1868.964081
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q11** : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.057
**Matches :** 19/124 fragment ions using 45 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 13 |
| 2 | 228.134267 | 114.570771 | 211.107718 | 106.057497 | | | N | 1756.887310 | 878.947293 | 1739.860761 | 870.434019 | 1738.876745 | 869.942011 | 12 |
| 3 | ***365.193179*** | 183.100227 | 348.166630 | 174.586953 | | | H | 1642.844383 | 821.925830 | 1625.817834 | 813.412555 | 1624.833818 | 812.920547 | 11 |
| 4 | ***493.251757*** | 247.129516 | 476.225208 | 238.616242 | | | Q | 1505.785471 | 753.396374 | 1488.758922 | 744.883099 | 1487.774906 | 744.391091 | 10 |
| 5 | ***606.335821*** | 303.671549 | 589.309272 | 295.158274 | | | L | 1377.726893 | 689.367085 | 1360.700344 | 680.853810 | 1359.716328 | 680.361802 | 9 |
| 6 | 735.378414 | 368.192845 | 718.351865 | 359.679571 | 717.367849 | 359.187563 | E | 1264.642829 | 632.825053 | 1247.616280 | 624.311778 | 1246.632264 | 623.819770 | 8 |
| 7 | ***792.399878*** | 396.703577 | 775.373329 | 388.190303 | 774.389313 | 387.698295 | G | ***1135.600236*** | 568.303756 | 1118.573687 | 559.790482 | 1117.589671 | 559.298474 | 7 |
| 8 | 905.483942 | 453.245609 | 888.457393 | 444.732335 | 887.473377 | 444.240327 | L | 1078.578772 | 539.793024 | 1061.552223 | 531.279750 | 1060.568207 | 530.787742 | 6 |
| 9 | ***1006.531621*** | 503.769449 | 989.505072 | 495.256174 | 988.521056 | 494.764166 | T | ***965.494708*** | 483.250992 | 948.468159 | 474.737718 | 947.484143 | 474.245710 | 5 |
| 10 | ***1153.600035*** | 577.303656 | 1136.573486 | 568.790381 | 1135.589470 | 568.298373 | F | ***864.447029*** | 432.727153 | 847.420480 | 424.213878 | | | 4 |
| 11 | 1592.825361 | 796.916319 | 1575.798812 | 788.403044 | 1574.814796 | 787.911036 | Q | ***717.378615*** | 359.192946 | 700.352066 | 350.679671 | | | 3 |
| 12 | 1723.865846 | 862.436561 | 1706.839297 | 853.923287 | 1705.855281 | 853.431279 | M | ***278.153289*** | 139.580282 | 261.126740 | 131.067008 | | | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LNHQLEGLTFQMK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.8 | 1868.964081 | -0.001269 | LNHQLEGLTFQMK |

**Mascot:** http://www.matrixscience.com/

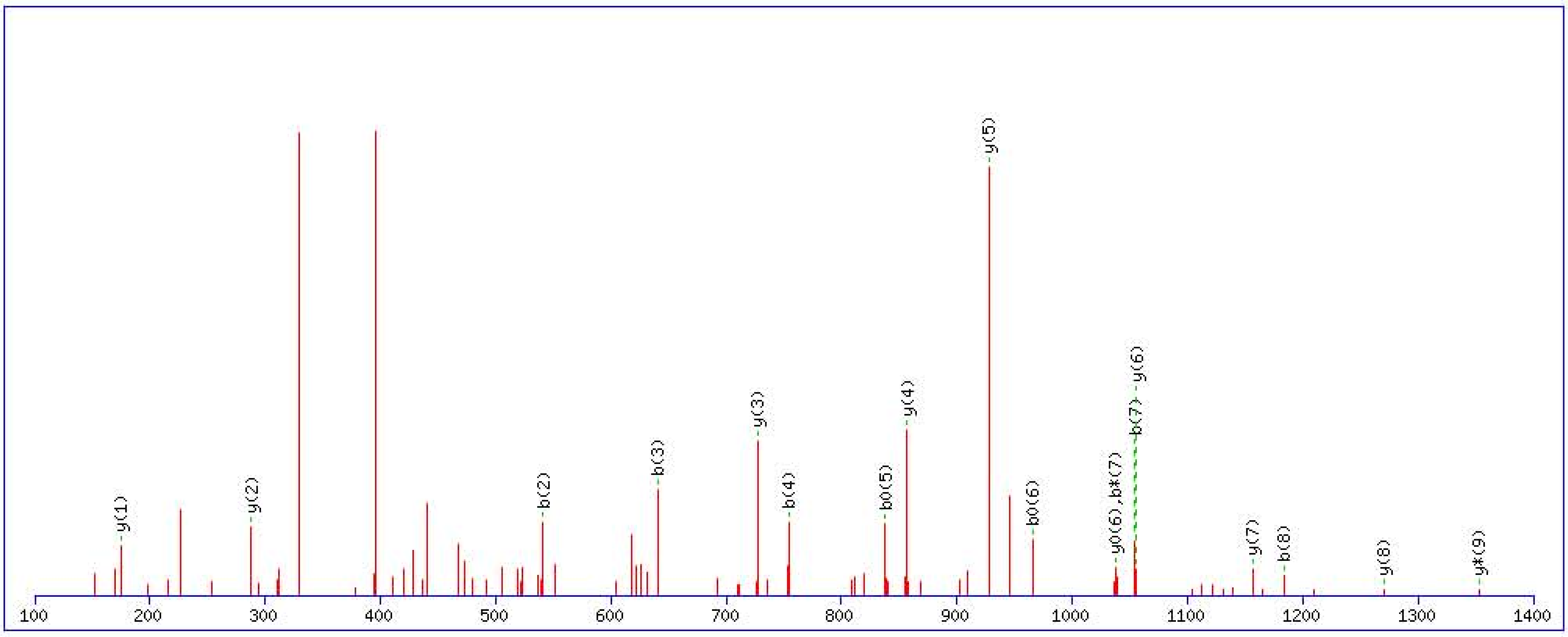
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TQVNTQAEQLR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

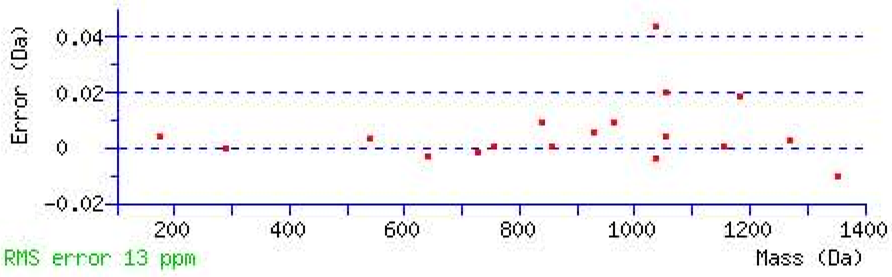
Match to Query 44739: 1908.989982 from(637.337270,3+) rtinseconds(1935) index(68265)
Title: Locus:1.1.1.1611.21 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

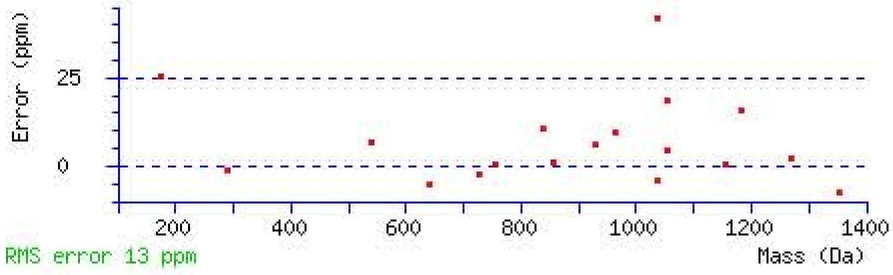
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1908.991364
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 1.4e-005
Matches : 18/112 fragment ions using 24 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 11 |
| 2 | **541.280281** | 271.143779 | 524.253732 | 262.630504 | 523.269716 | 262.138496 | Q | 1808.950973 | 904.979125 | 1791.924424 | 896.465850 | 1790.940408 | 895.973842 | 10 |
| 3 | **640.348695** | 320.677986 | 623.322146 | 312.164711 | 622.338130 | 311.672703 | V | 1369.725647 | 685.366462 | 1352.699098 | 676.853187 | 1351.715082 | 676.361179 | 9 |
| 4 | **754.391622** | 377.699449 | 737.365073 | 369.186174 | 736.381057 | 368.694166 | N | ***1270.657233*** | 635.832255 | 1253.630684 | 627.318980 | 1252.646668 | 626.826972 | 8 |
| 5 | 855.439301 | 428.223289 | 838.412752 | 419.710014 | 837.428736 | 419.218006 | T | ***1156.614306*** | 578.810791 | 1139.587757 | 570.297517 | 1138.603741 | 569.805509 | 7 |
| 6 | 983.497879 | 492.252578 | 966.471330 | 483.739303 | 965.487314 | 483.247295 | Q | ***1055.566627*** | 528.286952 | 1038.540078 | 519.773677 | 1037.556062 | 519.281669 | 6 |
| 7 | **1054.534993** | 527.771135 | 1037.508444 | 519.257860 | 1036.524428 | 518.765852 | A | ***927.508049*** | 464.257663 | 910.481500 | 455.744388 | 909.497484 | 455.252380 | 5 |
| 8 | **1183.577586** | 592.292431 | 1166.551037 | 583.779157 | 1165.567021 | 583.287149 | E | ***856.470935*** | 428.739106 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 9 | 1622.802912 | 811.905094 | 1605.776363 | 803.391820 | 1604.792347 | 802.899812 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 10 | 1735.886976 | 868.447126 | 1718.860427 | 859.933852 | 1717.876411 | 859.441844 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of TQVNTQAEQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 53.9 | 1908.991364 | -0.001382 | TQVNTQAEQLR |
| 16.6 | 1908.991364 | -0.001382 | TQVNTQAEQLR |
| 13.4 | 1908.991364 | -0.001382 | TQVNTQAEQLR |
| 2.0 | 1909.015610 | -0.025628 | SSIALTAPDAAADPKEKPK |
| 0.9 | 1908.974045 | 0.015937 | SAQWAINRVAMEIQHR |

**Mascot:** http://www.matrixscience.com/

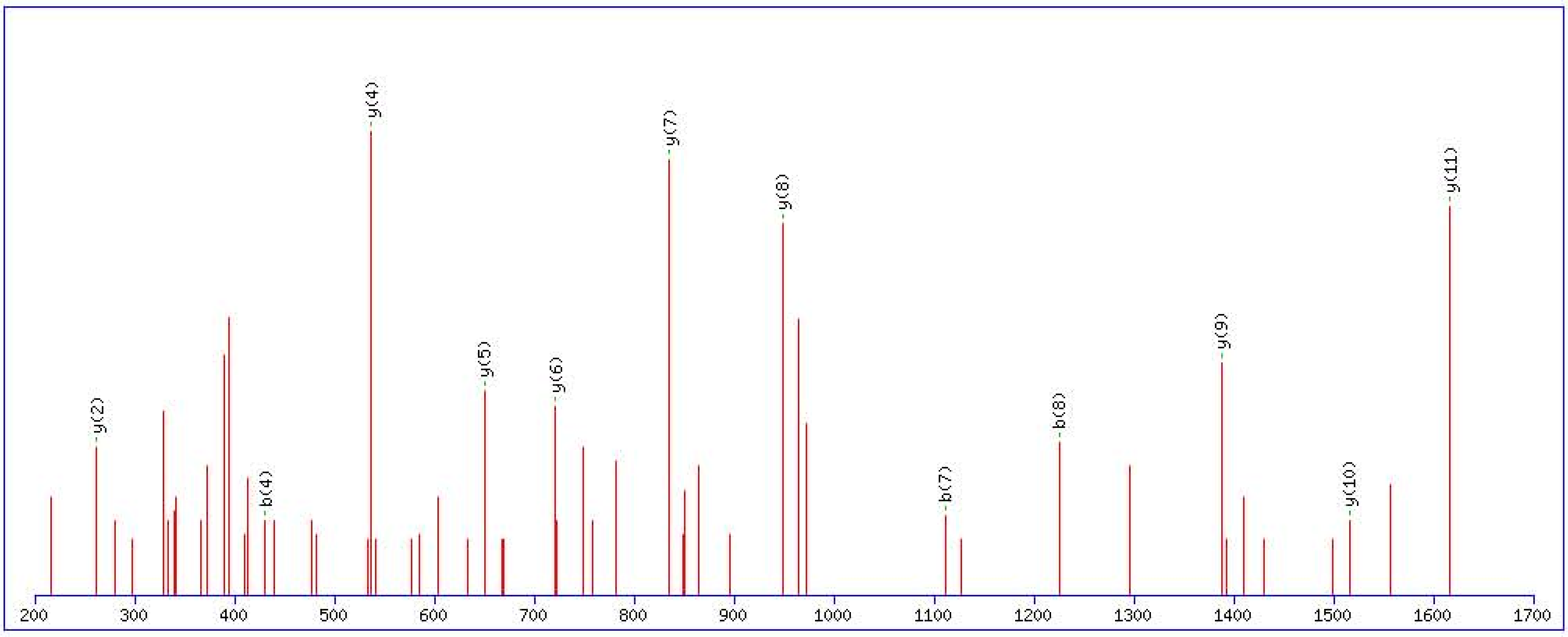
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SELTQQLNALFQDK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

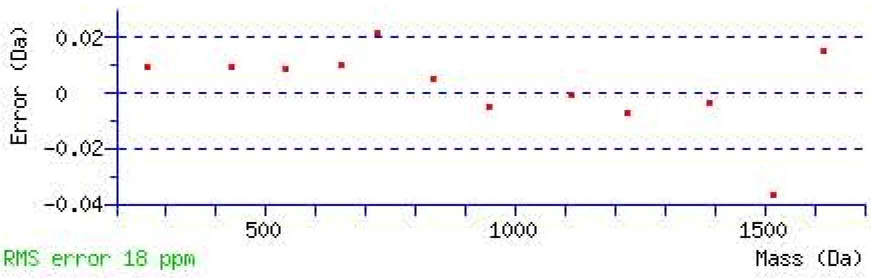
Match to Query 45445: 1944.999408 from(973.506980,2+) rtinseconds(2880) index(74176)
Title: Locus:1.1.1.1938.19 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

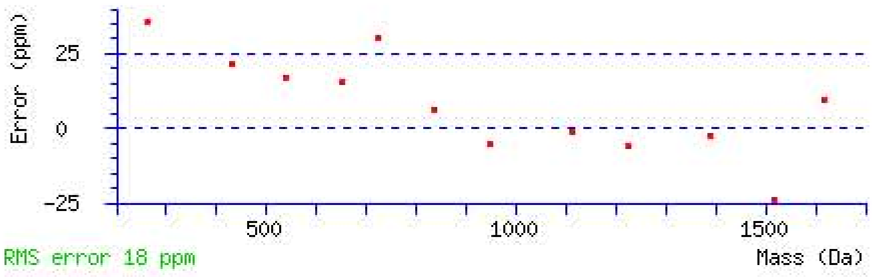
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 200 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1944.997879
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 79 **Expect:** 1.3e-007
**Matches :** 12/146 fragment ions using 14 most intense peaks (help)

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 14 |
| 2 | 217.081897 | 109.044586 | | | 199.071332 | 100.039304 | E | 1858.973148 | 929.990212 | 1841.946599 | 921.476938 | 1840.962583 | 920.984930 | 13 |
| 3 | 330.165961 | 165.586618 | | | 312.155396 | 156.581336 | L | 1729.930555 | 865.468916 | 1712.904006 | 856.955641 | 1711.919990 | 856.463633 | 12 |
| 4 | **431.213640** | 216.110458 | | | 413.203075 | 207.105176 | T | ***1616.846491*** | 808.926884 | 1599.819942 | 800.413609 | 1598.835926 | 799.921601 | 11 |
| 5 | 559.272218 | 280.139747 | 542.245669 | 271.626473 | 541.261653 | 271.134465 | Q | ***1515.798812*** | 758.403044 | 1498.772263 | 749.889770 | 1497.788247 | 749.397762 | 10 |
| 6 | 998.497544 | 499.752410 | 981.470995 | 491.239136 | 980.486979 | 490.747128 | Q | ***1387.740234*** | 694.373755 | 1370.713685 | 685.860481 | 1369.729669 | 685.368473 | 9 |
| 7 | **1111.581608** | 556.294442 | 1094.555059 | 547.781168 | 1093.571043 | 547.289159 | L | ***948.514908*** | 474.761092 | 931.488359 | 466.247818 | 930.504343 | 465.755810 | 8 |
| 8 | **1225.624535** | 613.315905 | 1208.597986 | 604.802631 | 1207.613970 | 604.310623 | N | ***835.430844*** | 418.219060 | 818.404295 | 409.705786 | 817.420279 | 409.213778 | 7 |
| 9 | 1296.661649 | 648.834462 | 1279.635100 | 640.321188 | 1278.651084 | 639.829180 | A | ***721.387917*** | 361.197597 | 704.361368 | 352.684322 | 703.377352 | 352.192314 | 6 |
| 10 | 1409.745713 | 705.376494 | 1392.719164 | 696.863220 | 1391.735148 | 696.371212 | L | ***650.350803*** | 325.679040 | 633.324254 | 317.165765 | 632.340238 | 316.673757 | 5 |
| 11 | 1556.814127 | 778.910701 | 1539.787578 | 770.397427 | 1538.803562 | 769.905419 | F | ***537.266739*** | 269.137008 | 520.240190 | 260.623733 | 519.256174 | 260.131725 | 4 |
| 12 | 1684.872705 | 842.939991 | 1667.846156 | 834.426716 | 1666.862140 | 833.934708 | Q | 390.198325 | 195.602801 | 373.171776 | 187.089526 | 372.187760 | 186.597518 | 3 |
| 13 | 1799.899648 | 900.453462 | 1782.873099 | 891.940188 | 1781.889083 | 891.448180 | D | ***262.139747*** | 131.573512 | 245.113198 | 123.060237 | 244.129182 | 122.568229 | 2 |
| 14 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SELTQQLNALFQDK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 79.3 | 1944.997879 | 0.001529 | SELTQQLNALFQDK |
| 64.2 | 1944.997879 | 0.001529 | SELTQQLNALFQDK |
| 8.2 | 1944.997879 | 0.001529 | SELTQQLNALFQDK |
| 5.4 | 1945.005280 | -0.005872 | QPPSDAALTMLSFIK |
| 2.1 | 1945.024384 | -0.024976 | QASLWVQGDIFRSK |
| 1.5 | 1945.024384 | -0.024976 | QASLWVQGDIFRSK |
| 0.3 | 1945.027740 | -0.028332 | GGFGSMLRALGAQIEK |

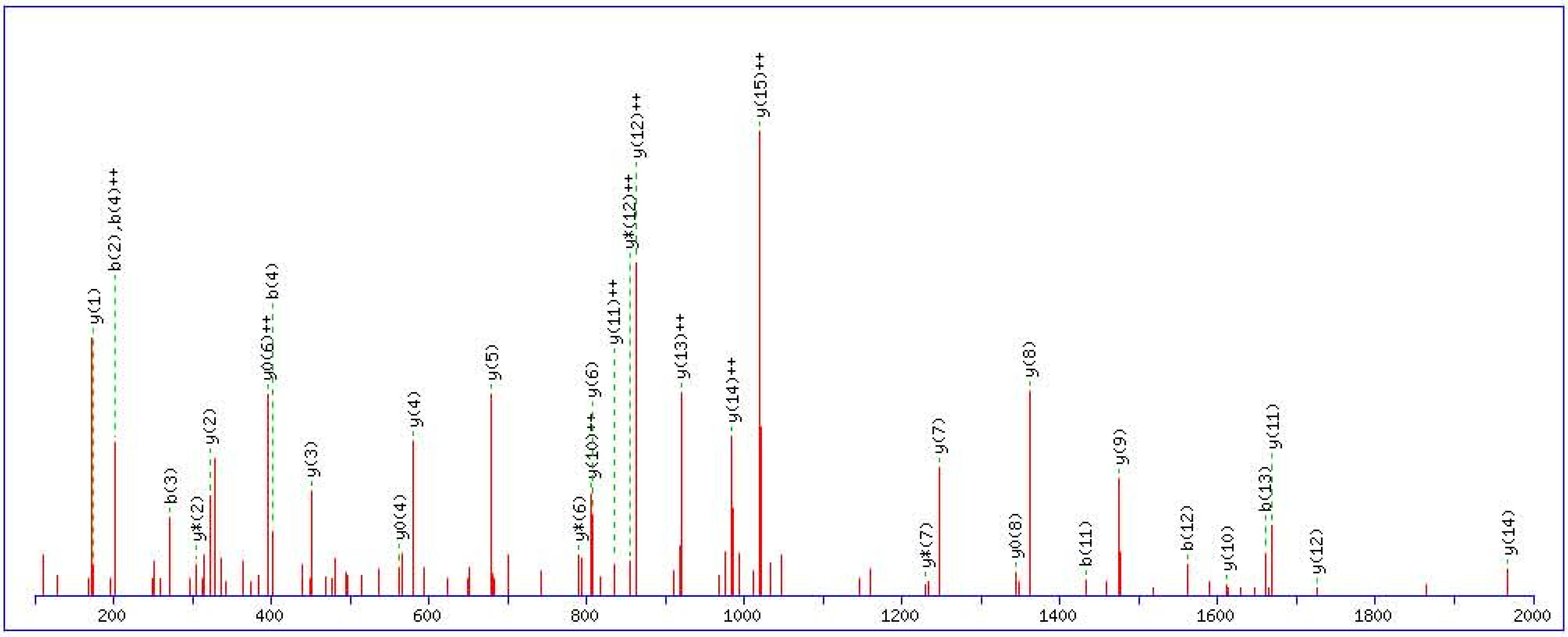
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SLAELGGHLDQQVEEFR**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

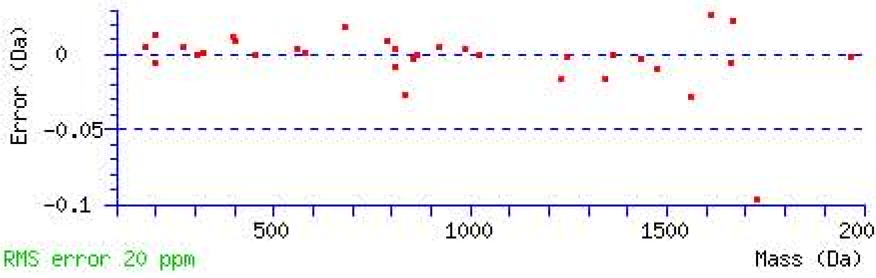
Match to Query 51791: 2238.110412 from(747.044080,3+) rtinseconds(2262) index(70361)
Title: Locus:1.1.1.1725.9 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

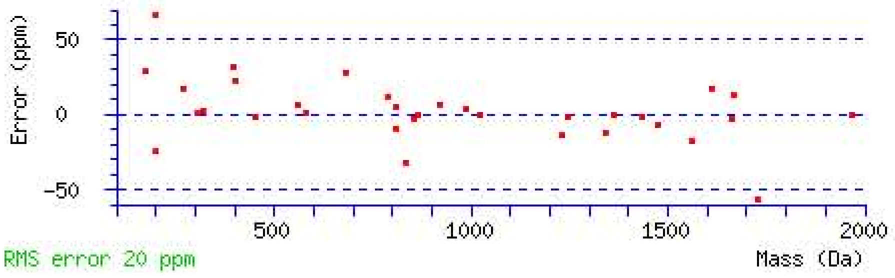
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2238.110291
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q11** : Biotin:Thermo-21345 (Q)
**Ions Score:** 74 **Expect:** 1.1e-006
**Matches** : 33/168 fragment ions using 62 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 17 |
| 2 | **201.123368** | 101.065322 | | | 183.112803 | 92.060039 | L | 2152.085552 | 1076.546414 | 2135.059003 | 1068.033139 | 2134.074987 | 1067.541131 | 16 |
| 3 | **272.160482** | 136.583879 | | | 254.149917 | 127.578596 | A | 2039.001488 | 1020.004382 | 2021.974939 | 1011.491108 | 2020.990923 | 1010.999100 | 15 |
| 4 | **401.203075** | 201.105175 | | | 383.192510 | 192.099893 | E | ***1967.964374*** | 984.485825 | 1950.937825 | 975.972551 | 1949.953809 | 975.480543 | 14 |
| 5 | 514.287139 | 257.647208 | | | 496.276574 | 248.641925 | L | 1838.921781 | 919.964529 | 1821.895232 | 911.451254 | 1820.911216 | 910.959246 | 13 |
| 6 | 571.308603 | 286.157940 | | | 553.298038 | 277.152657 | G | ***1725.837717*** | 863.422497 | 1708.811168 | 854.909222 | 1707.827152 | 854.417214 | 12 |
| 7 | 628.330067 | 314.668672 | | | 610.319502 | 305.663389 | G | ***1668.816253*** | 834.911765 | 1651.789704 | 826.398490 | 1650.805688 | 825.906482 | 11 |
| 8 | 765.388979 | 383.198128 | | | 747.378414 | 374.192845 | H | ***1611.794789*** | 806.401033 | 1594.768240 | 797.887758 | 1593.784224 | 797.395750 | 10 |
| 9 | 878.473043 | 439.740160 | | | 860.462478 | 430.734877 | L | ***1474.735877*** | 737.871577 | 1457.709328 | 729.358302 | 1456.725312 | 728.866294 | 9 |
| 10 | 993.499986 | 497.253631 | | | 975.489421 | 488.248349 | D | ***1361.651813*** | 681.329545 | 1344.625264 | 672.816270 | 1343.641248 | 672.324262 | 8 |
| 11 | **1432.725312** | 716.866294 | 1415.698763 | 708.353020 | 1414.714747 | 707.861012 | Q | ***1246.624870*** | 623.816073 | 1229.598321 | 615.302799 | 1228.614305 | 614.810791 | 7 |
| 12 | **1560.783890** | 780.895583 | 1543.757341 | 772.382309 | 1542.773325 | 771.890301 | Q | ***807.399544*** | 404.203410 | 790.372995 | 395.690136 | 789.388979 | 395.198128 | 6 |
| 13 | **1659.852304** | 830.429790 | 1642.825755 | 821.916516 | 1641.841739 | 821.424508 | V | ***679.340966*** | 340.174121 | 662.314417 | 331.660846 | 661.330401 | 331.168838 | 5 |
| 14 | 1788.894897 | 894.951087 | 1771.868348 | 886.437812 | 1770.884332 | 885.945804 | E | ***580.272552*** | 290.639914 | 563.246003 | 282.126639 | 562.261987 | 281.634631 | 4 |
| 15 | 1917.937490 | 959.472383 | 1900.910941 | 950.959109 | 1899.926925 | 950.467101 | E | ***451.229959*** | 226.118617 | 434.203410 | 217.605343 | 433.219394 | 217.113335 | 3 |
| 16 | 2065.005904 | 1033.006590 | 2047.979355 | 1024.493316 | 2046.995339 | 1024.001307 | F | ***322.187366*** | 161.597321 | 305.160817 | 153.084046 | | | 2 |
| 17 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SLAELGGHLDQQVEEFR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 73.8 | 2238.110291 | 0.000121 | SLAELGGHLDQQVEEFR |
| 69.0 | 2238.110291 | 0.000121 | SLAELGGHLDQQVEEFR |

**Mascot:** http://www.matrixscience.com/

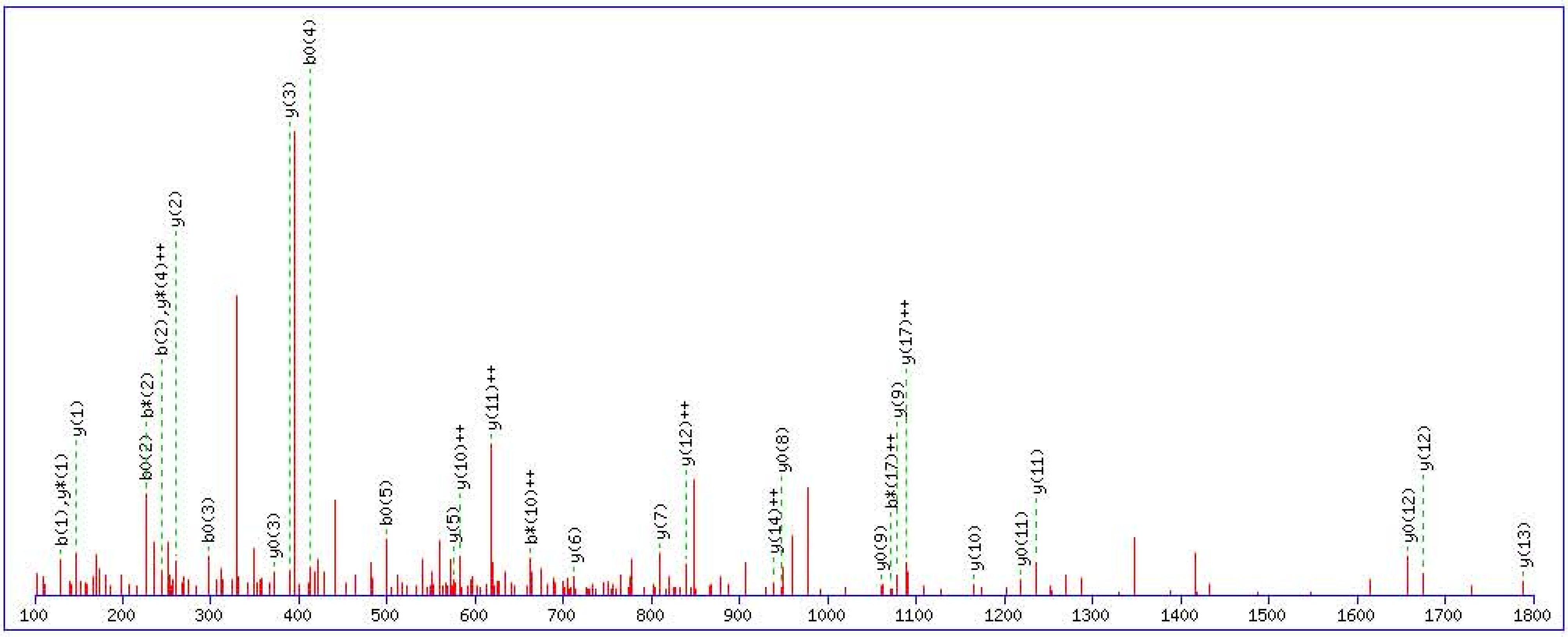
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ENADSLQASLRPHADELK**
Found in **APOA4_HUMAN**, Apolipoprotein A-IV OS=Homo sapiens GN=APOA4 PE=1 SV=3

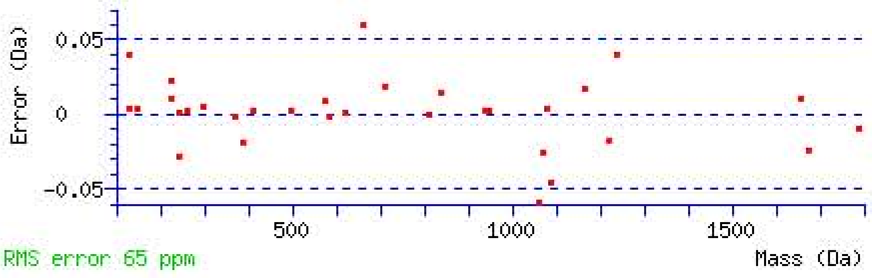
Match to Query 53077: 2304.154176 from(577.045820,4+) rtinseconds(1900) index(67967)
Title: Locus:1.1.1.1599.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

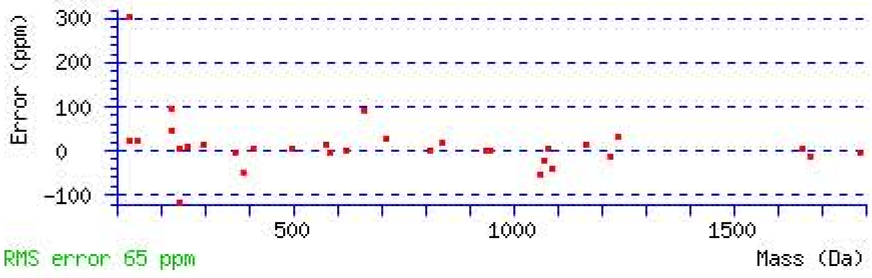
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2304.153183
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 26  Expect: 0.0065
Matches : 32/198 fragment ions using 104 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **130.049869** | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 18 |
| 2 | **244.092796** | 122.550036 | 227.066247 | 114.036762 | 226.082231 | 113.544754 | N | 2176.117913 | 1088.562594 | 2159.091364 | 1080.049320 | 2158.107348 | 1079.557312 | 17 |
| 3 | 315.129910 | 158.068593 | 298.103361 | 149.555319 | 297.119345 | 149.063311 | A | 2062.074986 | 1031.541131 | 2045.048437 | 1023.027856 | 2044.064421 | 1022.535848 | 16 |
| 4 | 430.156853 | 215.582065 | 413.130304 | 207.068790 | 412.146288 | 206.576782 | D | 1991.037872 | 996.022574 | 1974.011323 | 987.509300 | 1973.027307 | 987.017292 | 15 |
| 5 | 517.188881 | 259.098079 | 500.162332 | 250.584804 | 499.178316 | 250.092796 | S | 1876.010929 | 938.509103 | 1858.984380 | 929.995828 | 1858.000364 | 929.503820 | 14 |
| 6 | 630.272945 | 315.640111 | 613.246396 | 307.126836 | 612.262380 | 306.634828 | L | ***1788.978901*** | 894.993089 | 1771.952352 | 886.479814 | 1770.968336 | 885.987806 | 13 |
| 7 | 1069.498271 | 535.252774 | 1052.471722 | 526.739499 | 1051.487706 | 526.247491 | Q | ***1675.894837*** | 838.451057 | 1658.868288 | 829.937782 | 1657.884272 | 829.445774 | 12 |
| 8 | 1140.535385 | 570.771331 | 1123.508836 | 562.258056 | 1122.524820 | 561.766048 | A | ***1236.669511*** | 618.838394 | 1219.642962 | 610.325119 | 1218.658946 | 609.833111 | 11 |
| 9 | 1227.567413 | 614.287345 | 1210.540864 | 605.774070 | 1209.556848 | 605.282062 | S | ***1165.632397*** | 583.319837 | 1148.605848 | 574.806562 | 1147.621832 | 574.314554 | 10 |
| 10 | 1340.651477 | 670.829377 | 1323.624928 | 662.316102 | 1322.640912 | 661.824094 | L | ***1078.600369*** | 539.803823 | 1061.573820 | 531.290548 | 1060.589804 | 530.798540 | 9 |
| 11 | 1496.752588 | 748.879932 | 1479.726039 | 740.366658 | 1478.742023 | 739.874650 | R | 965.516305 | 483.261791 | 948.489756 | 474.748516 | 947.505740 | 474.256508 | 8 |
| 12 | 1593.805352 | 797.406314 | 1576.778803 | 788.893040 | 1575.794787 | 788.401032 | P | ***809.415194*** | 405.211235 | 792.388645 | 396.697961 | 791.404629 | 396.205953 | 7 |
| 13 | 1730.864264 | 865.935770 | 1713.837715 | 857.422496 | 1712.853699 | 856.930488 | H | ***712.362430*** | 356.684853 | 695.335881 | 348.171579 | 694.351865 | 347.679571 | 6 |
| 14 | 1801.901378 | 901.454327 | 1784.874829 | 892.941053 | 1783.890813 | 892.449045 | A | ***575.303518*** | 288.155397 | 558.276969 | 279.642123 | 557.292953 | 279.150115 | 5 |
| 15 | 1916.928321 | 958.967799 | 1899.901772 | 950.454524 | 1898.917756 | 949.962516 | D | 504.266404 | 252.636840 | 487.239855 | 244.123566 | 486.255839 | 243.631558 | 4 |
| 16 | 2045.970914 | 1023.489095 | 2028.944365 | 1014.975821 | 2027.960349 | 1014.483813 | E | ***389.239461*** | 195.123369 | 372.212912 | 186.610094 | 371.228896 | 186.118086 | 3 |
| 17 | 2159.054978 | 1080.031127 | 2142.028429 | 1071.517852 | 2141.044413 | 1071.025844 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 18 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of ENADSLQASLRPHADELK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.7 | 2304.153183 | 0.000993 | ENADSLQASLRPHADELK |
| 2.3 | 2304.149384 | 0.004792 | LNCMETFEVKVDSPVKPAPK |
| 0.8 | 2304.124191 | 0.029985 | TAAMLSSAESFSKHAHEIMLK |

**Mascot:** http://www.matrixscience.com/

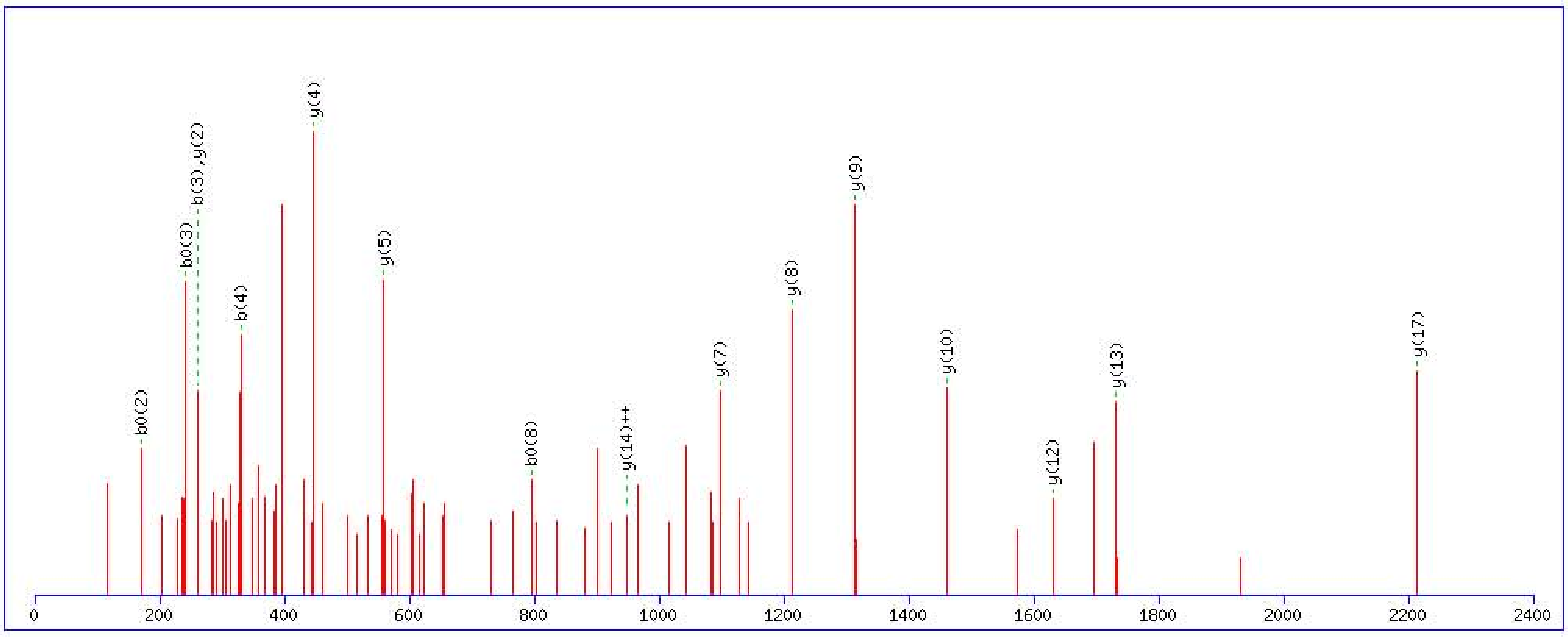
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **STAAMSTYTGIFTDQVLSVLK**
Found in **APOC2_HUMAN**, Apolipoprotein C-II OS=Homo sapiens GN=APOC2 PE=1 SV=1

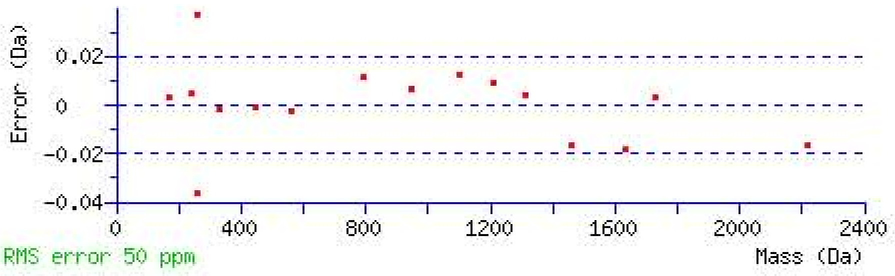
Match to Query 57186: 2543.312562 from(848.778130,3+) rtinseconds(3224) index(44528)
Title: Locus:1.1.1.3537.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

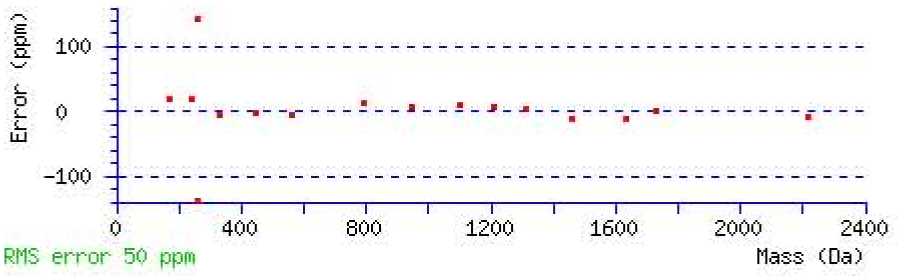
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2543.301544
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q15     : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 0.00069
Matches : 16/206 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 21 |
| 2 | 189.086983 | 95.047129 | | | 171.076418 | 86.041847 | T | 2457.276785 | 1229.142030 | 2440.250236 | 1220.628756 | 2439.266220 | 1220.136748 | 20 |
| 3 | **260.124097** | 130.565686 | | | 242.113532 | 121.560404 | A | 2356.229106 | 1178.618191 | 2339.202557 | 1170.104916 | 2338.218541 | 1169.612908 | 19 |
| 4 | **331.161211** | 166.084243 | | | 313.150646 | 157.078961 | A | 2285.191992 | 1143.099634 | 2268.165443 | 1134.586359 | 2267.181427 | 1134.094351 | 18 |
| 5 | 462.201696 | 231.604486 | | | 444.191131 | 222.599203 | M | ***2214.154878*** | 1107.581077 | 2197.128329 | 1099.067802 | 2196.144313 | 1098.575794 | 17 |
| 6 | 549.233724 | 275.120500 | | | 531.223159 | 266.115217 | S | 2083.114393 | 1042.060834 | 2066.087844 | 1033.547560 | 2065.103828 | 1033.055552 | 16 |
| 7 | 650.281403 | 325.644340 | | | 632.270838 | 316.639057 | T | 1996.082365 | 998.544821 | 1979.055816 | 990.031546 | 1978.071800 | 989.539538 | 15 |
| 8 | 813.344732 | 407.176004 | | | 795.334167 | 398.170722 | Y | 1895.034686 | 948.020981 | 1878.008137 | 939.507707 | 1877.024121 | 939.015699 | 14 |
| 9 | 914.392411 | 457.699844 | | | 896.381846 | 448.694561 | T | ***1731.971357*** | 866.489317 | 1714.944808 | 857.976042 | 1713.960792 | 857.484034 | 13 |
| 10 | 971.413875 | 486.210576 | | | 953.403310 | 477.205293 | G | ***1630.923678*** | 815.965477 | 1613.897129 | 807.452203 | 1612.913113 | 806.960195 | 12 |
| 11 | 1084.497939 | 542.752608 | | | 1066.487374 | 533.747325 | I | 1573.902214 | 787.454745 | 1556.875665 | 778.941471 | 1555.891649 | 778.449463 | 11 |
| 12 | 1231.566353 | 616.286815 | | | 1213.555788 | 607.281532 | F | ***1460.818150*** | 730.912713 | 1443.791601 | 722.399439 | 1442.807585 | 721.907431 | 10 |
| 13 | 1332.614032 | 666.810654 | | | 1314.603467 | 657.805372 | T | ***1313.749736*** | 657.378506 | 1296.723187 | 648.865232 | 1295.739171 | 648.373224 | 9 |
| 14 | 1447.640975 | 724.324126 | | | 1429.630410 | 715.318843 | D | ***1212.702057*** | 606.854667 | 1195.675508 | 598.341392 | 1194.691492 | 597.849384 | 8 |
| 15 | 1886.866301 | 943.936789 | 1869.839752 | 935.423514 | 1868.855736 | 934.931506 | Q | ***1097.675114*** | 549.341195 | 1080.648565 | 540.827921 | 1079.664549 | 540.335913 | 7 |
| 16 | 1985.934715 | 993.470996 | 1968.908166 | 984.957721 | 1967.924150 | 984.465713 | V | 658.449788 | 329.728532 | 641.423239 | 321.215258 | 640.439223 | 320.723250 | 6 |
| 17 | 2099.018779 | 1050.013027 | 2081.992230 | 1041.499753 | 2081.008214 | 1041.007745 | L | ***559.381374*** | 280.194325 | 542.354825 | 271.681051 | 541.370809 | 271.189043 | 5 |
| 18 | 2186.050807 | 1093.529041 | 2169.024258 | 1085.015767 | 2168.040242 | 1084.523759 | S | ***446.297310*** | 223.652293 | 429.270761 | 215.139019 | 428.286745 | 214.647011 | 4 |
| 19 | 2285.119221 | 1143.063248 | 2268.092672 | 1134.549974 | 2267.108656 | 1134.057966 | V | 359.265282 | 180.136279 | 342.238733 | 171.623004 | | | 3 |
| 20 | 2398.203285 | 1199.605280 | 2381.176736 | 1191.092006 | 2380.192720 | 1190.599998 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 21 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of STAAMSTYTGIFTDQVLSVLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.1 | 2543.301544 | 0.011018 | STAAMSTYTGIFTDQVLSVLK |

**Mascot:** http://www.matrixscience.com/

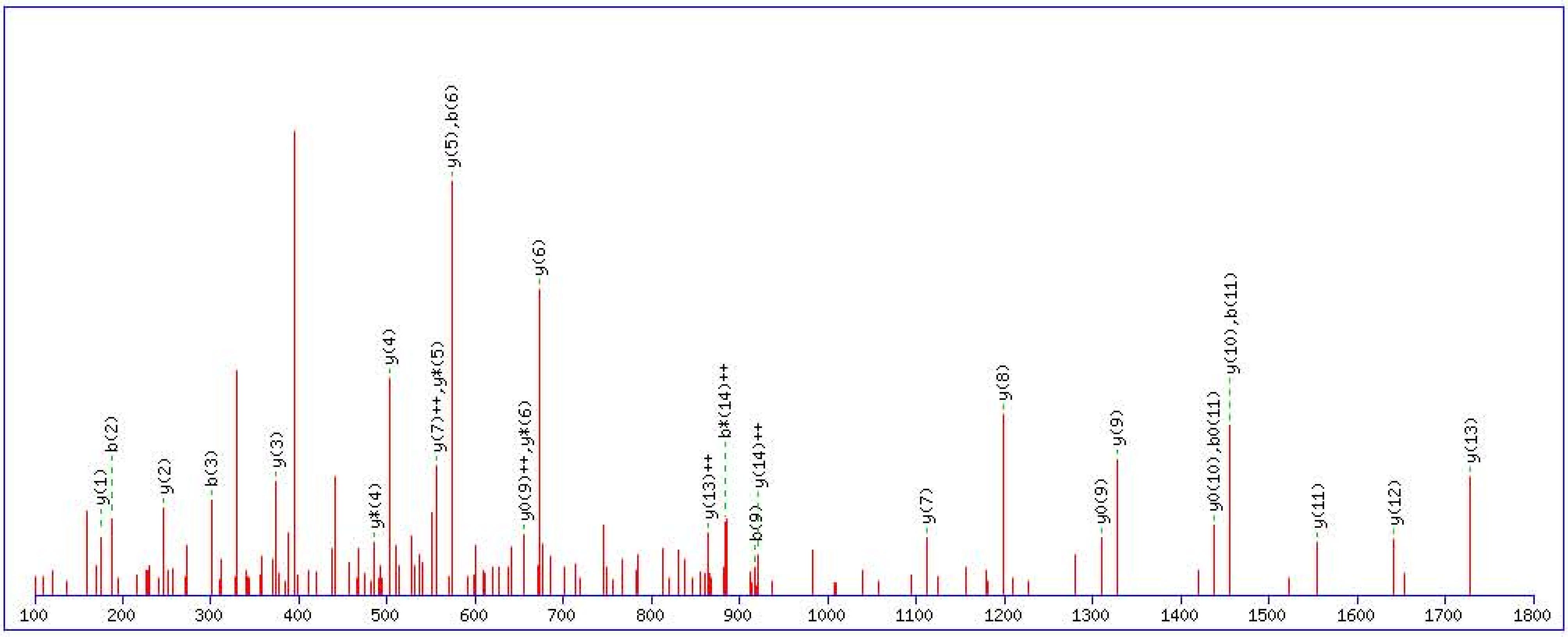
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DALSSVQESQVAQQAR**
Found in **APOC3_HUMAN**, Apolipoprotein C-III OS=Homo sapiens GN=APOC3 PE=1 SV=1

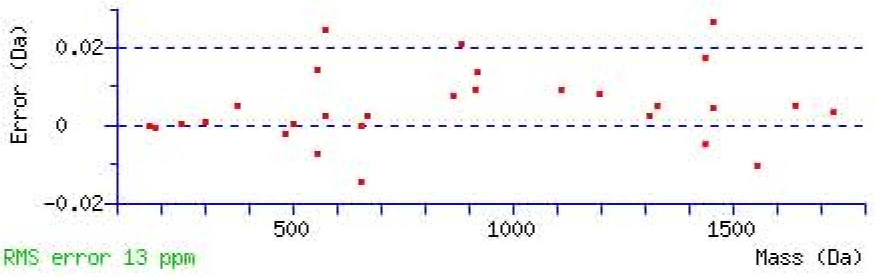
Match to Query 47816: 2027.010522 from(676.677450,3+) rtinseconds(1944) index(36032)
Title: Locus:1.1.1.3096.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

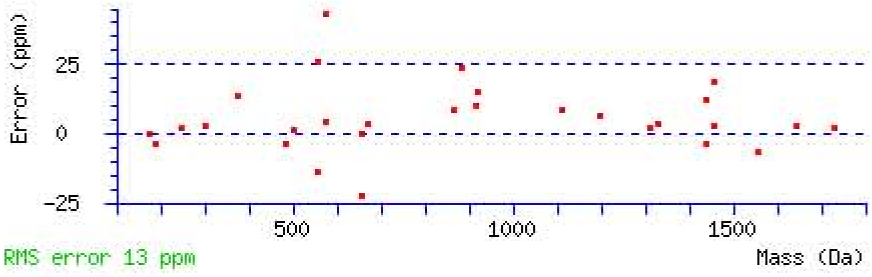
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2027.010574
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 81  Expect: 2.7e-008
Matches : 29/154 fragment ions using 47 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 16 |
| 2 | **187.071333** | 94.039304 | | | 169.060768 | 85.034022 | A | 1912.990923 | 956.999100 | 1895.964374 | 948.485825 | 1894.980358 | 947.993817 | 15 |
| 3 | **300.155397** | 150.581336 | | | 282.144832 | 141.576054 | L | 1841.953809 | 921.480543 | 1824.927260 | 912.967268 | 1823.943244 | 912.475260 | 14 |
| 4 | 387.187425 | 194.097351 | | | 369.176860 | 185.092068 | S | ***1728.869745*** | 864.938511 | 1711.843196 | 856.425236 | 1710.859180 | 855.933228 | 13 |
| 5 | 474.219453 | 237.613364 | | | 456.208888 | 228.608082 | S | ***1641.837717*** | 821.422497 | 1624.811168 | 812.909222 | 1623.827152 | 812.417214 | 12 |
| 6 | **573.287867** | 287.147572 | | | 555.277302 | 278.142289 | V | ***1554.805689*** | 777.906483 | 1537.779140 | 769.393208 | 1536.795124 | 768.901200 | 11 |
| 7 | 701.346445 | 351.176861 | 684.319896 | 342.663586 | 683.335880 | 342.171578 | Q | ***1455.737275*** | 728.372276 | 1438.710726 | 719.859001 | 1437.726710 | 719.366993 | 10 |
| 8 | 830.389038 | 415.698157 | 813.362489 | 407.184883 | 812.378473 | 406.692875 | E | ***1327.678697*** | 664.342987 | 1310.652148 | 655.829712 | 1309.668132 | 655.337704 | 9 |
| 9 | **917.421066** | 459.214171 | 900.394517 | 450.700897 | 899.410501 | 450.208889 | S | ***1198.636104*** | 599.821690 | 1181.609555 | 591.308416 | 1180.625539 | 590.816408 | 8 |
| 10 | 1356.646392 | 678.826834 | 1339.619843 | 670.313560 | 1338.635827 | 669.821551 | Q | ***1111.604076*** | 556.305676 | 1094.577527 | 547.792402 | | | 7 |
| 11 | **1455.714806** | 728.361041 | 1438.688257 | 719.847767 | 1437.704241 | 719.355758 | V | ***672.378750*** | 336.693013 | 655.352201 | 328.179739 | | | 6 |
| 12 | 1526.751920 | 763.879598 | 1509.725371 | 755.366324 | 1508.741355 | 754.874315 | A | ***573.310336*** | 287.158806 | 556.283787 | 278.645532 | | | 5 |
| 13 | 1654.810498 | 827.908887 | 1637.783949 | 819.395613 | 1636.799933 | 818.903605 | Q | ***502.273222*** | 251.640249 | 485.246673 | 243.126975 | | | 4 |
| 14 | 1782.869076 | 891.938176 | 1765.842527 | 883.424902 | 1764.858511 | 882.932894 | Q | ***374.214644*** | 187.610960 | 357.188095 | 179.097686 | | | 3 |
| 15 | 1853.906190 | 927.456733 | 1836.879641 | 918.943459 | 1835.895625 | 918.451451 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068396 | | | 2 |
| 16 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DALSSVQESQVAQQAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 81.4 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 74.7 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 68.6 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 43.5 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 0.6 | 2027.027161 | -0.016639 | IHSGKKPYQCGKAFNHR |

**Mascot:** http://www.matrixscience.com/

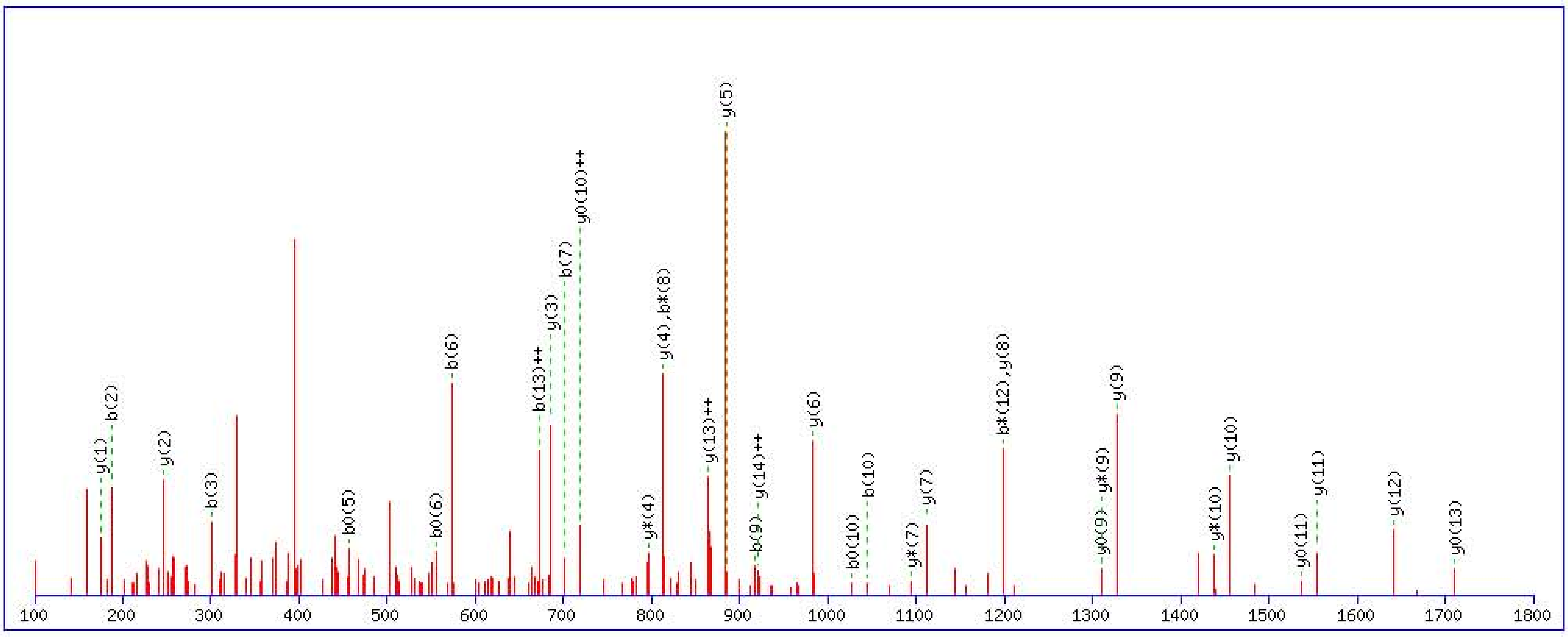
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DALSSVQESQVAQQAR**
Found in **APOC3_HUMAN**, Apolipoprotein C-III OS=Homo sapiens GN=APOC3 PE=1 SV=1

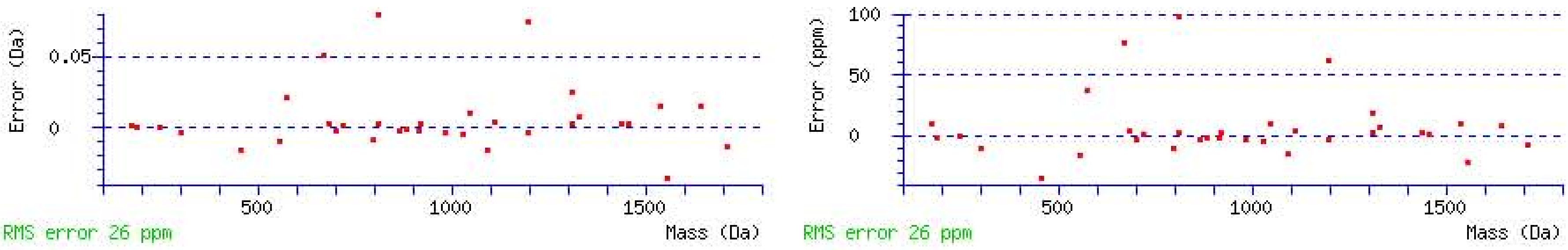
Match to Query 47817: 2027.010522 from(676.677450,3+) rtinseconds(1927) index(35894)
Title: Locus:1.1.1.3090.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2027.010574
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 88  Expect: 4.3e-008
Matches : 34/154 fragment ions using 45 most intense peaks   (help)
```

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 16 |
| 2 | **187.071333** | 94.039304 | | | 169.060768 | 85.034022 | A | 1912.990923 | 956.999100 | 1895.964374 | 948.485825 | 1894.980358 | 947.993817 | 15 |
| 3 | **300.155397** | 150.581336 | | | 282.144832 | 141.576054 | L | 1841.953809 | 921.480543 | 1824.927260 | 912.967268 | 1823.943244 | 912.475260 | 14 |
| 4 | 387.187425 | 194.097351 | | | 369.176860 | 185.092068 | S | 1728.869745 | 864.938511 | 1711.843196 | 856.425236 | 1710.859180 | 855.933228 | 13 |
| 5 | 474.219453 | 237.613364 | | | 456.208888 | 228.608082 | S | ***1641.837717*** | 821.422497 | 1624.811168 | 812.909222 | 1623.827152 | 812.417214 | 12 |
| 6 | **573.287867** | 287.147572 | | | 555.277302 | 278.142289 | V | ***1554.805689*** | 777.906483 | 1537.779140 | 769.393208 | 1536.795124 | 768.901200 | 11 |
| 7 | **701.346445** | 351.176861 | 684.319896 | 342.663586 | 683.335880 | 342.171578 | Q | ***1455.737275*** | 728.372276 | 1438.710726 | 719.859001 | 1437.726710 | 719.366993 | 10 |
| 8 | 830.389038 | 415.698157 | 813.362489 | 407.184883 | 812.378473 | 406.692875 | E | ***1327.678697*** | 664.342987 | 1310.652148 | 655.829712 | 1309.668132 | 655.337704 | 9 |
| 9 | **917.421066** | 459.214171 | 900.394517 | 450.700897 | 899.410501 | 450.208889 | S | ***1198.636104*** | 599.821690 | 1181.609555 | 591.308416 | 1180.625539 | 590.816408 | 8 |
| 10 | **1045.479644** | 523.243460 | 1028.453095 | 514.730186 | 1027.469079 | 514.238178 | Q | ***1111.604076*** | 556.305676 | 1094.577527 | 547.792402 | | | 7 |
| 11 | 1144.548058 | 572.777667 | 1127.521509 | 564.264393 | 1126.537493 | 563.772385 | V | ***983.545498*** | 492.276387 | 966.518949 | 483.763113 | | | 6 |
| 12 | 1215.585172 | 608.296224 | 1198.558623 | 599.782950 | 1197.574607 | 599.290942 | A | ***884.477084*** | 442.742180 | 867.450535 | 434.228906 | | | 5 |
| 13 | 1343.643750 | 672.325513 | 1326.617201 | 663.812239 | 1325.633185 | 663.320230 | Q | ***813.439970*** | 407.223623 | 796.413421 | 398.710349 | | | 4 |
| 14 | 1782.869076 | 891.938176 | 1765.842527 | 883.424902 | 1764.858511 | 882.932894 | Q | ***685.381392*** | 343.194334 | 668.354843 | 334.681060 | | | 3 |
| 15 | 1853.906190 | 927.456733 | 1836.879641 | 918.943459 | 1835.895625 | 918.451451 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068396 | | | 2 |
| 16 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of DALSSVQESQVAQQAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 87.7 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 87.3 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 80.7 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |
| 37.3 | 2027.010574 | -0.000052 | DALSSVQESQVAQQAR |

**Mascot:** http://www.matrixscience.com/

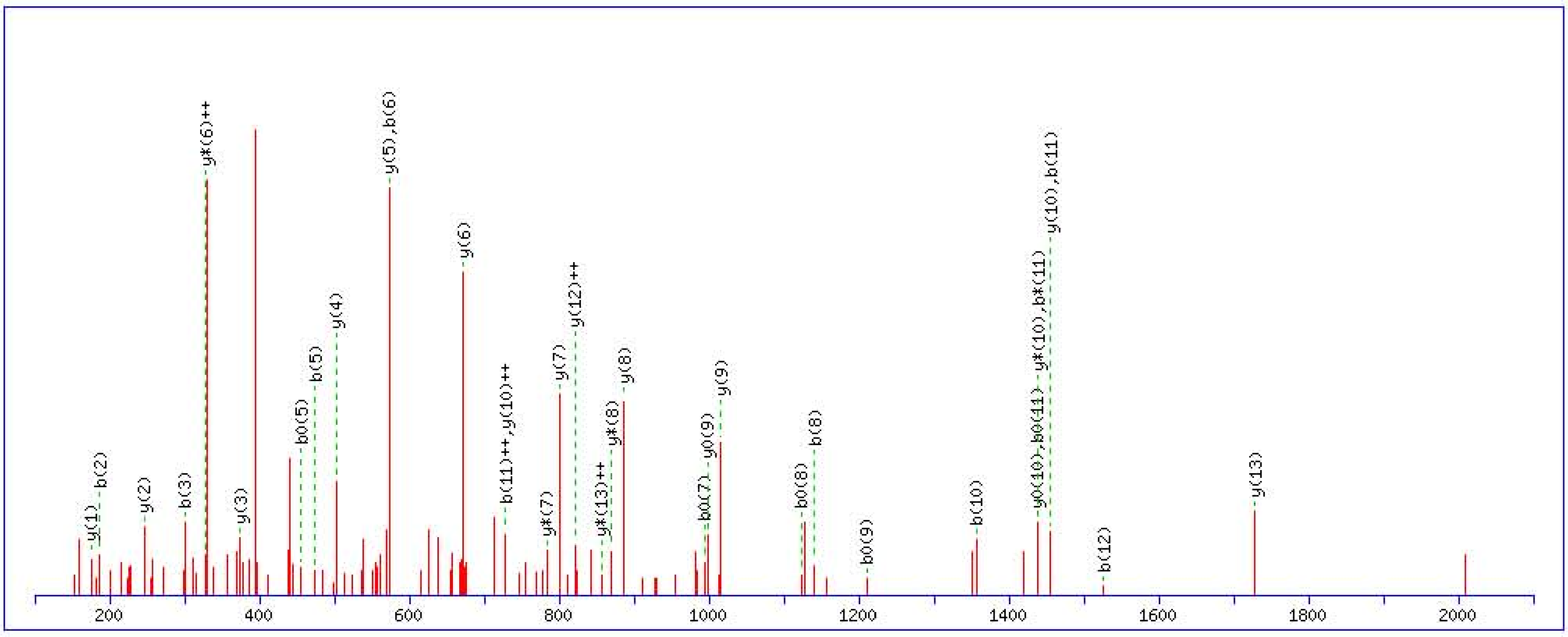
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DALSSVQESQVAQQAR**
Found in **APOC3_HUMAN**, Apolipoprotein C-III OS=Homo sapiens GN=APOC3 PE=1 SV=1

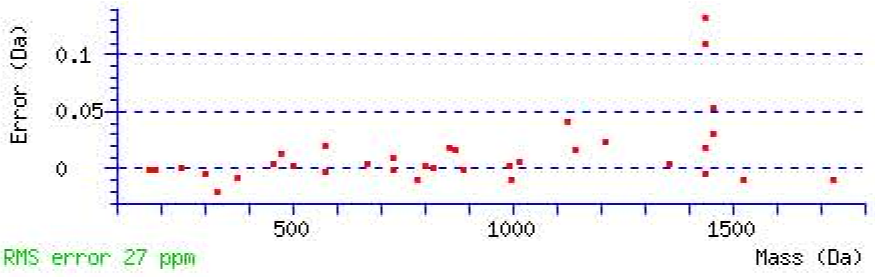
Match to Query 47819: 2027.012172 from(676.678000,3+) rtinseconds(1962) index(36184)
Title: Locus:1.1.1.3102.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

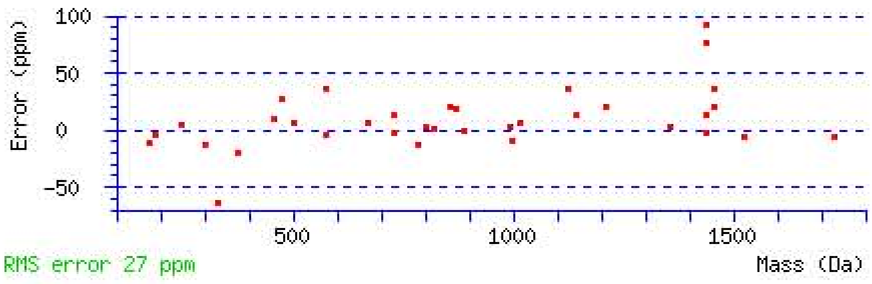
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2027.010574
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q7 : Biotin:Thermo-21345 (Q)
**Ions Score:** 69 **Expect:** 5.8e-007
**Matches :** 35/154 fragment ions using 50 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 16 |
| 2 | **187.071333** | 94.039304 | | | 169.060768 | 85.034022 | A | 1912.990923 | 956.999100 | 1895.964374 | 948.485825 | 1894.980358 | 947.993817 | 15 |
| 3 | **300.155397** | 150.581336 | | | 282.144832 | 141.576054 | L | 1841.953809 | 921.480543 | 1824.927260 | 912.967268 | 1823.943244 | 912.475260 | 14 |
| 4 | 387.187425 | 194.097351 | | | 369.176860 | 185.092068 | S | ***1728.869745*** | 864.938511 | 1711.843196 | 856.425236 | 1710.859180 | 855.933228 | 13 |
| 5 | **474.219453** | 237.613364 | | | 456.208888 | 228.608082 | S | 1641.837717 | 821.422497 | 1624.811168 | 812.909222 | 1623.827152 | 812.417214 | 12 |
| 6 | **573.287867** | 287.147572 | | | 555.277302 | 278.142289 | V | 1554.805689 | 777.906483 | 1537.779140 | 769.393208 | 1536.795124 | 768.901200 | 11 |
| 7 | 1012.513193 | 506.760235 | 995.486644 | 498.246960 | 994.502628 | 497.754952 | Q | ***1455.737275*** | 728.372276 | 1438.710726 | 719.859001 | 1437.726710 | 719.366993 | 10 |
| 8 | **1141.555786** | 571.281531 | 1124.529237 | 562.768257 | 1123.545221 | 562.276249 | E | ***1016.511949*** | 508.759613 | 999.485400 | 500.246338 | 998.501384 | 499.754330 | 9 |
| 9 | 1228.587814 | 614.797545 | 1211.561265 | 606.284271 | 1210.577249 | 605.792263 | S | ***887.469356*** | 444.238316 | 870.442807 | 435.725042 | 869.458791 | 435.233034 | 8 |
| 10 | **1356.646392** | 678.826834 | 1339.619843 | 670.313560 | 1338.635827 | 669.821552 | Q | ***800.437328*** | 400.722302 | 783.410779 | 392.209028 | | | 7 |
| 11 | **1455.714806** | 728.361041 | 1438.688257 | 719.847767 | 1437.704241 | 719.355759 | V | ***672.378750*** | 336.693013 | 655.352201 | 328.179739 | | | 6 |
| 12 | **1526.751920** | 763.879598 | 1509.725371 | 755.366324 | 1508.741355 | 754.874316 | A | ***573.310336*** | 287.158806 | 556.283787 | 278.645532 | | | 5 |
| 13 | 1654.810498 | 827.908887 | 1637.783949 | 819.395613 | 1636.799933 | 818.903605 | Q | ***502.273222*** | 251.640249 | 485.246673 | 243.126975 | | | 4 |
| 14 | 1782.869076 | 891.938176 | 1765.842527 | 883.424902 | 1764.858511 | 882.932894 | Q | ***374.214644*** | 187.610960 | 357.188095 | 179.097686 | | | 3 |
| 15 | 1853.906190 | 927.456733 | 1836.879641 | 918.943459 | 1835.895625 | 918.451451 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068396 | | | 2 |
| 16 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DALSSVQESQVAQQAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 68.6 | 2027.010574 | 0.001598 | DALSSVQESQVAQQAR |
| 31.7 | 2027.010574 | 0.001598 | DALSSVQESQVAQQAR |
| 12.1 | 2027.010574 | 0.001598 | DALSSVQESQVAQQAR |
| 10.1 | 2027.010574 | 0.001598 | DALSSVQESQVAQQAR |
| 2.0 | 2027.010559 | 0.001613 | LTGRGAEDSLADQAANK |
| 0.5 | 2027.000870 | 0.011302 | QMSEPNIPFPPQGFK |

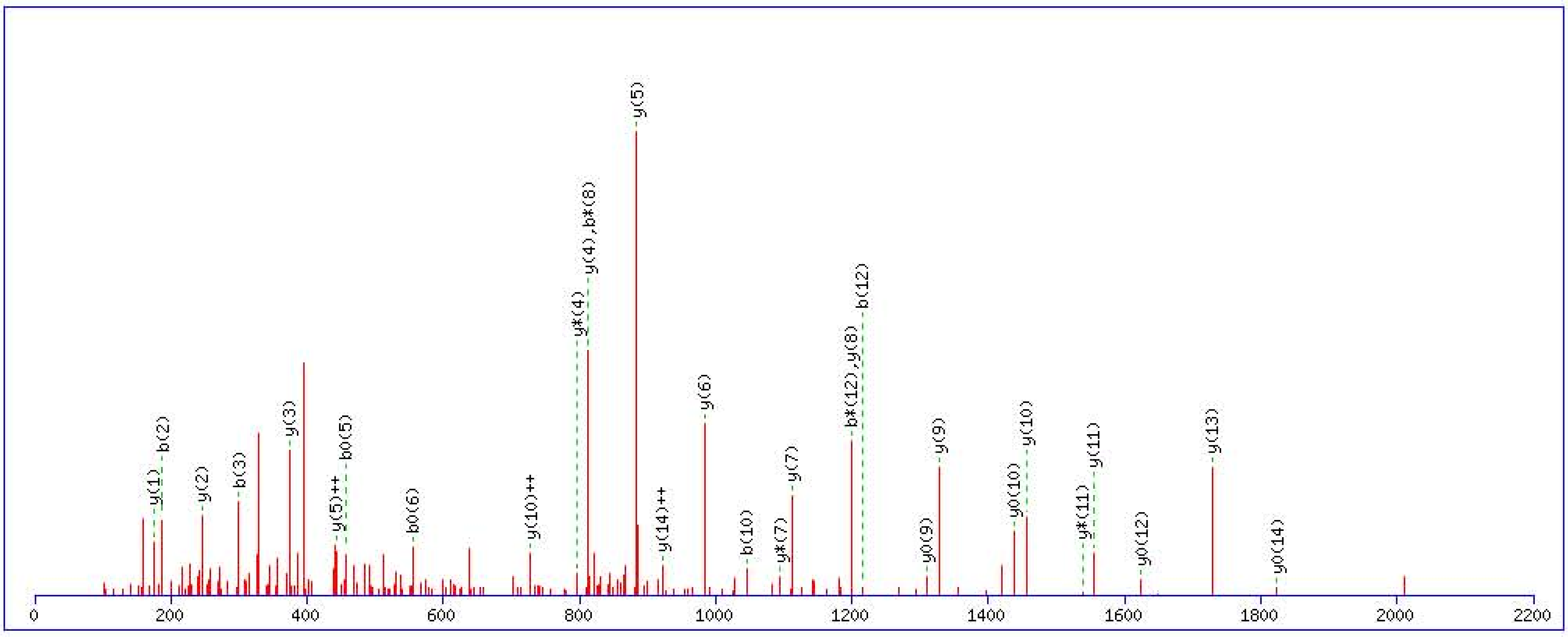
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DALSSVQESQVAQQAR**
Found in **APOC3_HUMAN**, Apolipoprotein C-III OS=Homo sapiens GN=APOC3 PE=1 SV=1

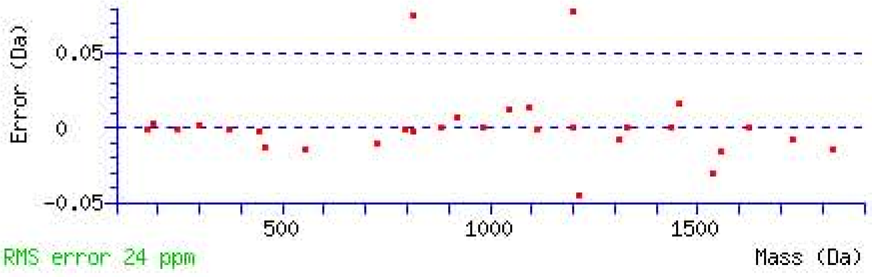
Match to Query 47821: 2027.012772 from(676.678200,3+) rtinseconds(1883) index(35519)
Title: Locus:1.1.1.3075.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

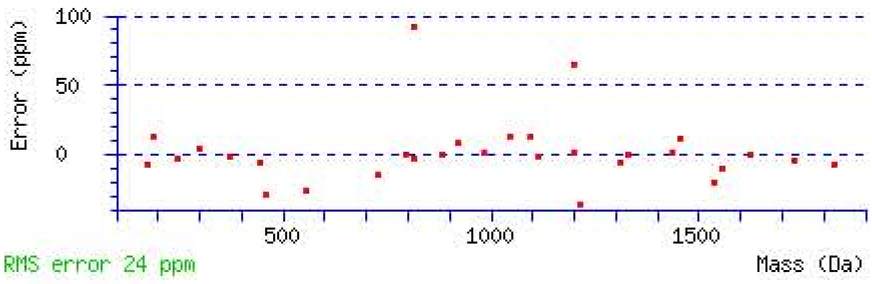
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2027.010574
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q13** : Biotin:Thermo-21345 (Q)
**Ions Score:** 76 **Expect:** 5.5e-007
**Matches :** 30/154 fragment ions using 50 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | **D** | | | | | | | **16** |
| **2** | **187.071333** | 94.039304 | | | 169.060768 | 85.034022 | **A** | 1912.990923 | 956.999100 | 1895.964374 | 948.485825 | 1894.980358 | 947.993817 | **15** |
| **3** | **300.155397** | 150.581336 | | | 282.144832 | 141.576054 | **L** | 1841.953809 | 921.480543 | 1824.927260 | 912.967268 | 1823.943244 | 912.475260 | **14** |
| **4** | 387.187425 | 194.097351 | | | 369.176860 | 185.092068 | **S** | ***1728.869745*** | 864.938511 | 1711.843196 | 856.425236 | 1710.859180 | 855.933228 | **13** |
| **5** | 474.219453 | 237.613364 | | | 456.208888 | 228.608082 | **S** | 1641.837717 | 821.422497 | 1624.811168 | 812.909222 | 1623.827152 | 812.417214 | **12** |
| **6** | 573.287867 | 287.147572 | | | 555.277302 | 278.142289 | **V** | ***1554.805689*** | 777.906483 | 1537.779140 | 769.393208 | 1536.795124 | 768.901200 | **11** |
| **7** | 701.346445 | 351.176861 | 684.319896 | 342.663586 | 683.335880 | 342.171578 | **Q** | ***1455.737275*** | 728.372276 | 1438.710726 | 719.859001 | 1437.726710 | 719.366993 | **10** |
| **8** | 830.389038 | 415.698157 | 813.362489 | 407.184883 | 812.378473 | 406.692875 | **E** | ***1327.678697*** | 664.342987 | 1310.652148 | 655.829712 | 1309.668132 | 655.337704 | **9** |
| **9** | 917.421066 | 459.214171 | 900.394517 | 450.700897 | 899.410501 | 450.208889 | **S** | ***1198.636104*** | 599.821690 | 1181.609555 | 591.308416 | 1180.625539 | 590.816408 | **8** |
| **10** | **1045.479644** | 523.243460 | 1028.453095 | 514.730186 | 1027.469079 | 514.238178 | **Q** | ***1111.604076*** | 556.305676 | 1094.577527 | 547.792402 | | | **7** |
| **11** | 1144.548058 | 572.777667 | 1127.521509 | 564.264393 | 1126.537493 | 563.772385 | **V** | ***983.545498*** | 492.276387 | 966.518949 | 483.763113 | | | **6** |
| **12** | **1215.585172** | 608.296224 | 1198.558623 | 599.782950 | 1197.574607 | 599.290942 | **A** | ***884.477084*** | 442.742180 | 867.450535 | 434.228906 | | | **5** |
| **13** | 1654.810498 | 827.908887 | 1637.783949 | 819.395613 | 1636.799933 | 818.903605 | **Q** | ***813.439970*** | 407.223623 | 796.413421 | 398.710349 | | | **4** |
| **14** | 1782.869076 | 891.938176 | 1765.842527 | 883.424902 | 1764.858511 | 882.932894 | **Q** | ***374.214644*** | 187.610960 | 357.188095 | 179.097686 | | | **3** |
| **15** | 1853.906190 | 927.456733 | 1836.879641 | 918.943459 | 1835.895625 | 918.451451 | **A** | ***246.156066*** | 123.581671 | 229.129517 | 115.068396 | | | **2** |
| **16** | | | | | | | **R** | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | **1** |





NCBI **BLAST** search of DALSSVQESQVAQQAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 76.5 | 2027.010574 | 0.002198 | DALSSVQESQVAQQAR |
| 66.5 | 2027.010574 | 0.002198 | DALSSVQESQVAQQAR |
| 38.2 | 2027.010574 | 0.002198 | DALSSVQESQVAQQAR |
| 11.5 | 2027.010574 | 0.002198 | DALSSVQESQVAQQAR |

**Mascot:** http://www.matrixscience.com/

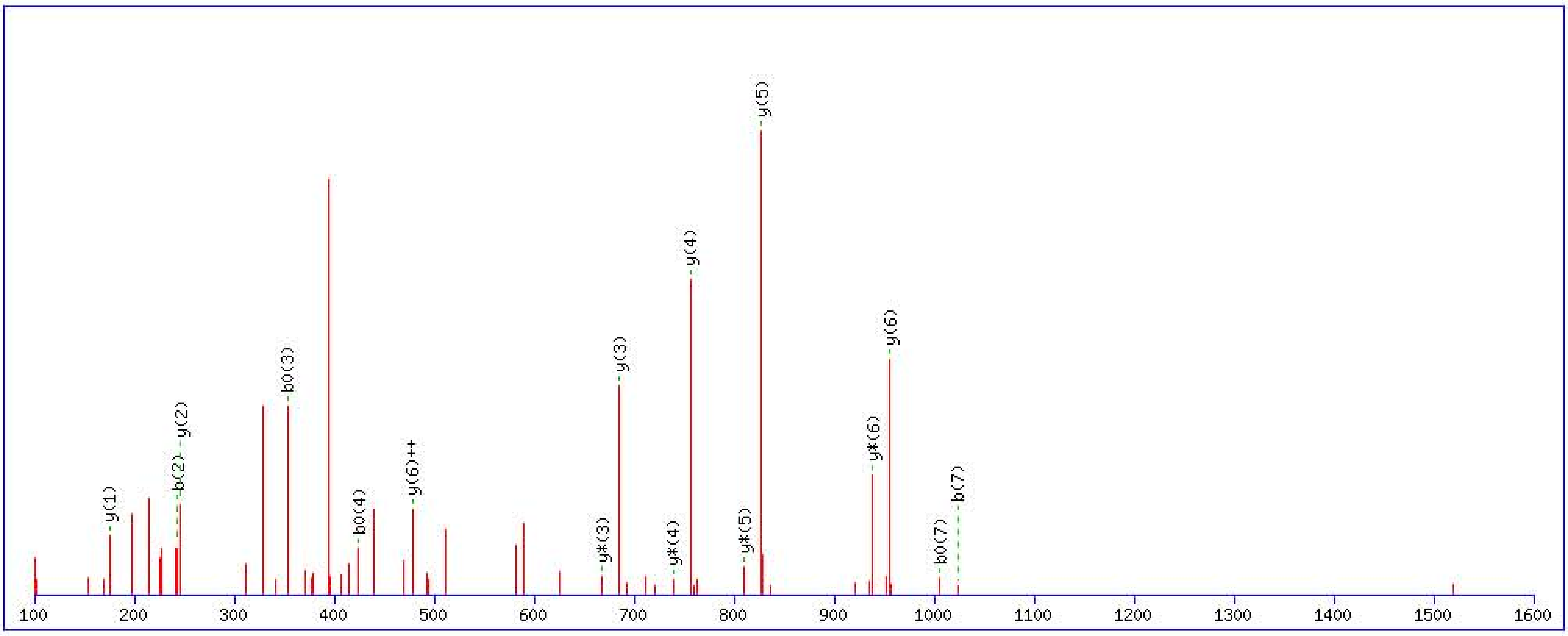
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ELQAAQAR**
Found in **APOE_HUMAN**, Apolipoprotein E OS=Homo sapiens GN=APOE PE=1 SV=1

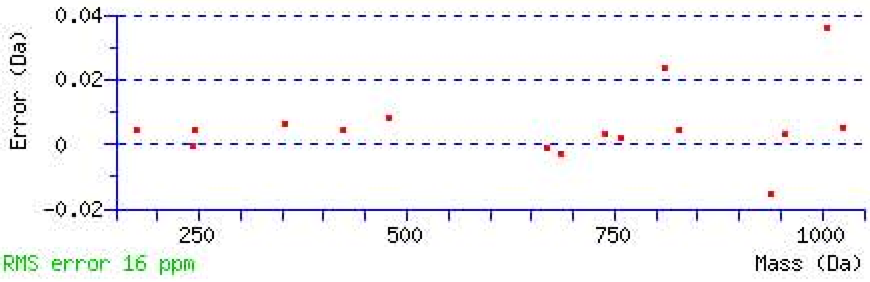
Match to Query 23251: 1196.634708 from(599.324630,2+) rtinseconds(1508) index(49626)
Title: Locus:1.1.1.1140.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

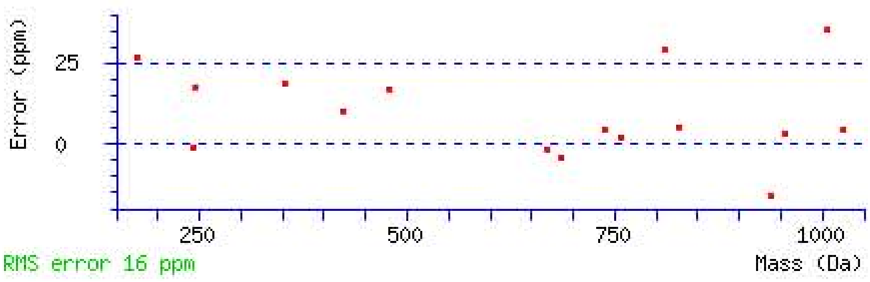
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1196.633545
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.0034
Matches : 16/66 fragment ions using 29 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | 8 |
| 2 | **243.133933** | 122.070605 | | | 225.123368 | 113.065322 | L | 1068.598262 | 534.802769 | 1051.571713 | 526.289495 | 7 |
| 3 | 371.192511 | 186.099894 | 354.165962 | 177.586619 | 353.181946 | 177.094611 | Q | ***955.514198*** | 478.260737 | 938.487649 | 469.747463 | 6 |
| 4 | 442.229625 | 221.618450 | 425.203076 | 213.105176 | 424.219060 | 212.613168 | A | ***827.455620*** | 414.231448 | 810.429071 | 405.718174 | 5 |
| 5 | 513.266739 | 257.137008 | 496.240190 | 248.623733 | 495.256174 | 248.131725 | A | ***756.418506*** | 378.712891 | 739.391957 | 370.199617 | 4 |
| 6 | 952.492065 | 476.749671 | 935.465516 | 468.236396 | 934.481500 | 467.744388 | Q | ***685.381392*** | 343.194334 | 668.354843 | 334.681060 | 3 |
| 7 | **1023.529179** | 512.268227 | 1006.502630 | 503.754953 | 1005.518614 | 503.262945 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068397 | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | 1 |





NCBI **BLAST** search of ELQAAQAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 34.4 | 1196.633545 | 0.001163 | ELQAAQAR |
| 7.6 | 1196.633575 | 0.001133 | QASTQVPR |
| 4.6 | 1196.637390 | -0.002682 | TLRQAGAPNNR |
| 2.0 | 1196.641434 | -0.006726 | STRPQAWVPR |
| 1.3 | 1196.633545 | 0.001163 | ELQAAQAR |
| 1.2 | 1196.627029 | 0.007679 | AGMPRQAR |

**Mascot:** http://www.matrixscience.com/

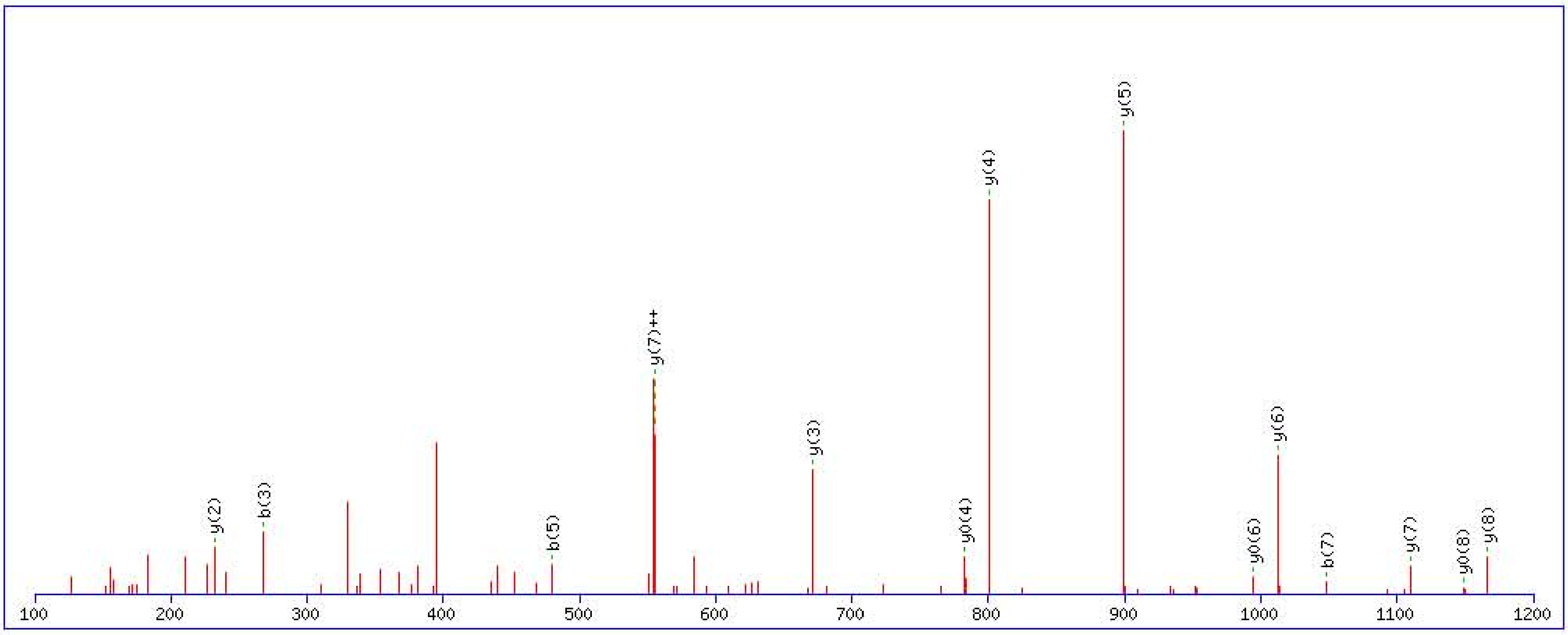
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LGPLVEQGR**
Found in **APOE_HUMAN**, Apolipoprotein E OS=Homo sapiens GN=APOE PE=1 SV=1

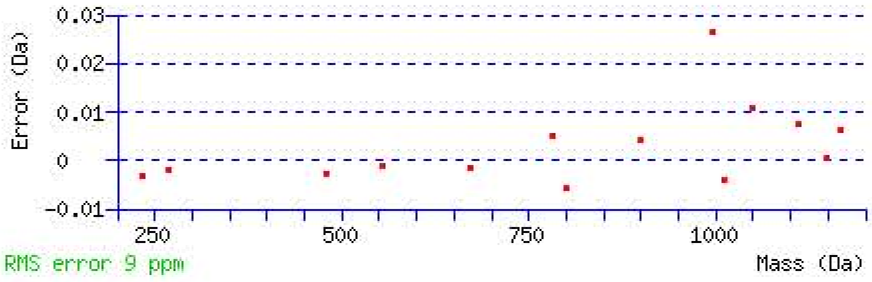
Match to Query 25534: 1278.711268 from(640.362910,2+) rtinseconds(1962) index(36182)
Title: Locus:1.1.1.3102.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

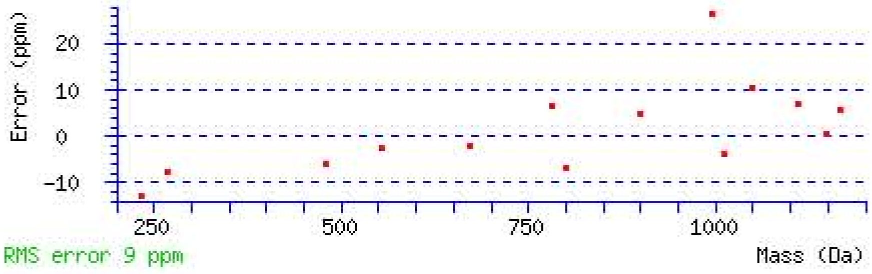
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1278.711823
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 50 **Expect:** 6.3e-005
**Matches :** 14/68 fragment ions using 22 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 9 |
| 2 | 171.112804 | 86.060040 | | | | | G | ***1166.635041*** | 583.821159 | 1149.608492 | 575.307884 | 1148.624476 | 574.815876 | 8 |
| 3 | **268.165568** | 134.586422 | | | | | P | ***1109.613577*** | 555.310426 | 1092.587028 | 546.797152 | 1091.603012 | 546.305144 | 7 |
| 4 | 381.249632 | 191.128454 | | | | | L | ***1012.560813*** | 506.784044 | 995.534264 | 498.270770 | 994.550248 | 497.778762 | 6 |
| 5 | **480.318046** | 240.662661 | | | | | V | ***899.476749*** | 450.242012 | 882.450200 | 441.728738 | 881.466184 | 441.236730 | 5 |
| 6 | 609.360639 | 305.183958 | | | 591.350074 | 296.178675 | E | ***800.408335*** | 400.707805 | 783.381786 | 392.194531 | 782.397770 | 391.702523 | 4 |
| 7 | **1048.585965** | 524.796621 | 1031.559416 | 516.283346 | 1030.575400 | 515.791338 | Q | ***671.365742*** | 336.186509 | 654.339193 | 327.673234 | | | 3 |
| 8 | 1105.607429 | 553.307352 | 1088.580880 | 544.794078 | 1087.596864 | 544.302070 | G | ***232.140416*** | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 9 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LGPLVEQGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.1 | 1278.711823 | -0.000555 | LGPLVEQGR |
| 5.0 | 1278.729584 | -0.018316 | IVIVPSLNPDGR |
| 0.3 | 1278.704422 | 0.006846 | ERGGLPVIEGPR |
| 0.3 | 1278.693192 | 0.018076 | LGDLDVALHQAK |

**Mascot:** http://www.matrixscience.com/

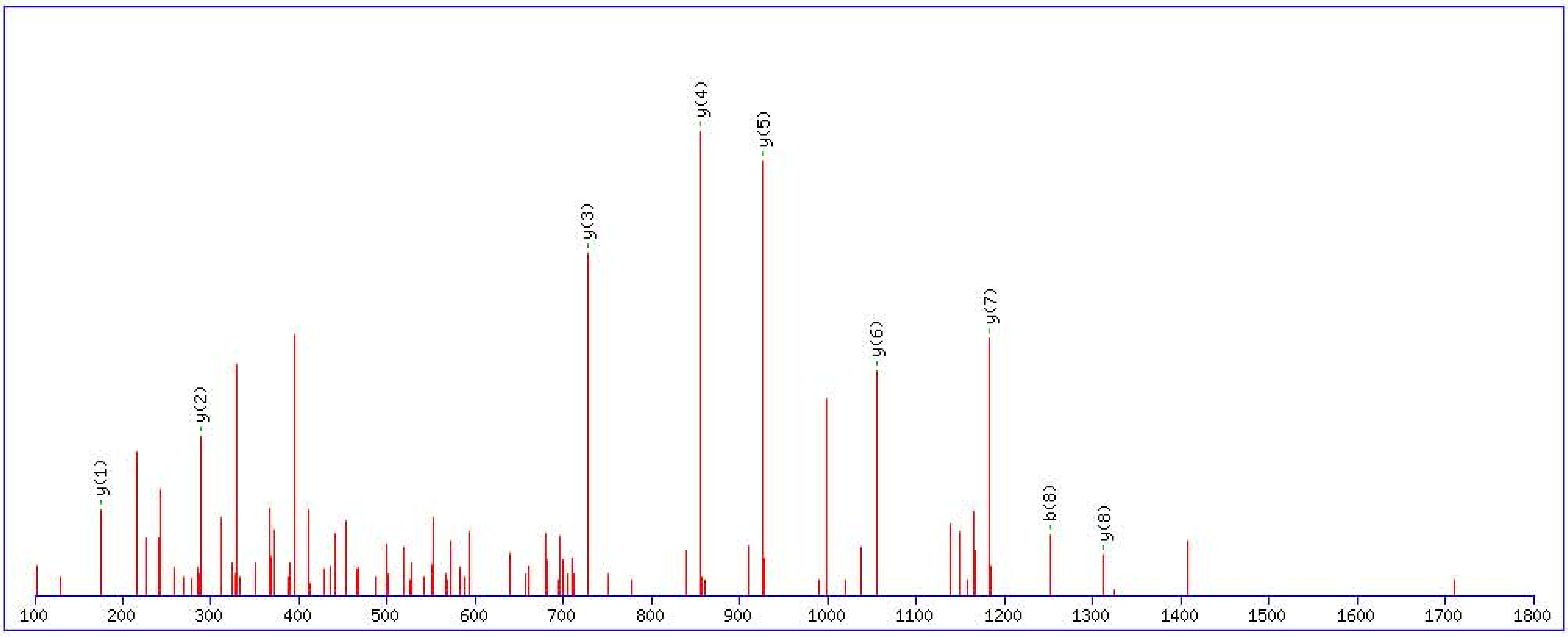
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LEEQAQQIR**
Found in **APOE_HUMAN**, Apolipoprotein E OS=Homo sapiens GN=APOE PE=1 SV=1

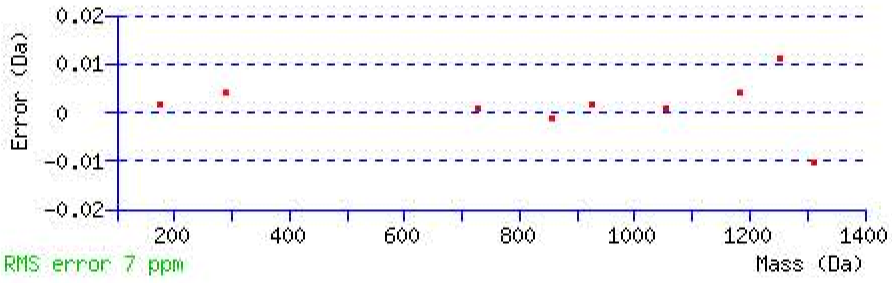
Match to Query 31712: 1424.740448 from(713.377500,2+) rtinseconds(1547) index(18797)
Title: Locus:1.1.1.541.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

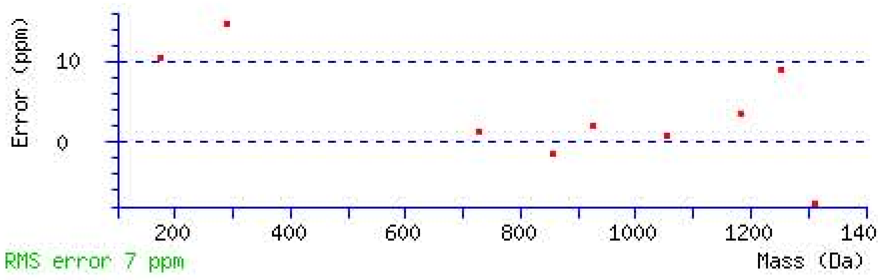
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1800] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1424.744553
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 1.7e-005
Matches : 9/76 fragment ions using 14 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 9 |
| 2 | 243.133933 | 122.070605 | | | 225.123368 | 113.065322 | E | ***1312.667798*** | 656.837537 | 1295.641249 | 648.324263 | 1294.657233 | 647.832255 | 8 |
| 3 | 372.176526 | 186.591901 | | | 354.165961 | 177.586619 | E | ***1183.625205*** | 592.316241 | 1166.598656 | 583.802966 | 1165.614640 | 583.310958 | 7 |
| 4 | 500.235104 | 250.621190 | 483.208555 | 242.107916 | 482.224539 | 241.615908 | Q | ***1054.582612*** | 527.794944 | 1037.556063 | 519.281670 | | | 6 |
| 5 | 571.272218 | 286.139747 | 554.245669 | 277.626473 | 553.261653 | 277.134465 | A | ***926.524034*** | 463.765655 | 909.497485 | 455.252381 | | | 5 |
| 6 | 699.330796 | 350.169036 | 682.304247 | 341.655762 | 681.320231 | 341.163754 | Q | ***855.486920*** | 428.247098 | 838.460371 | 419.733824 | | | 4 |
| 7 | 1138.556122 | 569.781699 | 1121.529573 | 561.268425 | 1120.545557 | 560.776417 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 8 | **1251.640186** | 626.323731 | 1234.613637 | 617.810457 | 1233.629621 | 617.318449 | I | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LEEQAQQIR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.1 | 1424.744553 | -0.004105 | LEEQAQQIR |
| 50.2 | 1424.744553 | -0.004105 | LEEQAQQIR |
| 22.0 | 1424.744553 | -0.004105 | LEEQAQQIR |
| 14.4 | 1424.733322 | 0.007126 | LEQETEPLR |
| 13.4 | 1424.745438 | -0.004990 | QMQQIR |
| 10.3 | 1424.730667 | 0.009781 | QPGCAVPQSGRLR |
| 8.9 | 1424.723465 | 0.016983 | TWTVLPPMSTHR |
| 5.5 | 1424.734680 | 0.005768 | WVLTAAHCLAQR |
| 5.4 | 1424.744583 | -0.004135 | QLSGDQPTIR |
| 4.3 | 1424.744583 | -0.004135 | QLSGDQPTIR |

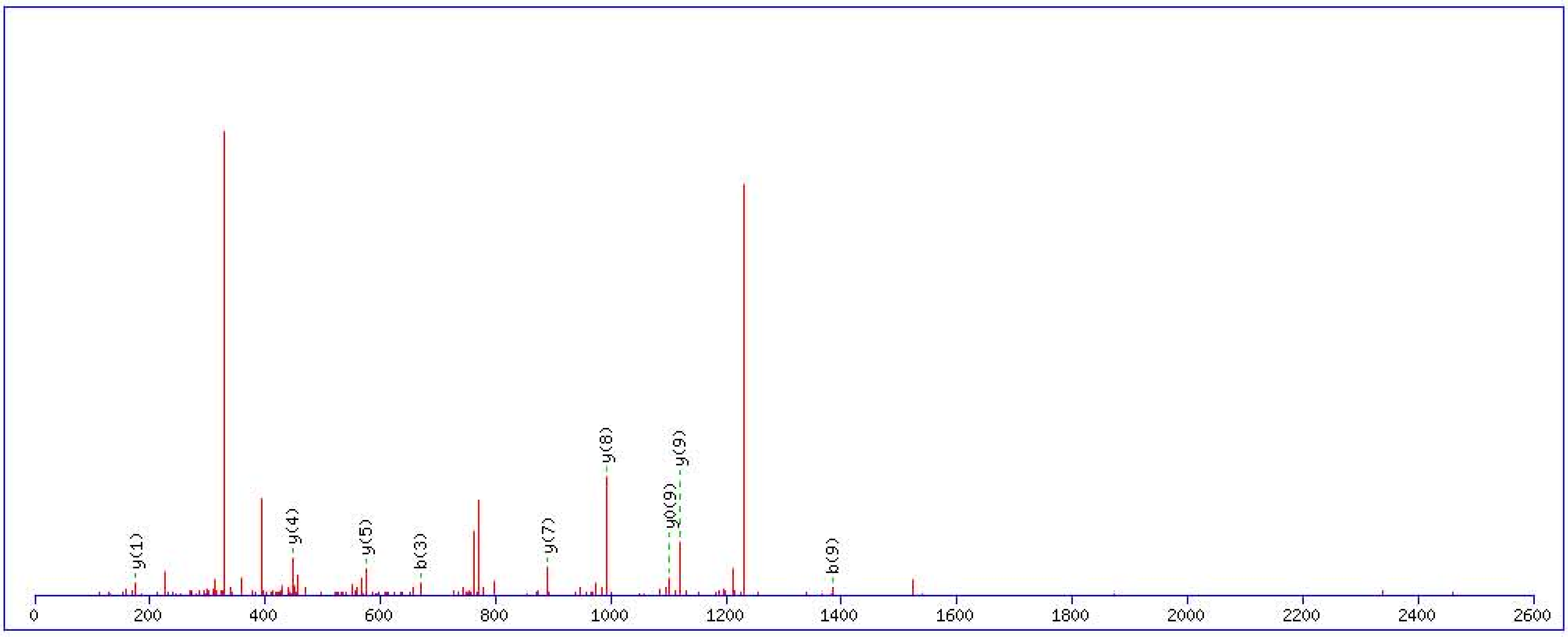
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QQTEWQSGQR**
Found in **APOE_HUMAN**, Apolipoprotein E OS=Homo sapiens GN=APOE PE=1 SV=1

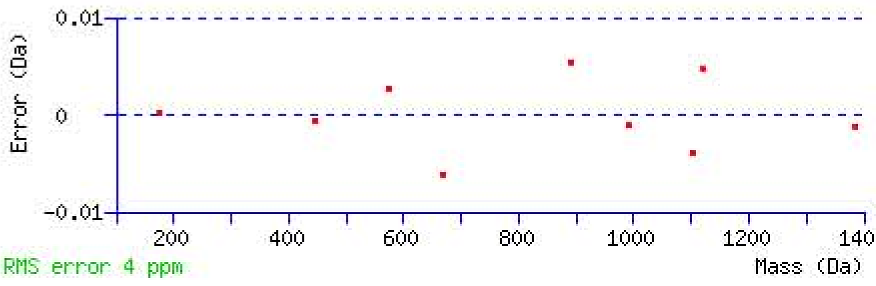
Match to Query 35208: 1557.731388 from(779.872970,2+) rtinseconds(1534) index(33507)
Title: Locus:1.1.1.2953.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

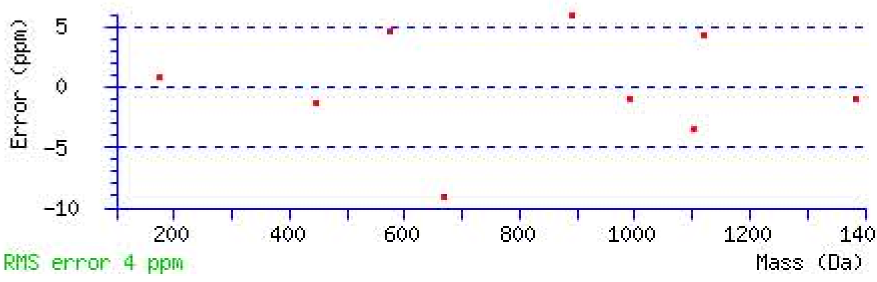
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1557.735809
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.00098
Matches : 9/98 fragment ions using 14 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 10 |
| 2 | 568.291180 | 284.649228 | 551.264631 | 276.135954 | | | Q | ***1119.517763*** | 560.262520 | 1102.491214 | 551.749245 | 1101.507198 | 551.257237 | 9 |
| 3 | **669.338859** | 335.173068 | 652.312310 | 326.659793 | 651.328294 | 326.167785 | T | ***991.459185*** | 496.233231 | 974.432636 | 487.719956 | 973.448620 | 487.227948 | 8 |
| 4 | 798.381452 | 399.694364 | 781.354903 | 391.181090 | 780.370887 | 390.689082 | E | ***890.411506*** | 445.709391 | 873.384957 | 437.196117 | 872.400941 | 436.704109 | 7 |
| 5 | 984.460765 | 492.734021 | 967.434216 | 484.220746 | 966.450200 | 483.728738 | W | 761.368913 | 381.188095 | 744.342364 | 372.674820 | 743.358348 | 372.182812 | 6 |
| 6 | 1112.519343 | 556.763310 | 1095.492794 | 548.250035 | 1094.508778 | 547.758027 | Q | ***575.289600*** | 288.148438 | 558.263051 | 279.635164 | 557.279035 | 279.143156 | 5 |
| 7 | 1199.551371 | 600.279324 | 1182.524822 | 591.766049 | 1181.540806 | 591.274041 | S | ***447.231022*** | 224.119149 | 430.204473 | 215.605875 | 429.220457 | 215.113867 | 4 |
| 8 | 1256.572835 | 628.790056 | 1239.546286 | 620.276781 | 1238.562270 | 619.784773 | G | 360.198994 | 180.603135 | 343.172445 | 172.089860 | | | 3 |
| 9 | **1384.631413** | 692.819345 | 1367.604864 | 684.306070 | 1366.620848 | 683.814062 | Q | 303.177530 | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |

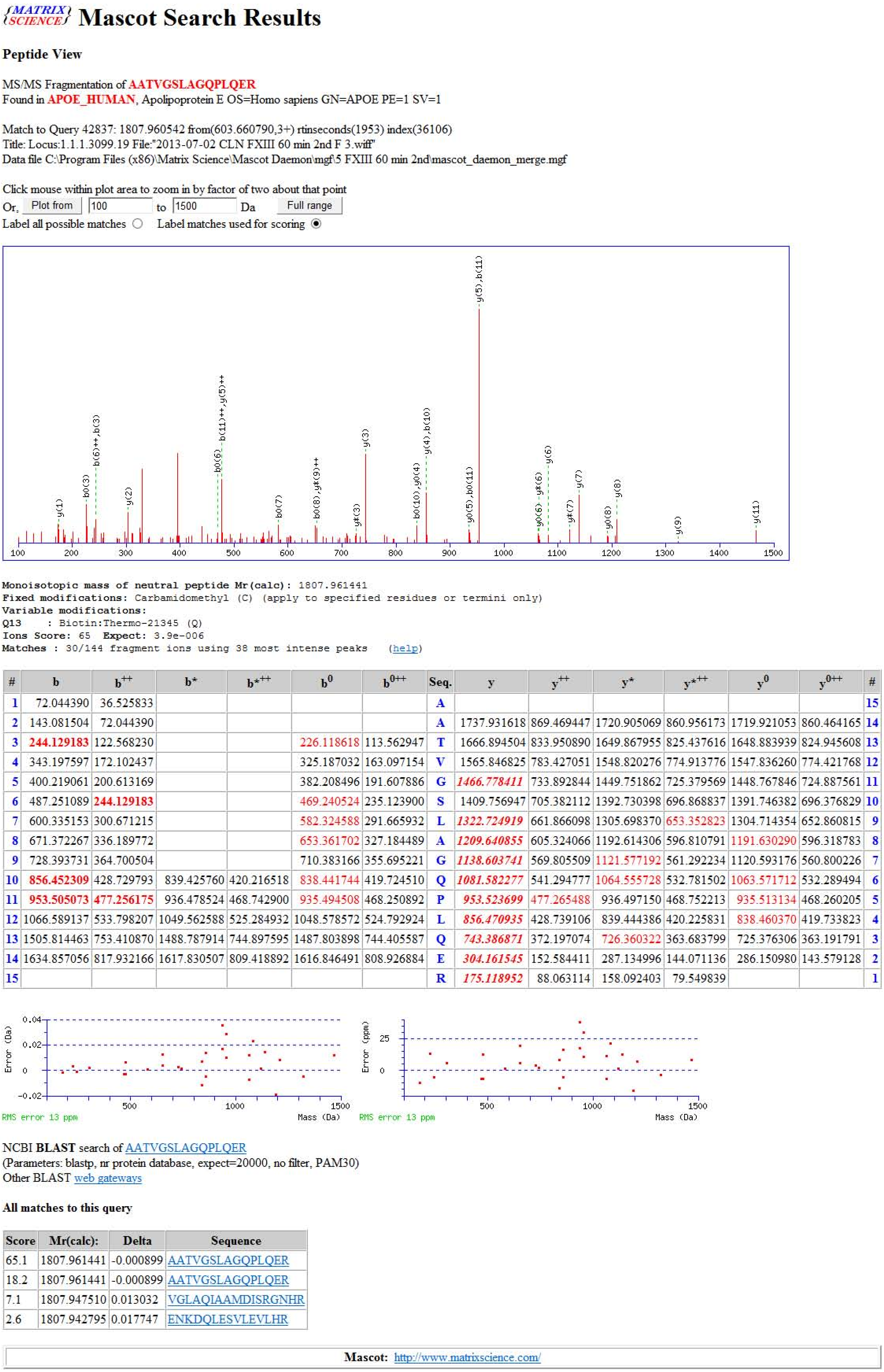




NCBI **BLAST** search of QQTEWQSGQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.5 | 1557.735809 | -0.004421 | QQTEWQSGQR |
| 28.7 | 1557.735809 | -0.004421 | QQTEWQSGQR |
| 16.9 | 1557.747040 | -0.015652 | AFSHCSSLTKHQR |
| 6.8 | 1557.745697 | -0.014309 | GSSLFMDTEKSGKR |
| 5.8 | 1557.742340 | -0.010952 | TQSFEIPQPDSGPR |
| 5.1 | 1557.739182 | -0.007794 | GPMIDQRGLPMDGR |
| 5.0 | 1557.720566 | 0.010822 | QEAATGVDTICTHR |
| 4.4 | 1557.720551 | 0.010837 | LSQVSPEDDRPCR |
| 4.4 | 1557.749496 | -0.018108 | QAEATRQAAAQEER |
| 4.4 | 1557.709305 | 0.022083 | QLSDQQDEER |



# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AATVGSLAGQPLQER**
Found in **APOE_HUMAN**, Apolipoprotein E OS=Homo sapiens GN=APOE PE=1 SV=1

Match to Query 42837: 1807.960542 from(603.660790,3+) rtinseconds(1953) index(36106)
Title: Locus:1.1.1.3099.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●

**Monoisotopic mass of neutral peptide Mr(calc):** 1807.961441
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q13 : Biotin:Thermo-21345 (Q)
**Ions Score:** 65 **Expect:** 3.9e-006
**Matches :** 30/144 fragment ions using 38 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 15 |
| 2 | 143.081504 | 72.044390 | | | | | A | 1737.931618 | 869.469447 | 1720.905069 | 860.956173 | 1719.921053 | 860.464165 | 14 |
| 3 | **244.129183** | 122.568230 | | | 226.118618 | 113.562947 | T | 1666.894504 | 833.950890 | 1649.867955 | 825.437616 | 1648.883939 | 824.945608 | 13 |
| 4 | 343.197597 | 172.102437 | | | 325.187032 | 163.097154 | V | 1565.846825 | 783.427051 | 1548.820276 | 774.913776 | 1547.836260 | 774.421768 | 12 |
| 5 | 400.219061 | 200.613169 | | | 382.208496 | 191.607886 | G | ***1466.778411*** | 733.892844 | 1449.751862 | 725.379569 | 1448.767846 | 724.887561 | 11 |
| 6 | 487.251089 | **244.129183** | | | 469.240524 | 235.123900 | S | 1409.756947 | 705.382112 | 1392.730398 | 696.868837 | 1391.746382 | 696.376829 | 10 |
| 7 | 600.335153 | 300.671215 | | | 582.324588 | 291.665932 | L | ***1322.724919*** | 661.866098 | 1305.698370 | 653.352823 | 1304.714354 | 652.860815 | 9 |
| 8 | 671.372267 | 336.189772 | | | 653.361702 | 327.184489 | A | ***1209.640855*** | 605.324066 | 1192.614306 | 596.810791 | 1191.630290 | 596.318783 | 8 |
| 9 | 728.393731 | 364.700504 | | | 710.383166 | 355.695221 | G | ***1138.603741*** | 569.805509 | 1121.577192 | 561.292234 | 1120.593176 | 560.800226 | 7 |
| 10 | **856.452309** | 428.729793 | 839.425760 | 420.216518 | 838.441744 | 419.724510 | Q | ***1081.582277*** | 541.294777 | 1064.555728 | 532.781502 | 1063.571712 | 532.289494 | 6 |
| 11 | **953.505073** | **477.256175** | 936.478524 | 468.742900 | 935.494508 | 468.250892 | P | ***953.523699*** | 477.265488 | 936.497150 | 468.752213 | 935.513134 | 468.260205 | 5 |
| 12 | 1066.589137 | 533.798207 | 1049.562588 | 525.284932 | 1048.578572 | 524.792924 | L | ***856.470935*** | 428.739106 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 13 | 1505.814463 | 753.410870 | 1488.787914 | 744.897595 | 1487.803898 | 744.405587 | Q | ***743.386871*** | 372.197074 | 726.360322 | 363.683799 | 725.376306 | 363.191791 | 3 |
| 14 | 1634.857056 | 817.932166 | 1617.830507 | 809.418892 | 1616.846491 | 808.926884 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |

NCBI **BLAST** search of AATVGSLAGQPLQER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.1 | 1807.961441 | -0.000899 | AATVGSLAGQPLQER |
| 18.2 | 1807.961441 | -0.000899 | AATVGSLAGQPLQER |
| 7.1 | 1807.947510 | 0.013032 | VGLAQIAAMDISRGNHR |
| 2.6 | 1807.942795 | 0.017747 | ENKDQLESVLEVLHR |

**Mascot:** http://www.matrixscience.com/

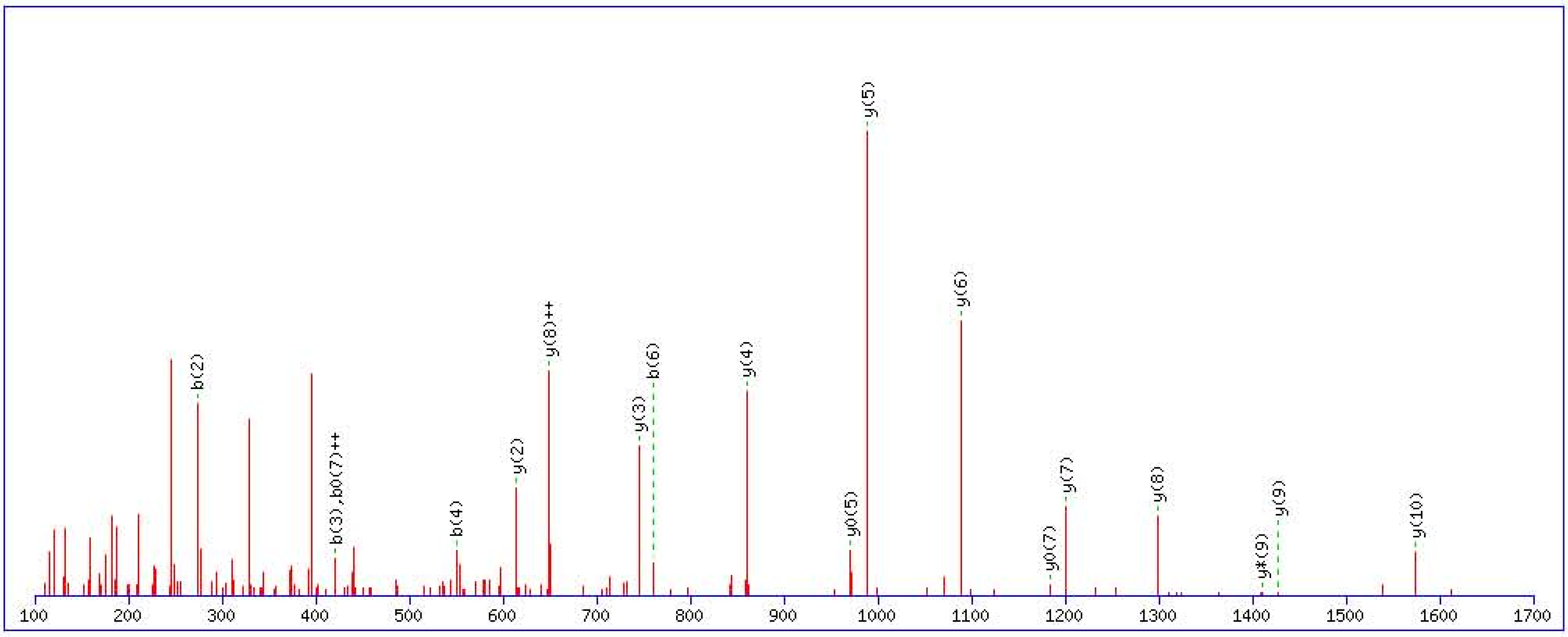
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SWFEPLVEDMQR**
Found in **APOE_HUMAN**, Apolipoprotein E OS=Homo sapiens GN=APOE PE=1 SV=1

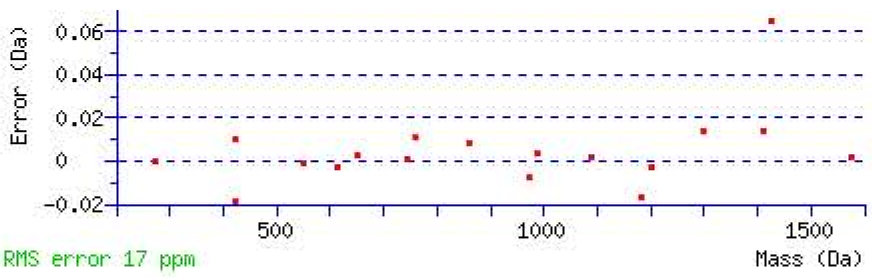
Match to Query 43580: 1846.875492 from(616.632440,3+) rtinseconds(2818) index(41692)
Title: Locus:1.1.1.3399.3 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

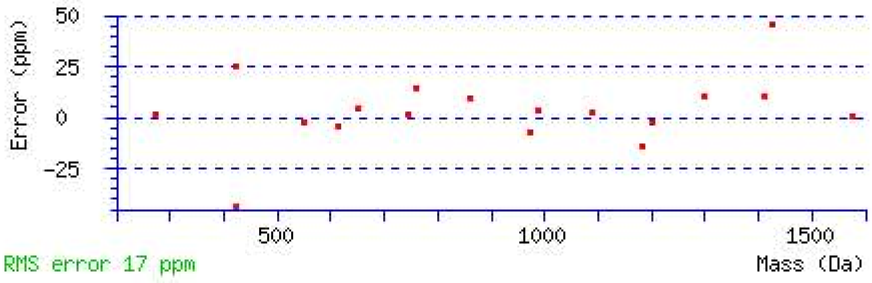
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1846.874603
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 52  Expect: 2.8e-005
Matches : 18/106 fragment ions using 31 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 12 |
| 2 | **274.118617** | 137.562947 | | | 256.108052 | 128.557664 | W | 1760.849861 | 880.928568 | 1743.823312 | 872.415294 | 1742.839296 | 871.923286 | 11 |
| 3 | **421.187031** | 211.097153 | | | 403.176466 | 202.091871 | F | ***1574.770548*** | 787.888912 | 1557.743999 | 779.375638 | 1556.759983 | 778.883629 | 10 |
| 4 | **550.229624** | 275.618450 | | | 532.219059 | 266.613168 | E | ***1427.702134*** | 714.354705 | 1410.675585 | 705.841431 | 1409.691569 | 705.349422 | 9 |
| 5 | 647.282388 | 324.144832 | | | 629.271823 | 315.139550 | P | ***1298.659541*** | 649.833409 | 1281.632992 | 641.320134 | 1280.648976 | 640.828126 | 8 |
| 6 | **760.366452** | 380.686864 | | | 742.355887 | 371.681582 | L | ***1201.606777*** | 601.307027 | 1184.580228 | 592.793752 | 1183.596212 | 592.301744 | 7 |
| 7 | 859.434866 | 430.221071 | | | 841.424301 | 421.215789 | V | ***1088.522713*** | 544.764995 | 1071.496164 | 536.251720 | 1070.512148 | 535.759712 | 6 |
| 8 | 988.477459 | 494.742368 | | | 970.466894 | 485.737085 | E | ***989.454299*** | 495.230788 | 972.427750 | 486.717513 | 971.443734 | 486.225505 | 5 |
| 9 | 1103.504402 | 552.255839 | | | 1085.493837 | 543.250557 | D | ***860.411706*** | 430.709491 | 843.385157 | 422.196216 | 842.401141 | 421.704208 | 4 |
| 10 | 1234.544887 | 617.776082 | | | 1216.534322 | 608.770799 | M | ***745.384763*** | 373.196020 | 728.358214 | 364.682745 | | | 3 |
| 11 | 1673.770213 | 837.388745 | 1656.743664 | 828.875470 | 1655.759648 | 828.383462 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 12 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SWFEPLVEDMQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.7 | 1846.874603 | 0.000889 | SWFEPLVEDMQR |
| 3.0 | 1846.849426 | 0.026066 | SFWENNCKMIYLAR |
| 0.4 | 1846.895721 | -0.020229 | LQLEETMPSPYGR |

**Mascot:** http://www.matrixscience.com/

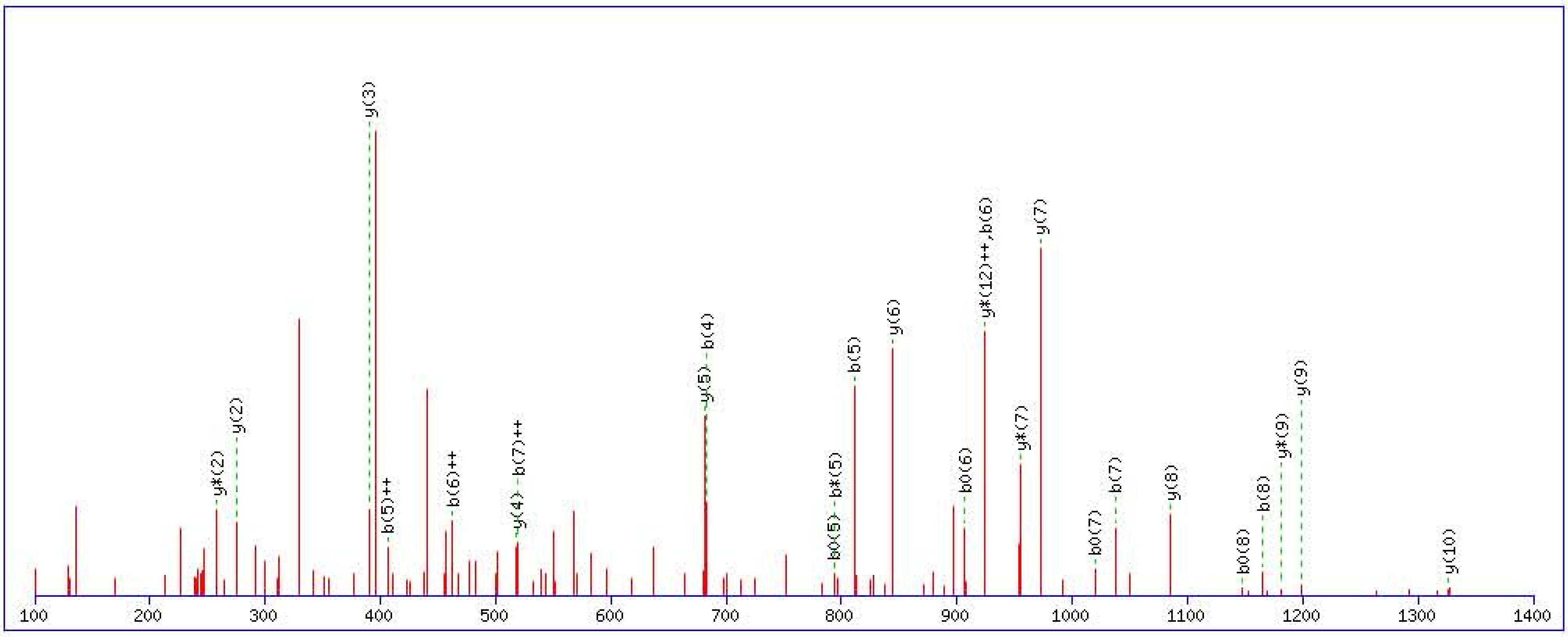
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of SGVQQLIQYYQDQK
Found in APOF_HUMAN, Apolipoprotein F OS=Homo sapiens GN=APOF PE=1 SV=2

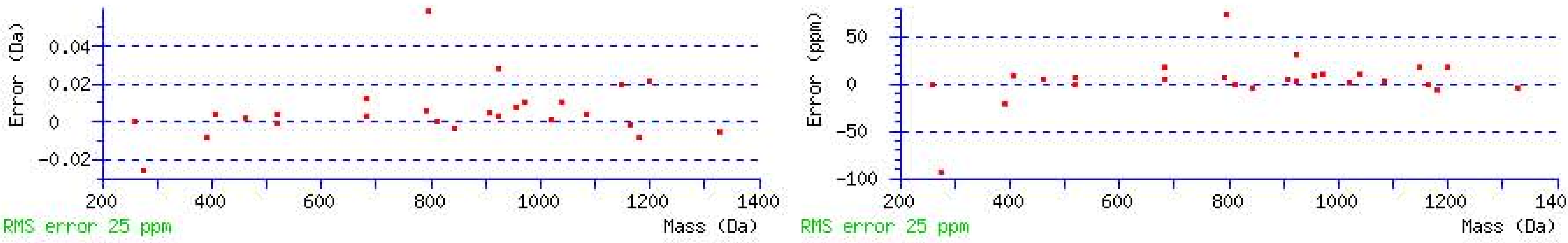
Match to Query 47485: 2008.016472 from(670.346100,3+) rtinseconds(2469) index(39224)
Title: Locus:1.1.1.3279.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2008.008789
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 43  Expect: 0.00088
Matches : 26/146 fragment ions using 49 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 14 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | G | 1921.984049 | 961.495663 | 1904.957500 | 952.982388 | 1903.973484 | 952.490380 | 13 |
| 3 | 244.129182 | 122.568229 | | | 226.118617 | 113.562947 | V | 1864.962585 | 932.984931 | 1847.936036 | 924.471656 | 1846.952020 | 923.979648 | 12 |
| 4 | **683.354508** | 342.180892 | 666.327959 | 333.667618 | 665.343943 | 333.175610 | Q | 1765.894171 | 883.450724 | 1748.867622 | 874.937449 | 1747.883606 | 874.445441 | 11 |
| 5 | **811.413086** | **406.210181** | 794.386537 | 397.696907 | 793.402521 | 397.204899 | Q | ***1326.668845*** | 663.838061 | 1309.642296 | 655.324786 | 1308.658280 | 654.832778 | 10 |
| 6 | **924.497150** | **462.752213** | 907.470601 | 454.238939 | 906.486585 | 453.746931 | L | ***1198.610267*** | 599.808772 | 1181.583718 | 591.295497 | 1180.599702 | 590.803489 | 9 |
| 7 | **1037.581214** | **519.294245** | 1020.554665 | 510.780971 | 1019.570649 | 510.288963 | I | ***1085.526203*** | 543.266740 | 1068.499654 | 534.753465 | 1067.515638 | 534.261457 | 8 |
| 8 | **1165.639792** | 583.323534 | 1148.613243 | 574.810260 | 1147.629227 | 574.318252 | Q | ***972.442139*** | 486.724708 | 955.415590 | 478.211433 | 954.431574 | 477.719425 | 7 |
| 9 | 1328.703121 | 664.855199 | 1311.676572 | 656.341924 | 1310.692556 | 655.849916 | Y | ***844.383561*** | 422.695419 | 827.357012 | 414.182144 | 826.372996 | 413.690136 | 6 |
| 10 | 1491.766450 | 746.386863 | 1474.739901 | 737.873589 | 1473.755885 | 737.381581 | Y | ***681.320232*** | 341.163754 | 664.293683 | 332.650480 | 663.309667 | 332.158472 | 5 |
| 11 | 1619.825028 | 810.416152 | 1602.798479 | 801.902878 | 1601.814463 | 801.410870 | Q | ***518.256903*** | 259.632090 | 501.230354 | 251.118815 | 500.246338 | 250.626807 | 4 |
| 12 | 1734.851971 | 867.929624 | 1717.825422 | 859.416349 | 1716.841406 | 858.924341 | D | ***390.198325*** | 195.602800 | 373.171776 | 187.089526 | 372.187760 | 186.597518 | 3 |
| 13 | 1862.910549 | 931.958913 | 1845.884000 | 923.445638 | 1844.899984 | 922.953630 | Q | ***275.171382*** | 138.089329 | 258.144833 | 129.576054 | | | 2 |
| 14 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of SGVQQLIQYYQDQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 42.6 | 2008.008789 | 0.007683 | SGVQQLIQYYQDQK |
| 32.2 | 2008.008789 | 0.007683 | SGVQQLIQYYQDQK |
| 9.4 | 2007.998215 | 0.018257 | QQLNLRTHMADENK |
| 7.6 | 2008.037308 | -0.020836 | VVPVSLSELYLLQCNMK |
| 0.6 | 2008.026535 | -0.010063 | HYSNTLKALGISDEFVSK |

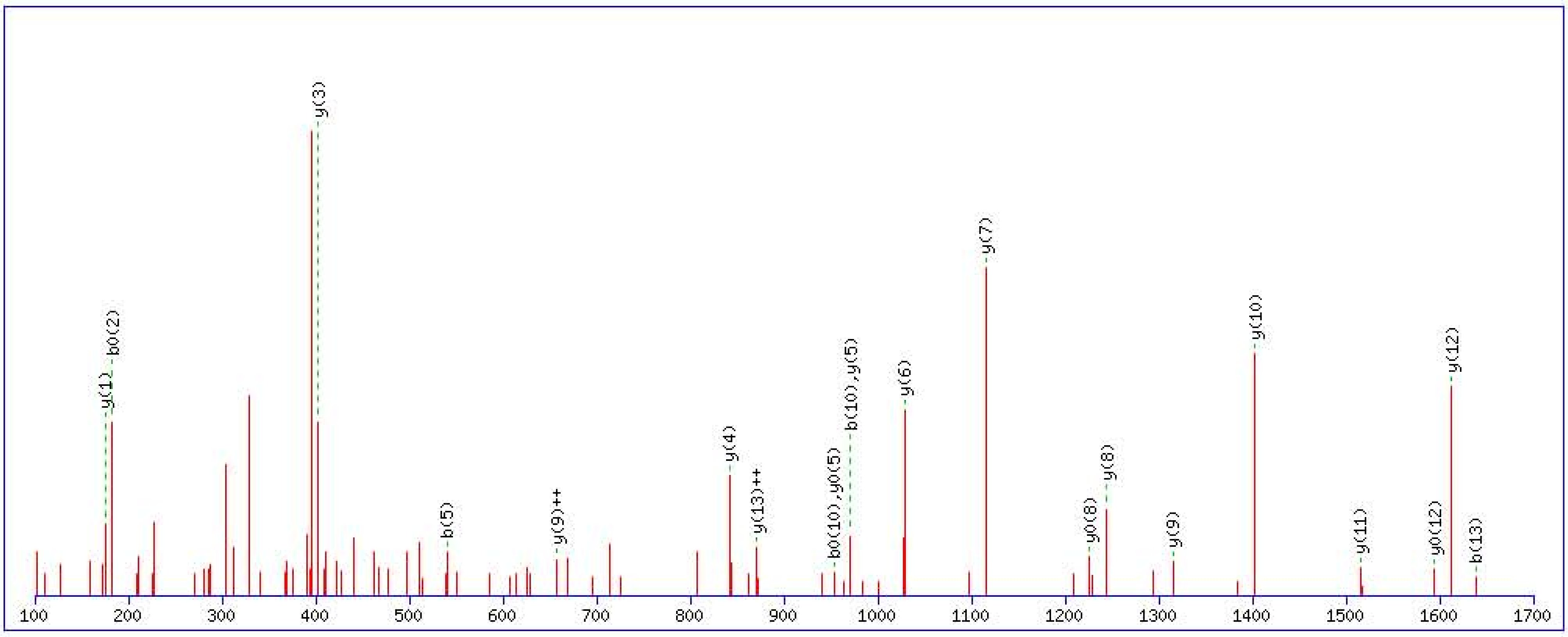
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VTEPISAESGEQVER**
Found in **APOL1_HUMAN**, Apolipoprotein L1 OS=Homo sapiens GN=APOL1 PE=1 SV=5

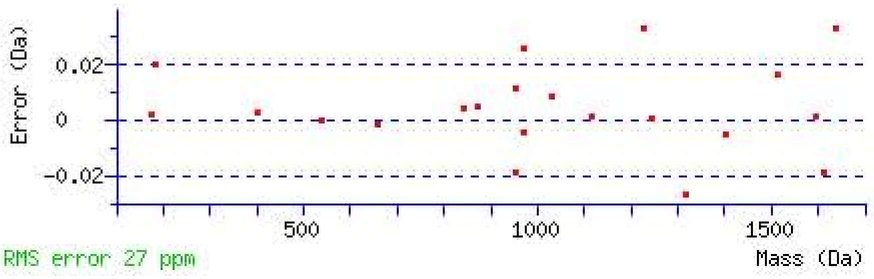
Match to Query 45380: 1940.949702 from(647.990510,3+) rtinseconds(1702) index(19696)
Title: Locus:1.1.1.595.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

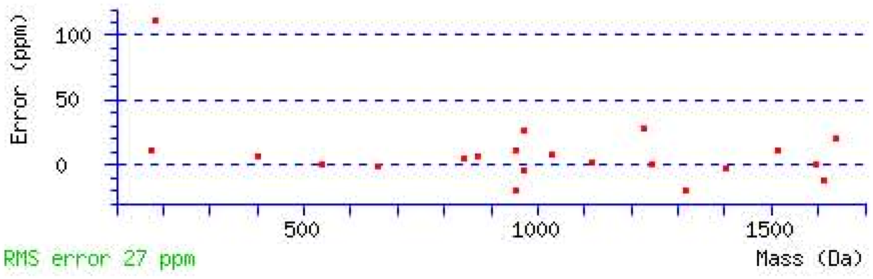
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1940.951324
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q12** : Biotin:Thermo-21345 (Q)
**Ions Score:** 79 **Expect:** 2.8e-007
**Matches :** 21/142 fragment ions using 30 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 15 |
| 2 | 201.123369 | 101.065322 | | | 183.112804 | 92.060040 | T | 1842.890205 | 921.948741 | 1825.863656 | 913.435466 | 1824.879640 | 912.943458 | 14 |
| 3 | 330.165962 | 165.586619 | | | 312.155397 | 156.581336 | E | 1741.842526 | 871.424901 | 1724.815977 | 862.911627 | 1723.831961 | 862.419619 | 13 |
| 4 | 427.218726 | 214.113001 | | | 409.208161 | 205.107719 | P | ***1612.799933*** | 806.903605 | 1595.773384 | 798.390330 | 1594.789368 | 797.898322 | 12 |
| 5 | **540.302790** | 270.655033 | | | 522.292225 | 261.649751 | I | ***1515.747169*** | 758.377223 | 1498.720620 | 749.863948 | 1497.736604 | 749.371940 | 11 |
| 6 | 627.334818 | 314.171047 | | | 609.324253 | 305.165765 | S | ***1402.663105*** | 701.835191 | 1385.636556 | 693.321916 | 1384.652540 | 692.829908 | 10 |
| 7 | 698.371932 | 349.689604 | | | 680.361367 | 340.684322 | A | ***1315.631077*** | 658.319177 | 1298.604528 | 649.805902 | 1297.620512 | 649.313894 | 9 |
| 8 | 827.414525 | 414.210901 | | | 809.403960 | 405.205618 | E | ***1244.593963*** | 622.800620 | 1227.567414 | 614.287345 | 1226.583398 | 613.795337 | 8 |
| 9 | 914.446553 | 457.726915 | | | 896.435988 | 448.721632 | S | ***1115.551370*** | 558.279323 | 1098.524821 | 549.766049 | 1097.540805 | 549.274041 | 7 |
| 10 | **971.468017** | 486.237647 | | | 953.457452 | 477.232364 | G | ***1028.519342*** | 514.763309 | 1011.492793 | 506.250035 | 1010.508777 | 505.758027 | 6 |
| 11 | 1100.510610 | 550.758943 | | | 1082.500045 | 541.753661 | E | ***971.497878*** | 486.252577 | 954.471329 | 477.739303 | 953.487313 | 477.247295 | 5 |
| 12 | 1539.735936 | 770.371606 | 1522.709387 | 761.858332 | 1521.725371 | 761.366324 | Q | ***842.455285*** | 421.731281 | 825.428736 | 413.218006 | 824.444720 | 412.725998 | 4 |
| 13 | **1638.804350** | 819.905813 | 1621.777801 | 811.392539 | 1620.793785 | 810.900531 | V | ***403.229959*** | 202.118617 | 386.203410 | 193.605343 | 385.219394 | 193.113335 | 3 |
| 14 | 1767.846943 | 884.427110 | 1750.820394 | 875.913835 | 1749.836378 | 875.421827 | E | 304.161545 | 152.584410 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VTEPISAESGEQVER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 79.2 | 1940.951324 | -0.001622 | VTEPISAESGEQVER |
| 11.1 | 1940.962540 | -0.012838 | LLNDQEEEGTQRAK |
| 2.5 | 1940.937378 | 0.012324 | SNNLEREQEQLDR |

**Mascot:** http://www.matrixscience.com/

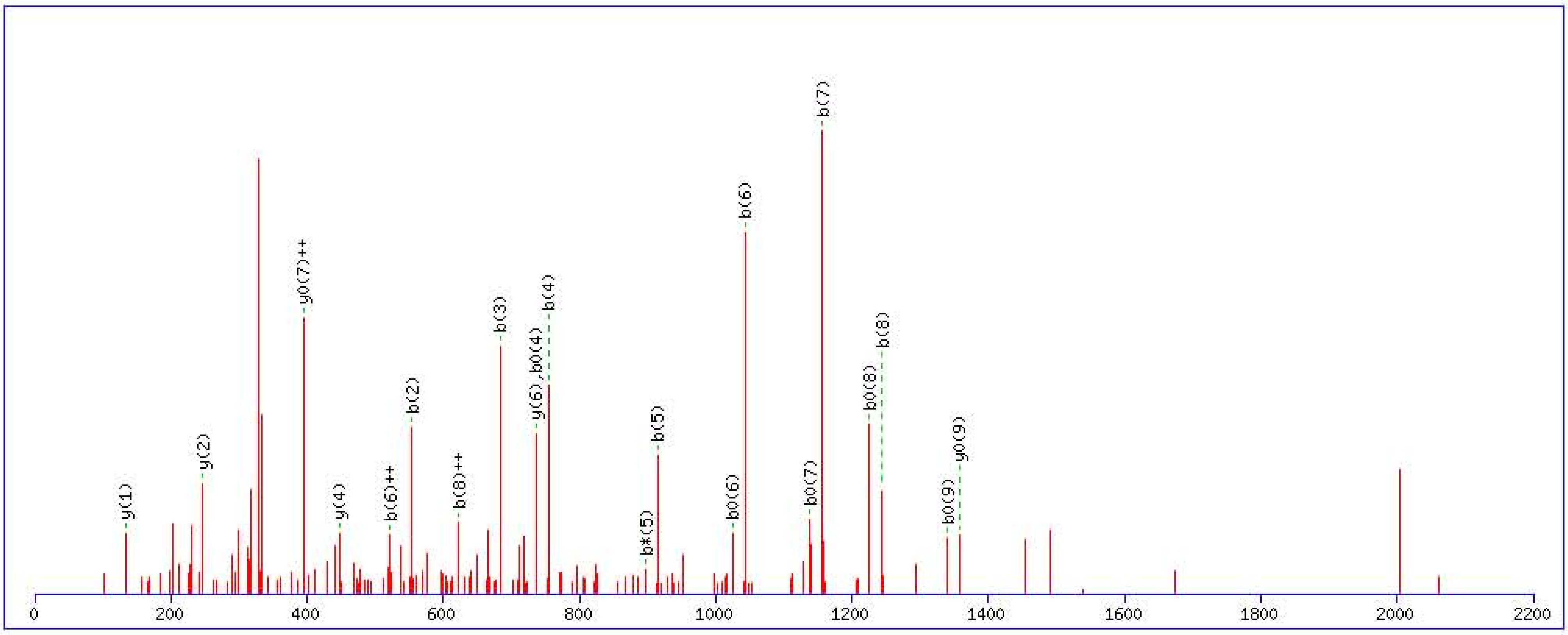
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of NQEACELSNN
Found in APOM_HUMAN, Apolipoprotein M OS=Homo sapiens GN=APOM PE=1 SV=2

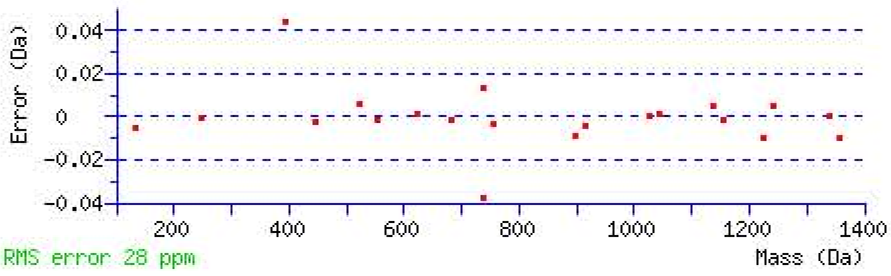
Match to Query 33528: 1488.631988 from(745.323270,2+) rtinseconds(1637) index(34042)
Title: Locus:1.1.1.2989.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

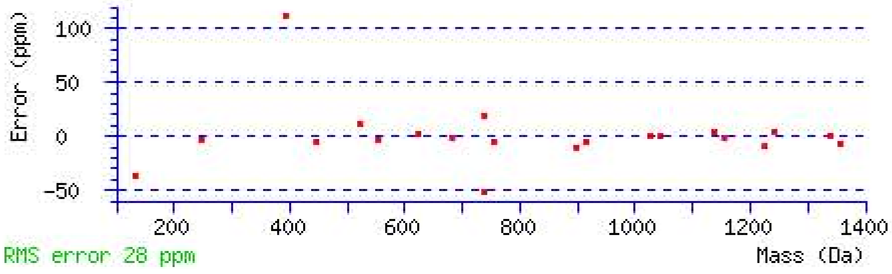
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1488.633682
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 63  Expect: 1.5e-006
Matches : 22/100 fragment ions using 28 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 10 |
| 2 | ***554.275529*** | 277.641403 | 537.248980 | 269.128128 | | | Q | 1375.598062 | 688.302669 | 1358.571513 | 679.789395 | 1357.587497 | 679.297387 | 9 |
| 3 | ***683.318122*** | 342.162699 | 666.291573 | 333.649425 | 665.307557 | 333.157417 | E | 936.372736 | 468.690006 | 919.346187 | 460.176732 | 918.362171 | 459.684724 | 8 |
| 4 | ***754.355236*** | 377.681256 | 737.328687 | 369.167982 | 736.344671 | 368.675974 | A | 807.330143 | 404.168710 | 790.303594 | 395.655435 | 789.319578 | 395.163427 | 7 |
| 5 | ***914.385885*** | 457.696581 | 897.359336 | 449.183306 | 896.375320 | 448.691298 | C | **736.293029** | 368.650153 | 719.266480 | 360.136878 | 718.282464 | 359.644870 | 6 |
| 6 | ***1043.428478*** | **522.217877** | 1026.401929 | 513.704603 | 1025.417913 | 513.212595 | E | 576.262380 | 288.634828 | 559.235831 | 280.121554 | 558.251815 | 279.629546 | 5 |
| 7 | ***1156.512542*** | 578.759909 | 1139.485993 | 570.246635 | 1138.501977 | 569.754626 | L | **447.219787** | 224.113531 | 430.193238 | 215.600257 | 429.209222 | 215.108249 | 4 |
| 8 | ***1243.544570*** | **622.275923** | 1226.518021 | 613.762649 | 1225.534005 | 613.270641 | S | 334.135723 | 167.571499 | 317.109174 | 159.058225 | 316.125158 | 158.566217 | 3 |
| 9 | ***1357.587497*** | 679.297387 | 1340.560948 | 670.784112 | 1339.576932 | 670.292104 | N | **247.103695** | 124.055485 | 230.077146 | 115.542211 | | | 2 |
| 10 | | | | | | | N | **133.060768** | 67.034022 | 116.034219 | 58.520747 | | | 1 |





NCBI **BLAST** search of NQEACELSNN
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.5 | 1488.633682 | -0.001694 | NQEACELSNN |

**Mascot:** http://www.matrixscience.com/

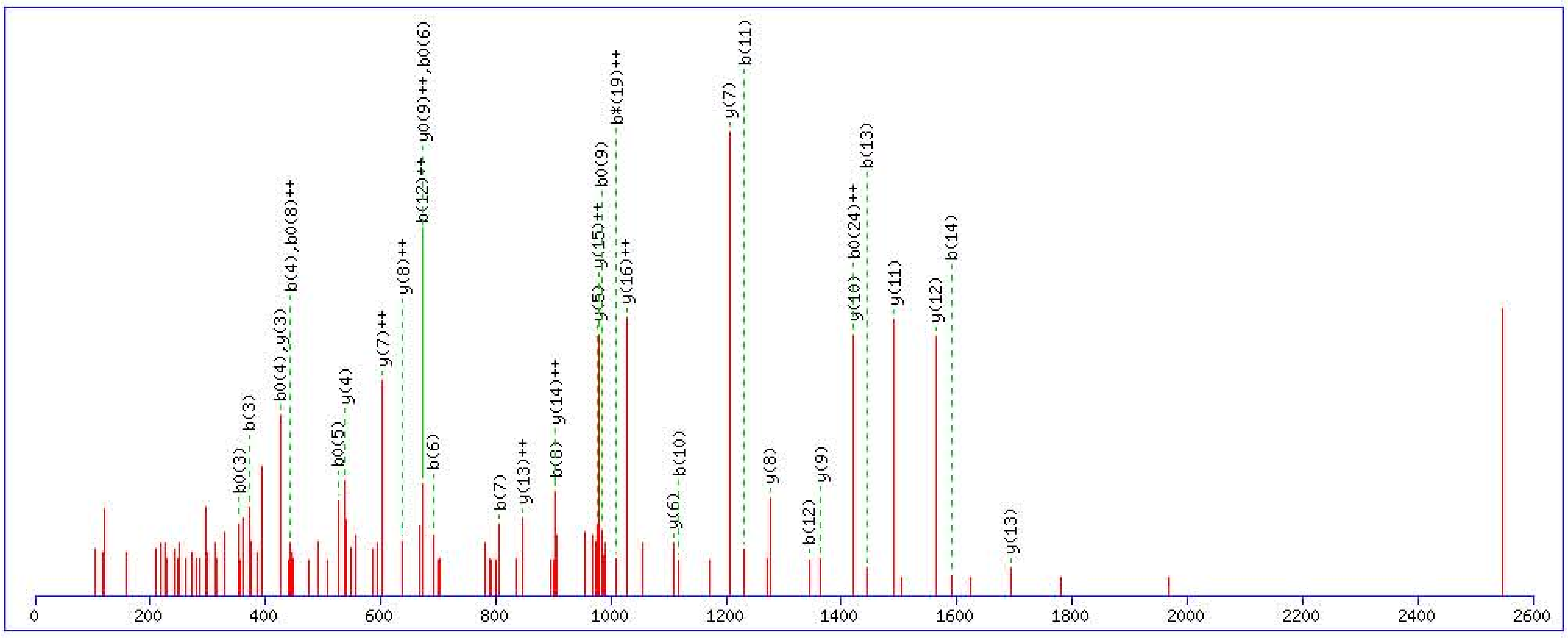
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EELATFDPVDNIVFNMAAGSAPMQLHLR**
Found in **APOM_HUMAN**, Apolipoprotein M OS=Homo sapiens GN=APOM PE=1 SV=2

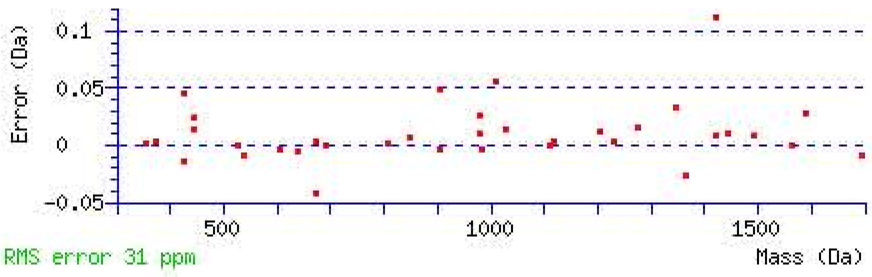
Match to Query 66282: 3396.690376 from(850.179870,4+) rtinseconds(3152) index(44024)
Title: Locus:1.1.1.3513.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

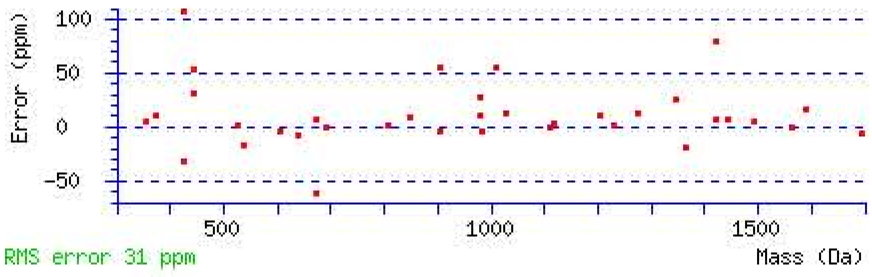
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3396.666855
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q24** : Biotin:Thermo-21345 (Q)
**Ions Score:** 72 **Expect:** 1.7e-006
**Matches** : 37/288 fragment ions using 69 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 28 |
| 2 | 259.092462 | 130.049869 | | | 241.081897 | 121.044587 | E | 3268.631560 | 1634.819418 | 3251.605011 | 1626.306143 | 3250.620995 | 1625.814135 | 27 |
| 3 | ***372.176526*** | 186.591901 | | | 354.165961 | 177.586619 | L | 3139.588967 | 1570.298122 | 3122.562418 | 1561.784847 | 3121.578402 | 1561.292839 | 26 |
| 4 | ***443.213640*** | 222.110458 | | | 425.203075 | 213.105176 | A | 3026.504903 | 1513.756089 | 3009.478354 | 1505.242815 | 3008.494338 | 1504.750807 | 25 |
| 5 | 544.261319 | 272.634298 | | | 526.250754 | 263.629015 | T | 2955.467789 | 1478.237532 | 2938.441240 | 1469.724258 | 2937.457224 | 1469.232250 | 24 |
| 6 | ***691.329733*** | 346.168505 | | | 673.319168 | 337.163222 | F | 2854.420110 | 1427.713693 | 2837.393561 | 1419.200418 | 2836.409545 | 1418.708410 | 23 |
| 7 | ***806.356676*** | 403.681976 | | | 788.346111 | 394.676694 | D | 2707.351696 | 1354.179486 | 2690.325147 | 1345.666211 | 2689.341131 | 1345.174204 | 22 |
| 8 | ***903.409440*** | 452.208358 | | | 885.398875 | 443.203076 | P | 2592.324753 | 1296.666014 | 2575.298204 | 1288.152740 | 2574.314188 | 1287.660732 | 21 |
| 9 | 1002.477854 | 501.742565 | | | 984.467289 | 492.737282 | V | 2495.271989 | 1248.139632 | 2478.245440 | 1239.626358 | 2477.261424 | 1239.134350 | 20 |
| 10 | ***1117.504797*** | 559.256037 | | | 1099.494232 | 550.250754 | D | 2396.203575 | 1198.605425 | 2379.177026 | 1190.092151 | 2378.193010 | 1189.600143 | 19 |
| 11 | ***1231.547724*** | 616.277500 | 1214.521175 | 607.764226 | 1213.537159 | 607.272218 | N | 2281.176632 | 1141.091954 | 2264.150083 | 1132.578679 | 2263.166067 | 1132.086672 | 18 |
| 12 | ***1344.631788*** | 672.819532 | 1327.605239 | 664.306258 | 1326.621223 | 663.814249 | I | 2167.133705 | 1084.070490 | 2150.107156 | 1075.557216 | 2149.123140 | 1075.065208 | 17 |
| 13 | ***1443.700202*** | 722.353739 | 1426.673653 | 713.840465 | 1425.689637 | 713.348457 | V | 2054.049641 | 1027.528458 | 2037.023092 | 1019.015184 | 2036.039076 | 1018.523176 | 16 |
| 14 | ***1590.768616*** | 795.887946 | 1573.742067 | 787.374672 | 1572.758051 | 786.882664 | F | 1954.981227 | 977.994252 | 1937.954678 | 969.480977 | 1936.970662 | 968.988969 | 15 |
| 15 | 1704.811543 | 852.909410 | 1687.784994 | 844.396135 | 1686.800978 | 843.904127 | N | 1807.912813 | 904.460045 | 1790.886264 | 895.946770 | 1789.902248 | 895.454762 | 14 |
| 16 | 1835.852028 | 918.429652 | 1818.825479 | 909.916378 | 1817.841463 | 909.424370 | M | ***1693.869886*** | 847.438581 | 1676.843337 | 838.925307 | 1675.859321 | 838.433299 | 13 |
| 17 | 1906.889142 | 953.948209 | 1889.862593 | 945.434935 | 1888.878577 | 944.942927 | A | ***1562.829401*** | 781.918339 | 1545.802852 | 773.405064 | 1544.818836 | 772.913056 | 12 |
| 18 | 1977.926256 | 989.466766 | 1960.899707 | 980.953492 | 1959.915691 | 980.461483 | A | ***1491.792287*** | 746.399782 | 1474.765738 | 737.886507 | 1473.781722 | 737.394499 | 11 |
| 19 | 2034.947720 | 1017.977498 | 2017.921171 | 1009.464224 | 2016.937155 | 1008.972215 | G | ***1420.755173*** | 710.881225 | 1403.728624 | 702.367950 | 1402.744608 | 701.875942 | 10 |
| 20 | 2121.979748 | 1061.493512 | 2104.953199 | 1052.980237 | 2103.969183 | 1052.488229 | S | ***1363.733709*** | 682.370493 | 1346.707160 | 673.857218 | 1345.723144 | 673.365210 | 9 |
| 21 | 2193.016862 | 1097.012069 | 2175.990313 | 1088.498794 | 2175.006297 | 1088.006786 | A | ***1276.701681*** | 638.854479 | 1259.675132 | 630.341204 | | | 8 |
| 22 | 2290.069626 | 1145.538451 | 2273.043077 | 1137.025176 | 2272.059061 | 1136.533168 | P | ***1205.664567*** | 603.335922 | 1188.638018 | 594.822647 | | | 7 |
| 23 | 2421.110111 | 1211.058693 | 2404.083562 | 1202.545419 | 2403.099546 | 1202.053411 | M | ***1108.611803*** | 554.809540 | 1091.585254 | 546.296265 | | | 6 |
| 24 | 2860.335437 | 1430.671357 | 2843.308888 | 1422.158082 | 2842.324872 | 1421.666074 | Q | ***977.571318*** | 489.289297 | 960.544769 | 480.776023 | | | 5 |
| 25 | 2973.419501 | 1487.213389 | 2956.392952 | 1478.700114 | 2955.408936 | 1478.208106 | L | ***538.345992*** | 269.676634 | 521.319443 | 261.163360 | | | 4 |
| 26 | 3110.478413 | 1555.742845 | 3093.451864 | 1547.229570 | 3092.467848 | 1546.737562 | H | ***425.261928*** | 213.134602 | 408.235379 | 204.621328 | | | 3 |
| 27 | 3223.562477 | 1612.284877 | 3206.535928 | 1603.771602 | 3205.551912 | 1603.279594 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 28 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EELATFDPVDNIVFNMAAGSAPMQLHLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 72.0 | 3396.666855 | 0.023521 | EELATFDPVDNIVFNMAAGSAPMQLHLR |

**Mascot:** http://www.matrixscience.com/

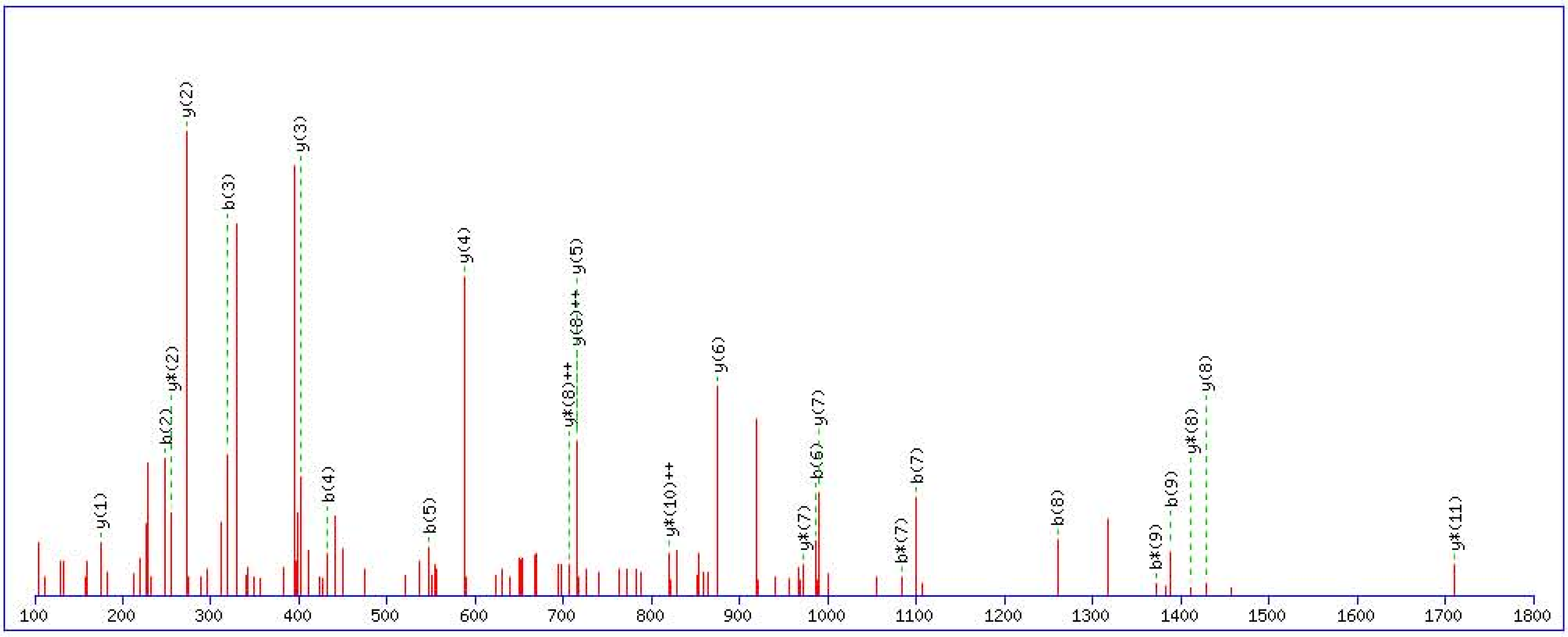
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of SCALDQNCQWEPR
Found in ATRN_HUMAN, Attractin OS=Homo sapiens GN=ATRN PE=1 SV=2

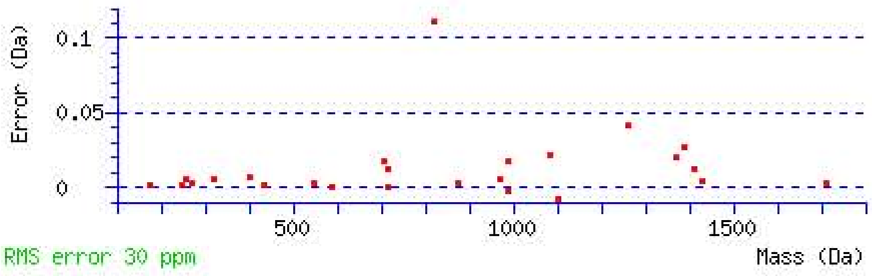
Match to Query 46012: 1973.853792 from(658.958540,3+) rtinseconds(1990) index(5796)
Title: Locus:1.1.1.1502.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

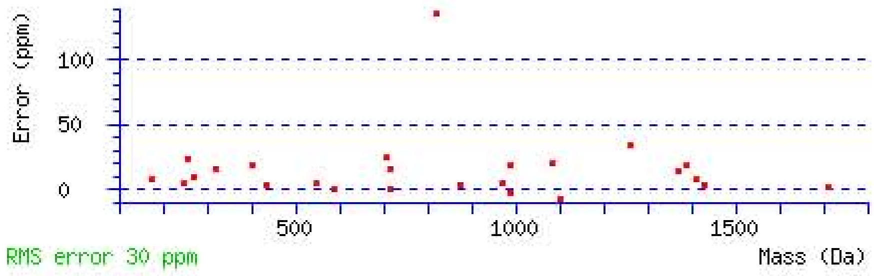
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1973.854614
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.00016
Matches : 25/130 fragment ions using 49 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 13 |
| 2 | ***248.069953*** | 124.538614 | | | 230.059388 | 115.533332 | C | 1887.829872 | 944.418574 | 1870.803323 | 935.905300 | 1869.819307 | 935.413292 | 12 |
| 3 | ***319.107067*** | 160.057171 | | | 301.096502 | 151.051889 | A | 1727.799223 | 864.403250 | 1710.772674 | 855.889975 | 1709.788658 | 855.397967 | 11 |
| 4 | ***432.191131*** | 216.599203 | | | 414.180566 | 207.593921 | L | 1656.762109 | 828.884693 | 1639.735560 | 820.371418 | 1638.751544 | 819.879410 | 10 |
| 5 | ***547.218074*** | 274.112675 | | | 529.207509 | 265.107393 | D | 1543.678045 | 772.342661 | 1526.651496 | 763.829386 | 1525.667480 | 763.337378 | 9 |
| 6 | ***986.443400*** | 493.725338 | 969.416851 | 485.212064 | 968.432835 | 484.720056 | Q | ***1428.651102*** | 714.829189 | 1411.624553 | 706.315915 | 1410.640537 | 705.823907 | 8 |
| 7 | ***1100.486327*** | 550.746802 | 1083.459778 | 542.233527 | 1082.475762 | 541.741519 | N | ***989.425776*** | 495.216526 | 972.399227 | 486.703252 | 971.415211 | 486.211244 | 7 |
| 8 | ***1260.516976*** | 630.762126 | 1243.490427 | 622.248852 | 1242.506411 | 621.756844 | C | ***875.382849*** | 438.195063 | 858.356300 | 429.681788 | 857.372284 | 429.189780 | 6 |
| 9 | ***1388.575554*** | 694.791415 | 1371.549005 | 686.278141 | 1370.564989 | 685.786133 | Q | ***715.352200*** | 358.179738 | 698.325651 | 349.666464 | 697.341635 | 349.174456 | 5 |
| 10 | 1574.654867 | 787.831072 | 1557.628318 | 779.317797 | 1556.644302 | 778.825789 | W | ***587.293622*** | 294.150449 | 570.267073 | 285.637174 | 569.283057 | 285.145166 | 4 |
| 11 | 1703.697460 | 852.352368 | 1686.670911 | 843.839094 | 1685.686895 | 843.347086 | E | ***401.214309*** | 201.110792 | 384.187760 | 192.597518 | 383.203744 | 192.105510 | 3 |
| 12 | 1800.750224 | 900.878750 | 1783.723675 | 892.365476 | 1782.739659 | 891.873468 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 13 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SCALDQNCQWEPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.2 | 1973.854614 | -0.000822 | SCALDQNCQWEPR |
| 16.2 | 1973.854614 | -0.000822 | SCALDQNCQWEPR |
| 1.7 | 1973.853729 | 0.000063 | DSPETGEEMGRAEGAWPR |

**Mascot:** http://www.matrixscience.com/

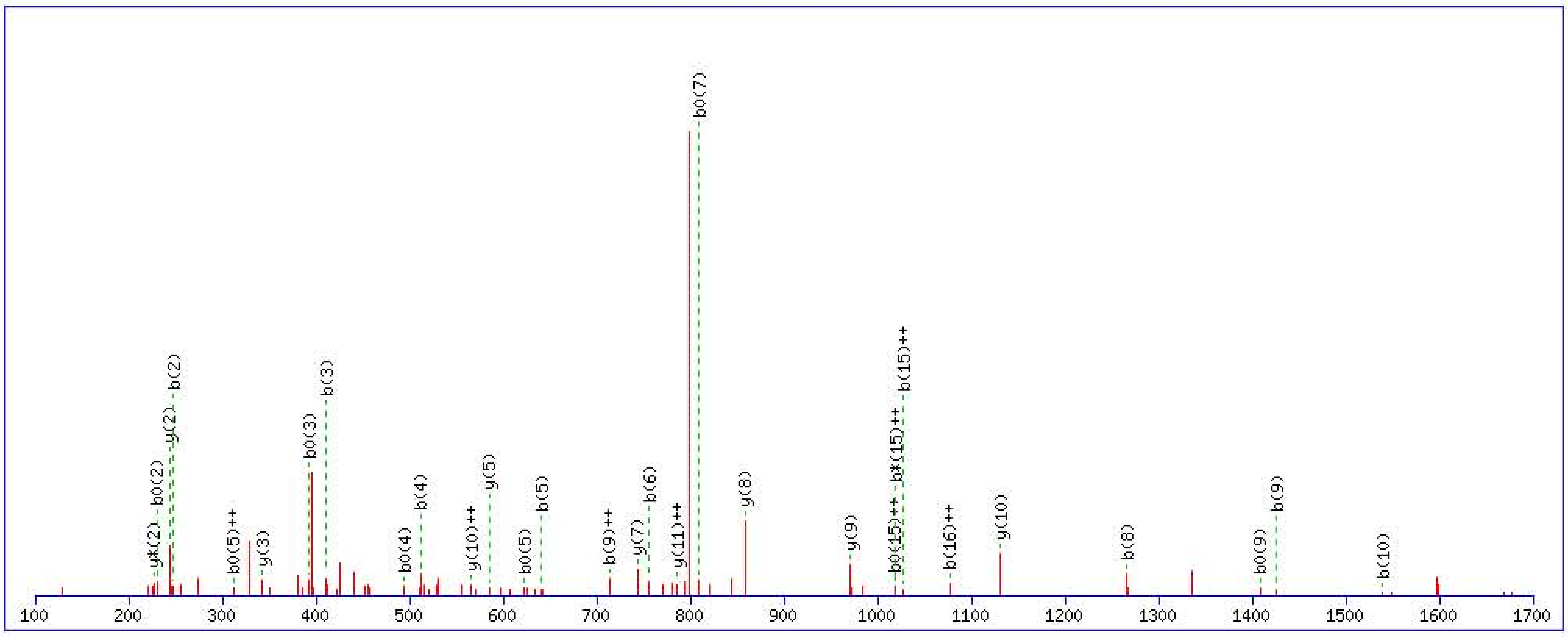
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **CSYTEDAQCIDGTIEVPK**
Found in **APOH_HUMAN**, Beta-2-glycoprotein 1 OS=Homo sapiens GN=APOH PE=1 SV=3

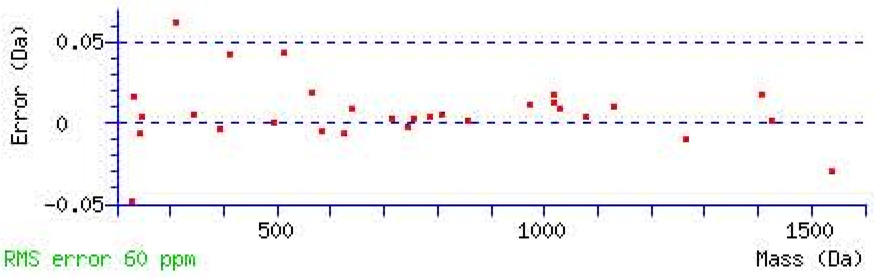
Match to Query 54239: 2396.073612 from(799.698480,3+) rtinseconds(2156) index(69708)
Title: Locus:1.1.1.1688.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

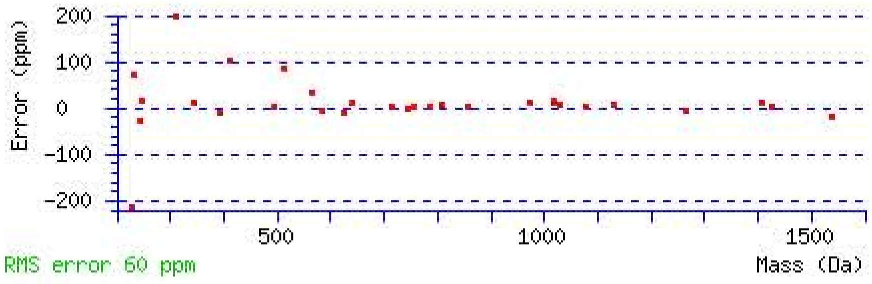
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2396.069824
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.0042
Matches : 30/182 fragment ions using 67 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 18 |
| 2 | ***248.069953*** | 124.538614 | | | 230.059388 | 115.533332 | S | 2237.046450 | 1119.026863 | 2220.019901 | 1110.513588 | 2219.035885 | 1110.021580 | 17 |
| 3 | ***411.133282*** | 206.070279 | | | 393.122717 | 197.064997 | Y | 2150.014422 | 1075.510849 | 2132.987873 | 1066.997574 | 2132.003857 | 1066.505566 | 16 |
| 4 | ***512.180961*** | 256.594119 | | | 494.170396 | 247.588836 | T | 1986.951093 | 993.979184 | 1969.924544 | 985.465910 | 1968.940528 | 984.973902 | 15 |
| 5 | ***641.223554*** | 321.115415 | | | 623.212989 | 312.110133 | E | 1885.903414 | 943.455345 | 1868.876865 | 934.942071 | 1867.892849 | 934.450062 | 14 |
| 6 | ***756.250497*** | 378.628887 | | | 738.239932 | 369.623604 | D | 1756.860821 | 878.934048 | 1739.834272 | 870.420774 | 1738.850256 | 869.928766 | 13 |
| 7 | 827.287611 | 414.147444 | | | 809.277046 | 405.142161 | A | 1641.833878 | 821.420577 | 1624.807329 | 812.907302 | 1623.823313 | 812.415294 | 12 |
| 8 | ***1266.512937*** | 633.760107 | 1249.486388 | 625.246832 | 1248.502372 | 624.754824 | Q | 1570.796764 | 785.902020 | 1553.770215 | 777.388746 | 1552.786199 | 776.896737 | 11 |
| 9 | ***1426.543586*** | **713.775431** | 1409.517037 | 705.262157 | 1408.533021 | 704.770149 | C | ***1131.571438*** | 566.289357 | 1114.544889 | 557.776088 | 1113.560873 | 557.284074 | 10 |
| 10 | ***1539.627650*** | 770.317463 | 1522.601101 | 761.804189 | 1521.617085 | 761.312181 | I | ***971.540789*** | 486.274032 | 954.514240 | 477.760758 | 953.530224 | 477.268750 | 9 |
| 11 | 1654.654593 | 827.830935 | 1637.628044 | 819.317660 | 1636.644028 | 818.825652 | D | ***858.456725*** | 429.732000 | 841.430176 | 421.218726 | 840.446160 | 420.726718 | 8 |
| 12 | 1711.676057 | 856.341667 | 1694.649508 | 847.828392 | 1693.665492 | 847.336384 | G | ***743.429782*** | 372.218529 | 726.403233 | 363.705254 | 725.419217 | 363.213246 | 7 |
| 13 | 1812.723736 | 906.865506 | 1795.697187 | 898.352232 | 1794.713171 | 897.860224 | T | 686.408318 | 343.707797 | 669.381769 | 335.194522 | 668.397753 | 334.702514 | 6 |
| 14 | 1925.807800 | 963.407538 | 1908.781251 | 954.894264 | 1907.797235 | 954.402256 | I | ***585.360639*** | 293.183957 | 568.334090 | 284.670683 | 567.350074 | 284.178675 | 5 |
| 15 | 2054.850393 | **1027.928834** | 2037.823844 | 1019.415560 | 2036.839828 | 1018.923552 | E | 472.276575 | 236.641925 | 455.250026 | 228.128651 | 454.266010 | 227.636643 | 4 |
| 16 | 2153.918807 | **1077.463041** | 2136.892258 | 1068.949767 | 2135.908242 | 1068.457759 | V | ***343.233982*** | 172.120629 | 326.207433 | 163.607354 | | | 3 |
| 17 | 2250.971571 | 1125.989423 | 2233.945022 | 1117.476149 | 2232.961006 | 1116.984141 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 18 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of CSYTEDAQCIDGTIEVPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.8 | 2396.069824 | 0.003788 | CSYTEDAQCIDGTIEVPK |

**Mascot:** http://www.matrixscience.com/

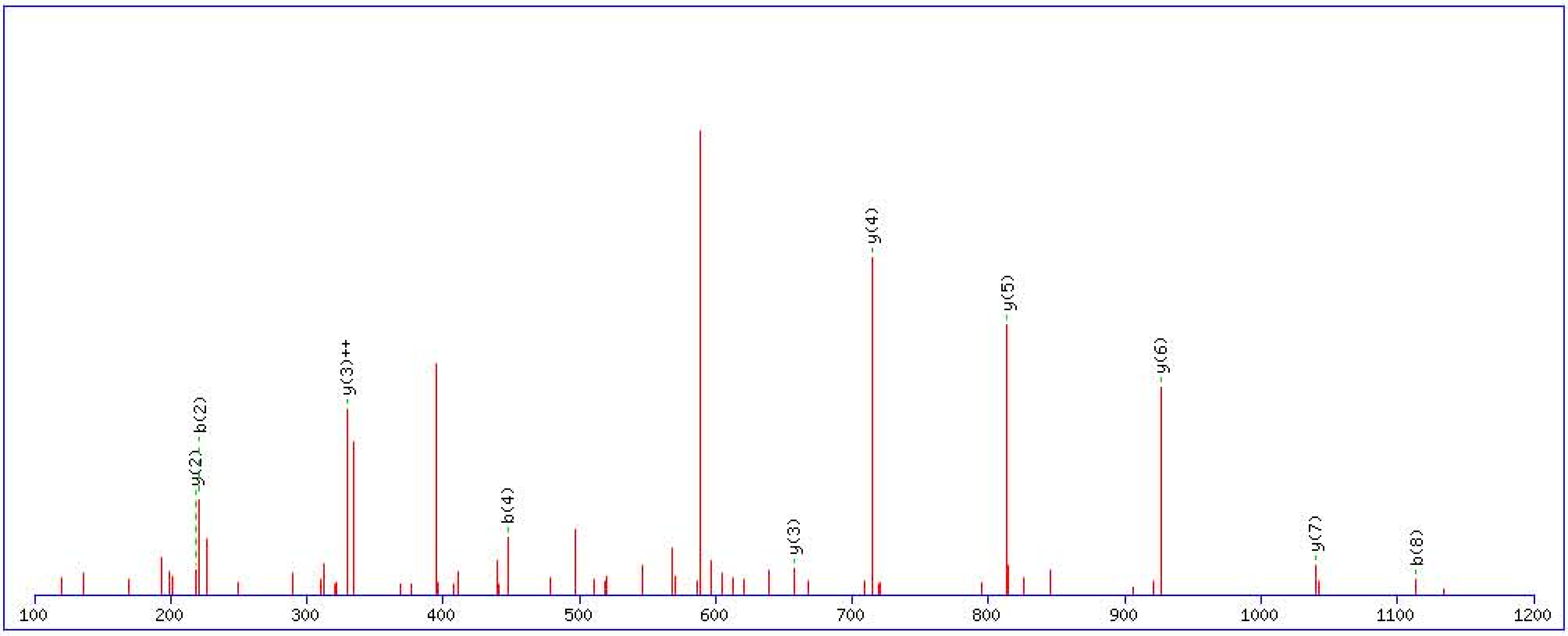
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GYILVGQAK**
Found in **C4BPA_HUMAN**, C4b-binding protein alpha chain OS=Homo sapiens GN=C4BPA PE=1 SV=2

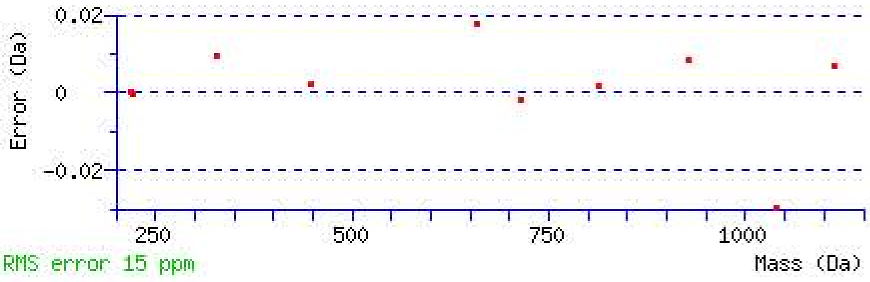
Match to Query 24918: 1258.713068 from(630.363810,2+) rtinseconds(2050) index(36718)
Title: Locus:1.1.1.3133.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

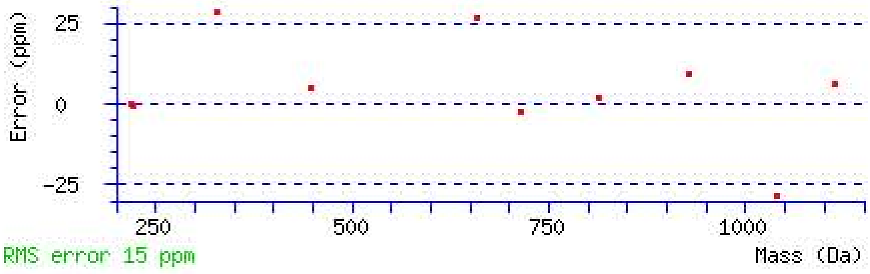
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1258.710754
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 30 **Expect:** 0.0071
**Matches** : 10/52 fragment ions using 21 most intense peaks (help)

| # | b | b++ | b* | b*++ | Seq. | y | y++ | y* | y*++ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | G | | | | | 9 |
| 2 | **221.092069** | 111.049673 | | | Y | 1202.696579 | 601.851928 | 1185.670030 | 593.338653 | 8 |
| 3 | 334.176133 | 167.591704 | | | I | ***1039.633250*** | 520.320263 | 1022.606701 | 511.806989 | 7 |
| 4 | **447.260197** | 224.133737 | | | L | ***926.549186*** | 463.778231 | 909.522637 | 455.264957 | 6 |
| 5 | 546.328611 | 273.667944 | | | V | ***813.465122*** | 407.236199 | 796.438573 | 398.722925 | 5 |
| 6 | 603.350075 | 302.178676 | | | G | ***714.396708*** | 357.701992 | 697.370159 | 349.188718 | 4 |
| 7 | 1042.575401 | 521.791339 | 1025.548852 | 513.278064 | Q | ***657.375244*** | 329.191260 | 640.348695 | 320.677986 | 3 |
| 8 | **1113.612515** | 557.309896 | 1096.585966 | 548.796621 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | 2 |
| 9 | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | 1 |





NCBI **BLAST** search of GYILVGQAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.9 | 1258.710754 | 0.002314 | GYILVGQAK |
| 6.9 | 1258.721970 | -0.008902 | GYILQAKR |
| 6.7 | 1258.717941 | -0.004873 | RILAKVQEMR |

**Mascot:** http://www.matrixscience.com/

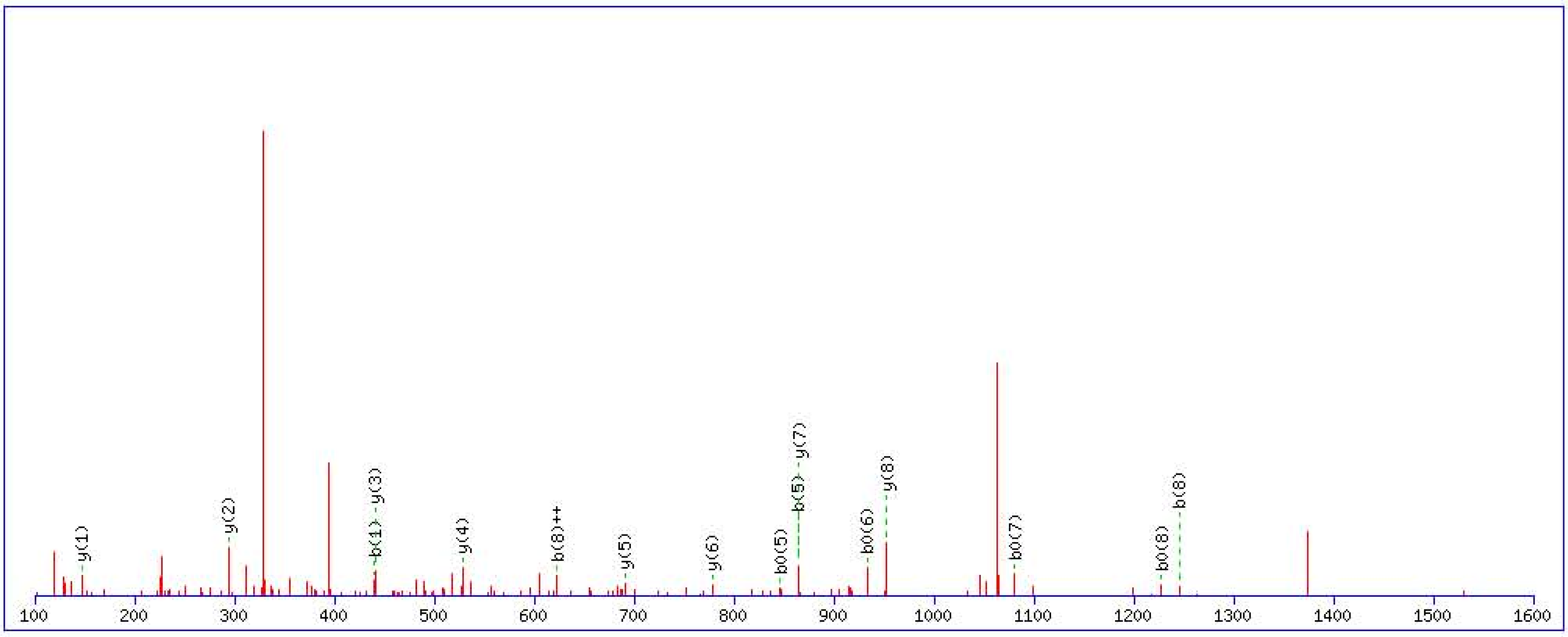
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QSSSYSFFK**
Found in **C4BPA_HUMAN**, C4b-binding protein alpha chain OS=Homo sapiens GN=C4BPA PE=1 SV=2

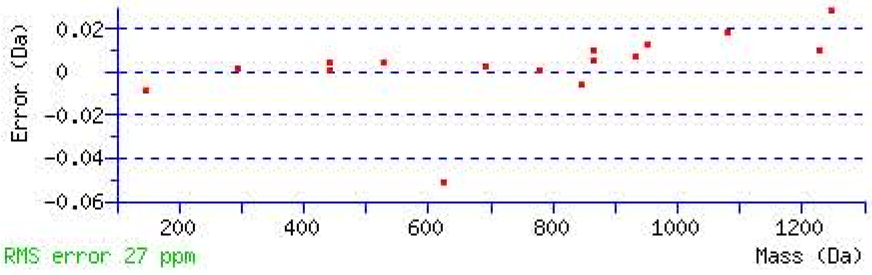
Match to Query 29789: 1390.665948 from(696.340250,2+) rtinseconds(2139) index(37248)
Title: Locus:1.1.1.3164.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

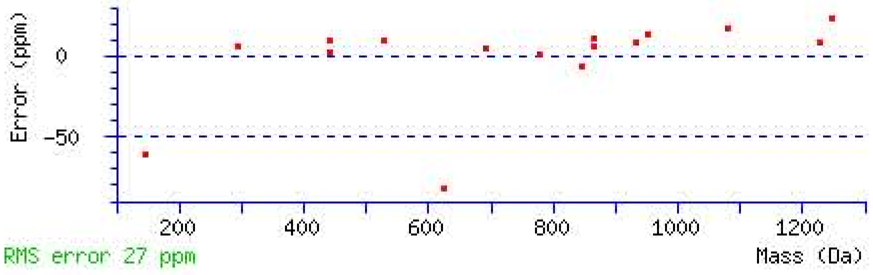
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1390.659119
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.00036
Matches : 16/88 fragment ions using 36 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **440.232602** | 220.619939 | 423.206053 | 212.106664 | | | **Q** | | | | | | | 9 |
| 2 | 527.264630 | 264.135953 | 510.238081 | 255.622679 | 509.254065 | 255.130671 | **S** | ***952.441073*** | 476.724175 | 935.414524 | 468.210900 | 934.430508 | 467.718892 | 8 |
| 3 | 614.296658 | 307.651967 | 597.270109 | 299.138692 | 596.286093 | 298.646684 | **S** | ***865.409045*** | 433.208161 | 848.382496 | 424.694886 | 847.398480 | 424.202878 | 7 |
| 4 | 701.328686 | 351.167981 | 684.302137 | 342.654706 | 683.318121 | 342.162698 | **S** | ***778.377017*** | 389.692147 | 761.350468 | 381.178872 | 760.366452 | 380.686864 | 6 |
| 5 | **864.392015** | 432.699645 | 847.365466 | 424.186371 | 846.381450 | 423.694363 | **Y** | ***691.344989*** | 346.176133 | 674.318440 | 337.662858 | 673.334424 | 337.170850 | 5 |
| 6 | 951.424043 | 476.215659 | 934.397494 | 467.702385 | 933.413478 | 467.210377 | **S** | ***528.281660*** | 264.644468 | 511.255111 | 256.131194 | 510.271095 | 255.639186 | 4 |
| 7 | 1098.492457 | 549.749866 | 1081.465908 | 541.236592 | 1080.481892 | 540.744584 | **F** | ***441.249632*** | 221.128454 | 424.223083 | 212.615180 | | | 3 |
| 8 | **1245.560871** | 623.284073 | 1228.534322 | 614.770799 | 1227.550306 | 614.278791 | **F** | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 9 | | | | | | | **K** | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QSSSYSFFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.4 | 1390.659119 | 0.006829 | QSSSYSFFK |
| 3.5 | 1390.670135 | -0.004187 | YRNQESKSSHR |
| 3.2 | 1390.669678 | -0.003730 | QEMAIQQSLGMR |
| 2.3 | 1390.655075 | 0.010873 | IHEQDQLYSMK |
| 2.0 | 1390.676208 | -0.010260 | AEKSSSTDQK |
| 1.7 | 1390.669678 | -0.003730 | CAPASIRLMDNK |
| 1.4 | 1390.672821 | -0.006873 | QQLENNLEEFK |

**Mascot:** http://www.matrixscience.com/

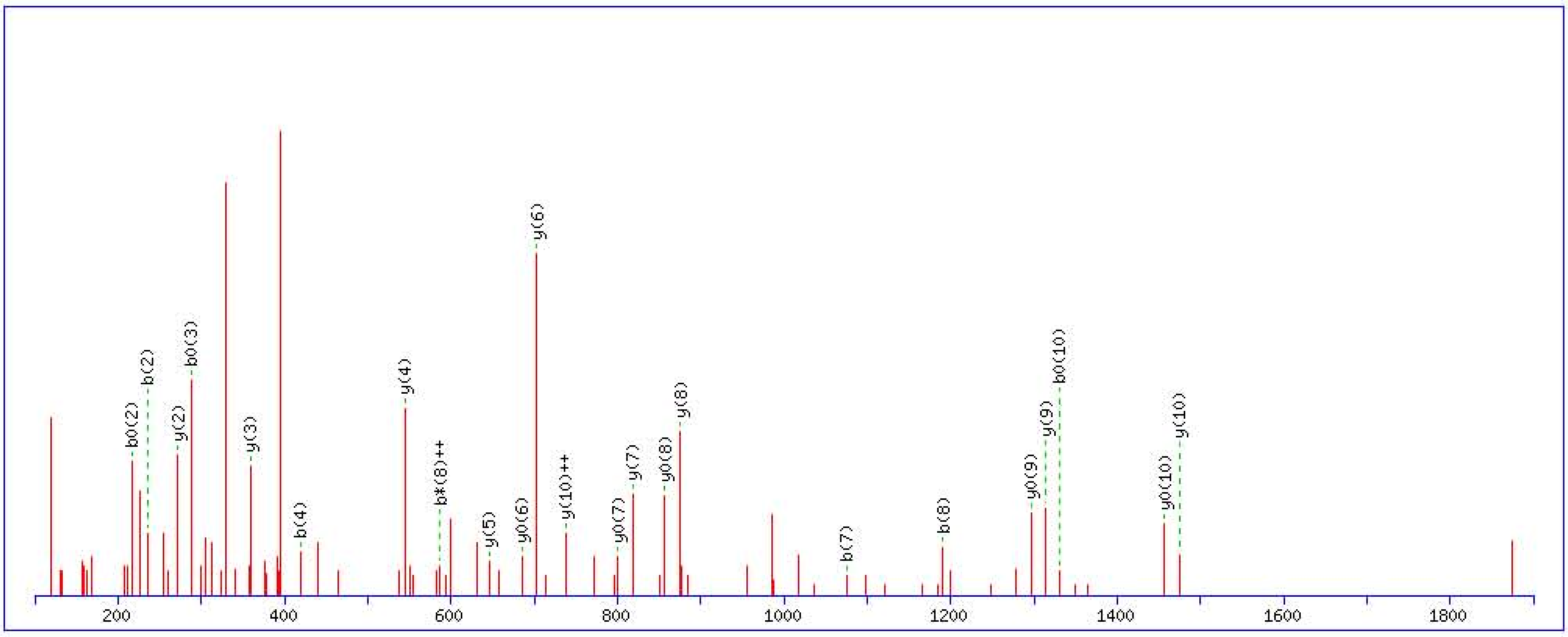
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **FSAICQGDGTWSPR**
Found in **C4BPA_HUMAN**, C4b-binding protein alpha chain OS=Homo sapiens GN=C4BPA PE=1 SV=2

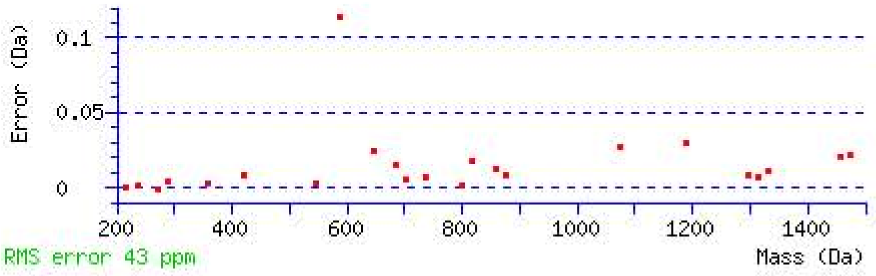
Match to Query 44409: 1891.878882 from(631.633570,3+) rtinseconds(2138) index(37246)
Title: Locus:1.1.1.3164.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

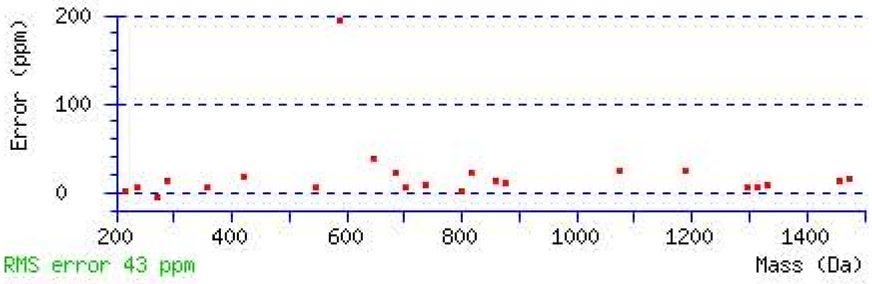
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1891.870941
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 39 **Expect:** 0.0019
**Matches :** 23/140 fragment ions using 52 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 14 |
| 2 | **235.107718** | 118.057497 | | | 217.097153 | 109.052214 | S | 1745.809788 | 873.408532 | 1728.783239 | 864.895258 | 1727.799223 | 864.403250 | 13 |
| 3 | 306.144832 | 153.576054 | | | 288.134267 | 144.570772 | A | 1658.777760 | 829.892518 | 1641.751211 | 821.379244 | 1640.767195 | 820.887236 | 12 |
| 4 | **419.228896** | 210.118086 | | | 401.218331 | 201.112804 | I | 1587.740646 | 794.373961 | 1570.714097 | 785.860687 | 1569.730081 | 785.368678 | 11 |
| 5 | 579.259545 | 290.133411 | | | 561.248980 | 281.128128 | C | ***1474.656582*** | 737.831929 | 1457.630033 | 729.318655 | 1456.646017 | 728.826647 | 10 |
| 6 | 1018.484871 | 509.746074 | 1001.458322 | 501.232799 | 1000.474306 | 500.740791 | Q | ***1314.625933*** | 657.816605 | 1297.599384 | 649.303330 | 1296.615368 | 648.811322 | 9 |
| 7 | **1075.506335** | 538.256806 | 1058.479786 | 529.743531 | 1057.495770 | 529.251523 | G | ***875.400607*** | 438.203942 | 858.374058 | 429.690667 | 857.390042 | 429.198659 | 8 |
| 8 | **1190.533278** | 595.770277 | 1173.506729 | 587.257003 | 1172.522713 | 586.764995 | D | ***818.379143*** | 409.693210 | 801.352594 | 401.179935 | 800.368578 | 400.687927 | 7 |
| 9 | 1247.554742 | 624.281009 | 1230.528193 | 615.767735 | 1229.544177 | 615.275727 | G | ***703.352200*** | 352.179738 | 686.325651 | 343.666464 | 685.341635 | 343.174456 | 6 |
| 10 | 1348.602421 | 674.804849 | 1331.575872 | 666.291574 | 1330.591856 | 665.799566 | T | ***646.330736*** | 323.669006 | 629.304187 | 315.155732 | 628.320171 | 314.663724 | 5 |
| 11 | 1534.681734 | 767.844505 | 1517.655185 | 759.331231 | 1516.671169 | 758.839223 | W | ***545.283057*** | 273.145167 | 528.256508 | 264.631892 | 527.272492 | 264.139884 | 4 |
| 12 | 1621.713762 | 811.360519 | 1604.687213 | 802.847245 | 1603.703197 | 802.355237 | S | ***359.203744*** | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 13 | 1718.766526 | 859.886901 | 1701.739977 | 851.373627 | 1700.755961 | 850.881619 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 14 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FSAICQGDGTWSPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.7 | 1891.870941 | 0.007941 | FSAICQGDGTWSPR |

**Mascot:** http://www.matrixscience.com/

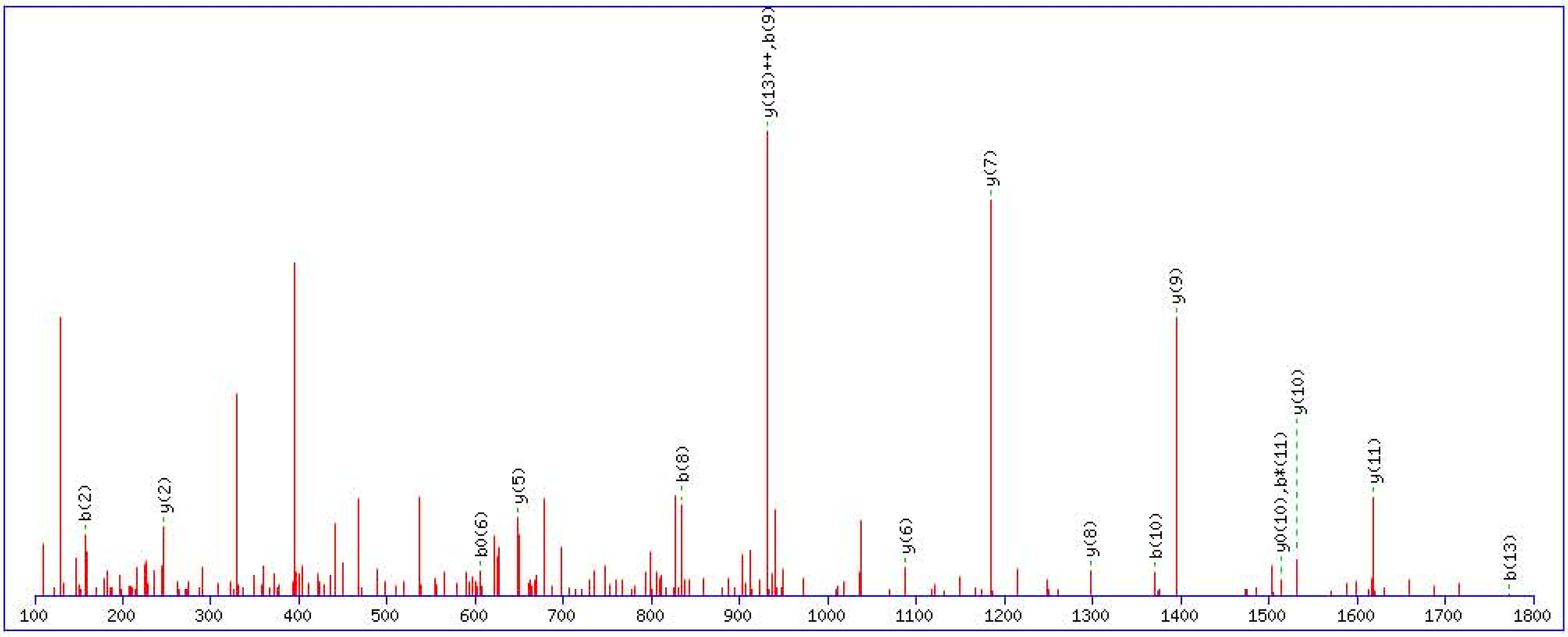
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GVGWSHPLPQCEIVK**
Found in **C4BPA_HUMAN**, C4b-binding protein alpha chain OS=Homo sapiens GN=C4BPA PE=1 SV=2

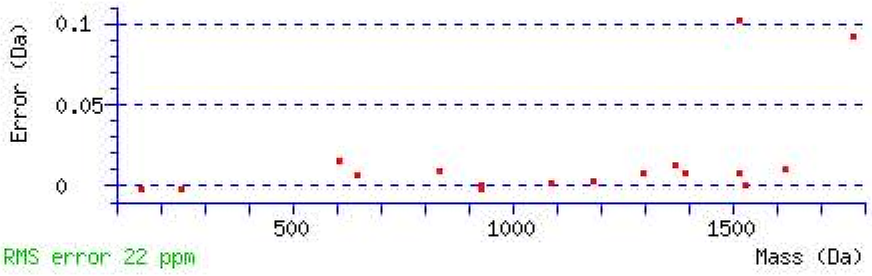
Match to Query 47664: 2017.031712 from(673.351180,3+) rtinseconds(2070) index(36836)
Title: Locus:1.1.1.3140.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

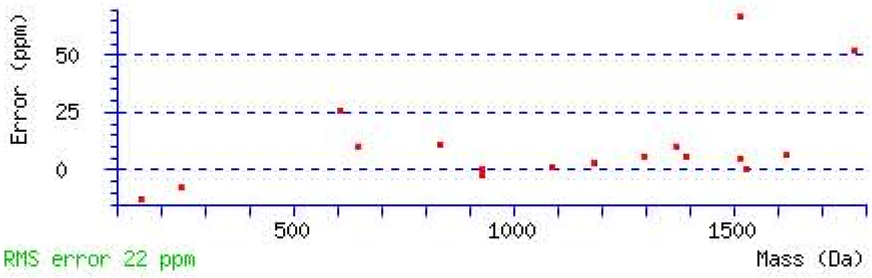
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2017.027771
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.013
Matches : 17/136 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 15 |
| 2 | **157.097154** | 79.052215 | | | | | V | 1961.013573 | 981.010425 | 1943.987024 | 972.497150 | 1943.003008 | 972.005142 | 14 |
| 3 | 214.118618 | 107.562947 | | | | | G | 1861.945159 | 931.476217 | 1844.918610 | 922.962943 | 1843.934594 | 922.470935 | 13 |
| 4 | 400.197931 | 200.602603 | | | | | W | 1804.923695 | 902.965486 | 1787.897146 | 894.452211 | 1786.913130 | 893.960203 | 12 |
| 5 | 487.229959 | 244.118617 | | | 469.219394 | 235.113335 | S | ***1618.844382*** | 809.925829 | 1601.817833 | 801.412555 | 1600.833817 | 800.920547 | 11 |
| 6 | 624.288871 | 312.648074 | | | 606.278306 | 303.642791 | H | ***1531.812354*** | 766.409815 | 1514.785805 | 757.896541 | 1513.801789 | 757.404532 | 10 |
| 7 | 721.341635 | 361.174456 | | | 703.331070 | 352.169173 | P | ***1394.753442*** | 697.880359 | 1377.726893 | 689.367085 | 1376.742877 | 688.875076 | 9 |
| 8 | **834.425699** | 417.716488 | | | 816.415134 | 408.711205 | L | ***1297.700678*** | 649.353977 | 1280.674129 | 640.840703 | 1279.690113 | 640.348694 | 8 |
| 9 | **931.478463** | 466.242870 | | | 913.467898 | 457.237587 | P | ***1184.616614*** | 592.811945 | 1167.590065 | 584.298670 | 1166.606049 | 583.806662 | 7 |
| 10 | **1370.703789** | 685.855532 | 1353.677240 | 677.342258 | 1352.693224 | 676.850250 | Q | ***1087.563850*** | 544.285563 | 1070.537301 | 535.772288 | 1069.553285 | 535.280280 | 6 |
| 11 | 1530.734438 | 765.870857 | 1513.707889 | 757.357583 | 1512.723873 | 756.865574 | C | ***648.338524*** | 324.672900 | 631.311975 | 316.159626 | 630.327959 | 315.667618 | 5 |
| 12 | 1659.777031 | 830.392153 | 1642.750482 | 821.878879 | 1641.766466 | 821.386871 | E | 488.307875 | 244.657575 | 471.281326 | 236.144301 | 470.297310 | 235.652293 | 4 |
| 13 | **1772.861095** | 886.934185 | 1755.834546 | 878.420911 | 1754.850530 | 877.928903 | I | 359.265282 | 180.136279 | 342.238733 | 171.623004 | | | 3 |
| 14 | 1871.929509 | 936.468392 | 1854.902960 | 927.955118 | 1853.918944 | 927.463110 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 15 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GVGWSHPLPQCEIVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.5 | 2017.027771 | 0.003941 | GVGWSHPLPQCEIVK |

**Mascot:** http://www.matrixscience.com/

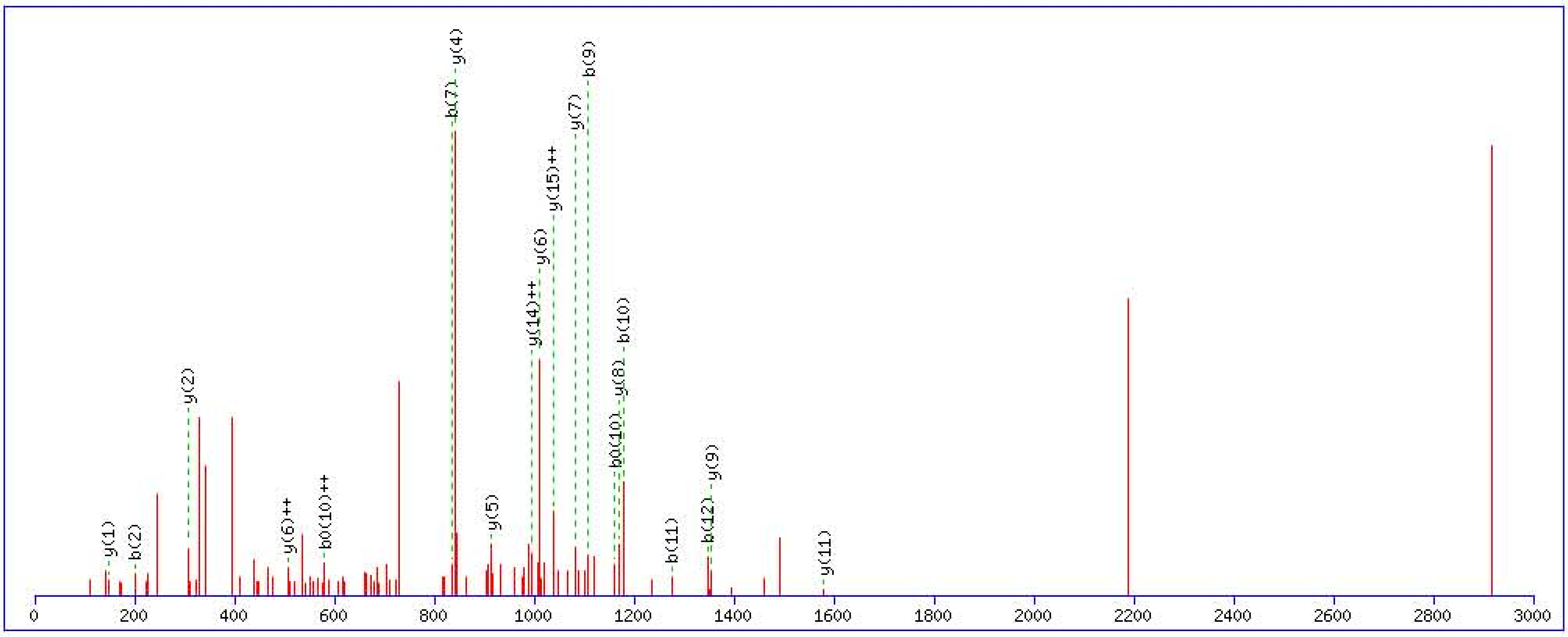
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LSCSYSHWSAPAPQCK**
Found in **C4BPA_HUMAN**, C4b-binding protein alpha chain OS=Homo sapiens GN=C4BPA PE=1 SV=2

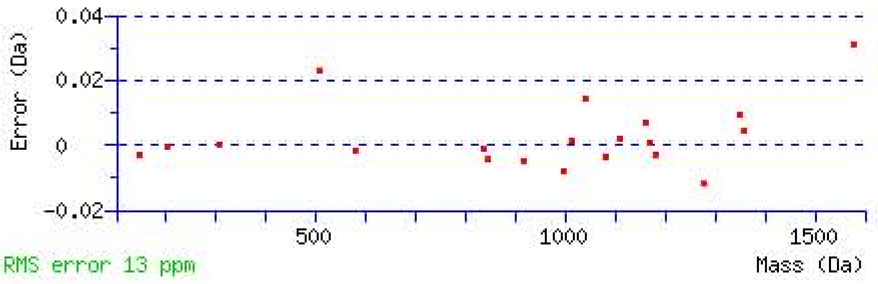
Match to Query 50865: 2188.986132 from(730.669320,3+) rtinseconds(1769) index(34880)
Title: Locus:1.1.1.3035.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

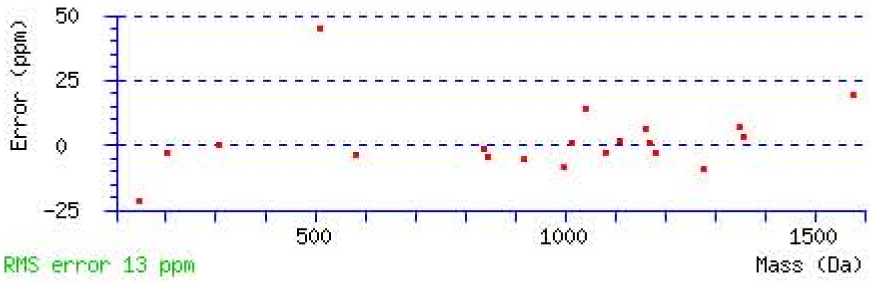
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2188.985626
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.008
Matches : 20/138 fragment ions using 54 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 16 |
| 2 | **201.123368** | 101.065322 | | | 183.112803 | 92.060039 | S | 2076.908850 | 1038.958063 | 2059.882301 | 1030.444788 | 2058.898285 | 1029.952780 | 15 |
| 3 | 361.154017 | 181.080647 | | | 343.143452 | 172.075364 | C | 1989.876822 | 995.442049 | 1972.850273 | 986.928775 | 1971.866257 | 986.436767 | 14 |
| 4 | 448.186045 | 224.596660 | | | 430.175480 | 215.591378 | S | 1829.846173 | 915.426725 | 1812.819624 | 906.913450 | 1811.835608 | 906.421442 | 13 |
| 5 | 611.249374 | 306.128325 | | | 593.238809 | 297.123043 | Y | 1742.814145 | 871.910711 | 1725.787596 | 863.397436 | 1724.803580 | 862.905428 | 12 |
| 6 | 698.281402 | 349.644339 | | | 680.270837 | 340.639056 | S | ***1579.750816*** | 790.379046 | 1562.724267 | 781.865772 | 1561.740251 | 781.373764 | 11 |
| 7 | **835.340314** | 418.173795 | | | 817.329749 | 409.168512 | H | 1492.718788 | 746.863032 | 1475.692239 | 738.349758 | 1474.708223 | 737.857750 | 10 |
| 8 | 1021.419627 | 511.213452 | | | 1003.409062 | 502.208169 | W | ***1355.659876*** | 678.333576 | 1338.633327 | 669.820302 | 1337.649311 | 669.328294 | 9 |
| 9 | **1108.451655** | 554.729466 | | | 1090.441090 | 545.724183 | S | ***1169.580563*** | 585.293920 | 1152.554014 | 576.780645 | 1151.569998 | 576.288637 | 8 |
| 10 | **1179.488769** | 590.248023 | | | 1161.478204 | 581.242740 | A | ***1082.548535*** | 541.777906 | 1065.521986 | 533.264631 | | | 7 |
| 11 | **1276.541533** | 638.774405 | | | 1258.530968 | 629.769122 | P | ***1011.511421*** | 506.259349 | 994.484872 | 497.746074 | | | 6 |
| 12 | **1347.578647** | 674.292962 | | | 1329.568082 | 665.287679 | A | ***914.458657*** | 457.732967 | 897.432108 | 449.219692 | | | 5 |
| 13 | 1444.631411 | 722.819344 | | | 1426.620846 | 713.814061 | P | ***843.421543*** | 422.214410 | 826.394994 | 413.701135 | | | 4 |
| 14 | 1883.856737 | 942.432007 | 1866.830188 | 933.918732 | 1865.846172 | 933.426724 | Q | 746.368779 | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 15 | 2043.887386 | 1022.447331 | 2026.860837 | 1013.934057 | 2025.876821 | 1013.442049 | C | ***307.143453*** | 154.075365 | 290.116904 | 145.562090 | | | 2 |
| 16 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546766 | | | 1 |





NCBI **BLAST** search of LSCSYSHWSAPAPQCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.9 | 2188.985626 | 0.000506 | LSCSYSHWSAPAPQCK |

**Mascot:** http://www.matrixscience.com/

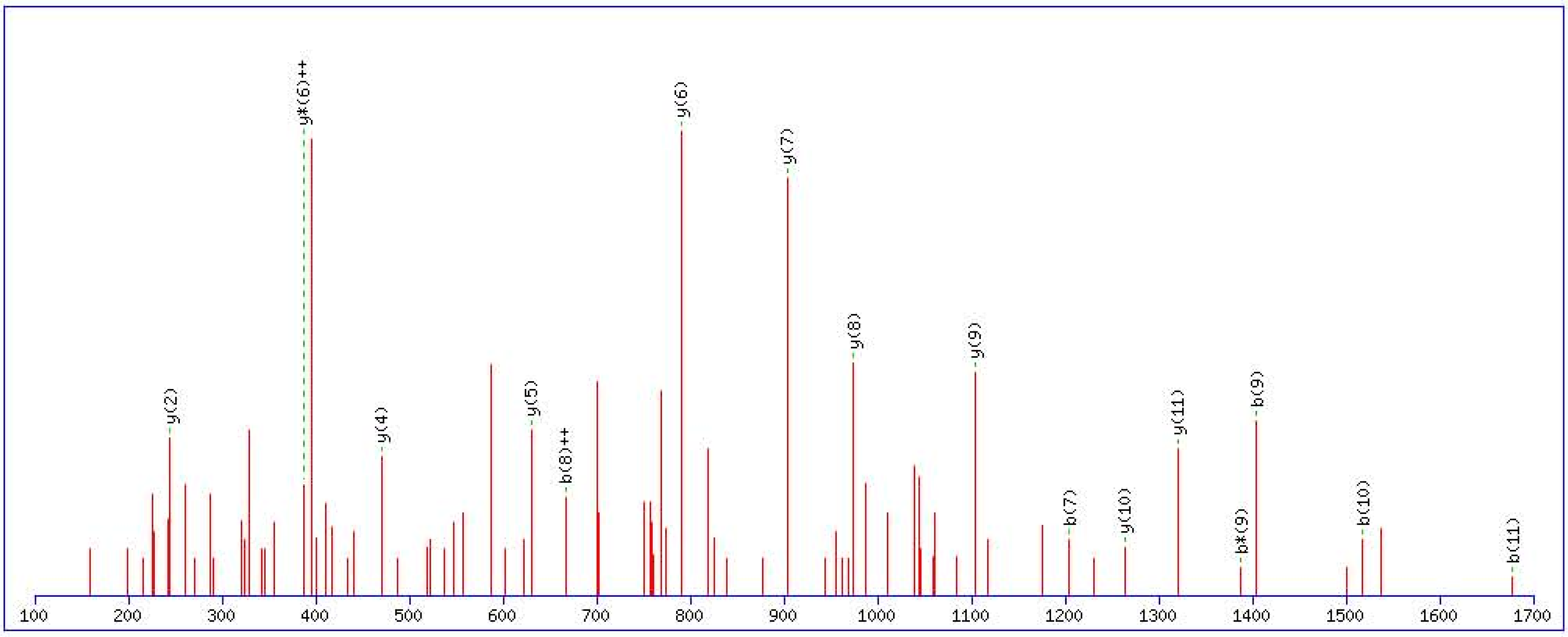
# {MATRIX}{SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **WTPYQGCEALCCPEPK**
Found in **C4BPA_HUMAN**, C4b-binding protein alpha chain OS=Homo sapiens GN=C4BPA PE=1 SV=2

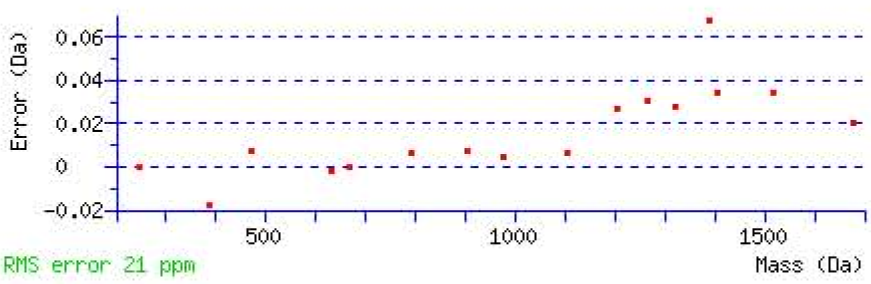
Match to Query 53115: 2306.018952 from(769.680260,3+) rtinseconds(2114) index(37103)
Title: Locus:1.1.1.3155.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

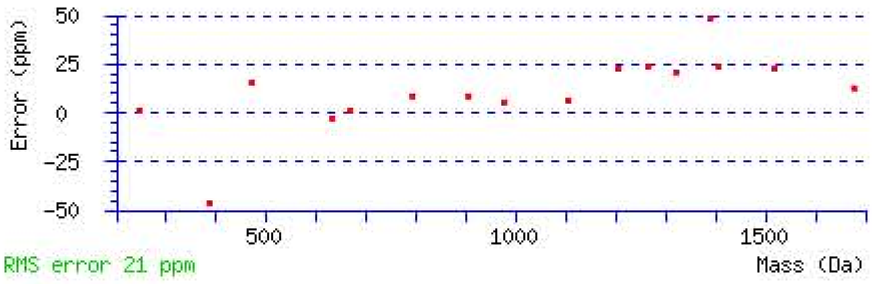
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2305.999237
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5     : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 0.00015
Matches : 16/166 fragment ions using 29 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 187.086589 | 94.046932 | | | | | W | | | | | | | 16 |
| 2 | 288.134268 | 144.570772 | | | 270.123703 | 135.565490 | T | 2120.927205 | 1060.967240 | 2103.900656 | 1052.453966 | 2102.916640 | 1051.961958 | 15 |
| 3 | 385.187032 | 193.097154 | | | 367.176467 | 184.091872 | P | 2019.879526 | 1010.443401 | 2002.852977 | 1001.930127 | 2001.868961 | 1001.438119 | 14 |
| 4 | 548.250361 | 274.628819 | | | 530.239796 | 265.623536 | Y | 1922.826762 | 961.917019 | 1905.800213 | 953.403745 | 1904.816197 | 952.911737 | 13 |
| 5 | 987.475687 | 494.241482 | 970.449138 | 485.728207 | 969.465122 | 485.236199 | Q | 1759.763433 | 880.385355 | 1742.736884 | 871.872080 | 1741.752868 | 871.380072 | 12 |
| 6 | 1044.497151 | 522.752214 | 1027.470602 | 514.238939 | 1026.486586 | 513.746931 | G | ***1320.538107*** | 660.772692 | 1303.511558 | 652.259417 | 1302.527542 | 651.767409 | 11 |
| 7 | **1204.527800** | 602.767538 | 1187.501251 | 594.254264 | 1186.517235 | 593.762256 | C | ***1263.516643*** | 632.261960 | 1246.490094 | 623.748685 | 1245.506078 | 623.256677 | 10 |
| 8 | 1333.570393 | 667.288835 | 1316.543844 | 658.775560 | 1315.559828 | 658.283552 | E | ***1103.485994*** | 552.246635 | 1086.459445 | 543.733361 | 1085.475429 | 543.241353 | 9 |
| 9 | **1404.607507** | 702.807392 | 1387.580958 | 694.294117 | 1386.596942 | 693.802109 | A | ***974.443401*** | 487.725339 | 957.416852 | 479.212064 | 956.432836 | 478.720056 | 8 |
| 10 | **1517.691571** | 759.349424 | 1500.665022 | 750.836149 | 1499.681006 | 750.344141 | L | ***903.406287*** | 452.206782 | 886.379738 | 443.693507 | 885.395722 | 443.201499 | 7 |
| 11 | **1677.722220** | 839.364748 | 1660.695671 | 830.851474 | 1659.711655 | 830.359466 | C | ***790.322223*** | 395.664750 | 773.295674 | 387.151475 | 772.311658 | 386.659467 | 6 |
| 12 | 1837.752869 | 919.380073 | 1820.726320 | 910.866798 | 1819.742304 | 910.374790 | C | ***630.291574*** | 315.649425 | 613.265025 | 307.136151 | 612.281009 | 306.644143 | 5 |
| 13 | 1934.805633 | 967.906455 | 1917.779084 | 959.393180 | 1916.795068 | 958.901172 | P | ***470.260925*** | 235.634101 | 453.234376 | 227.120826 | 452.250360 | 226.628818 | 4 |
| 14 | 2063.848226 | 1032.427751 | 2046.821677 | 1023.914477 | 2045.837661 | 1023.422469 | E | 373.208161 | 187.107719 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 15 | 2160.900990 | 1080.954133 | 2143.874441 | 1072.440858 | 2142.890425 | 1071.948850 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of WTPYQGCEALCCPEPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.7 | 2305.999237 | 0.019715 | WTPYQGCEALCCPEPK |

**Mascot:** http://www.matrixscience.com/

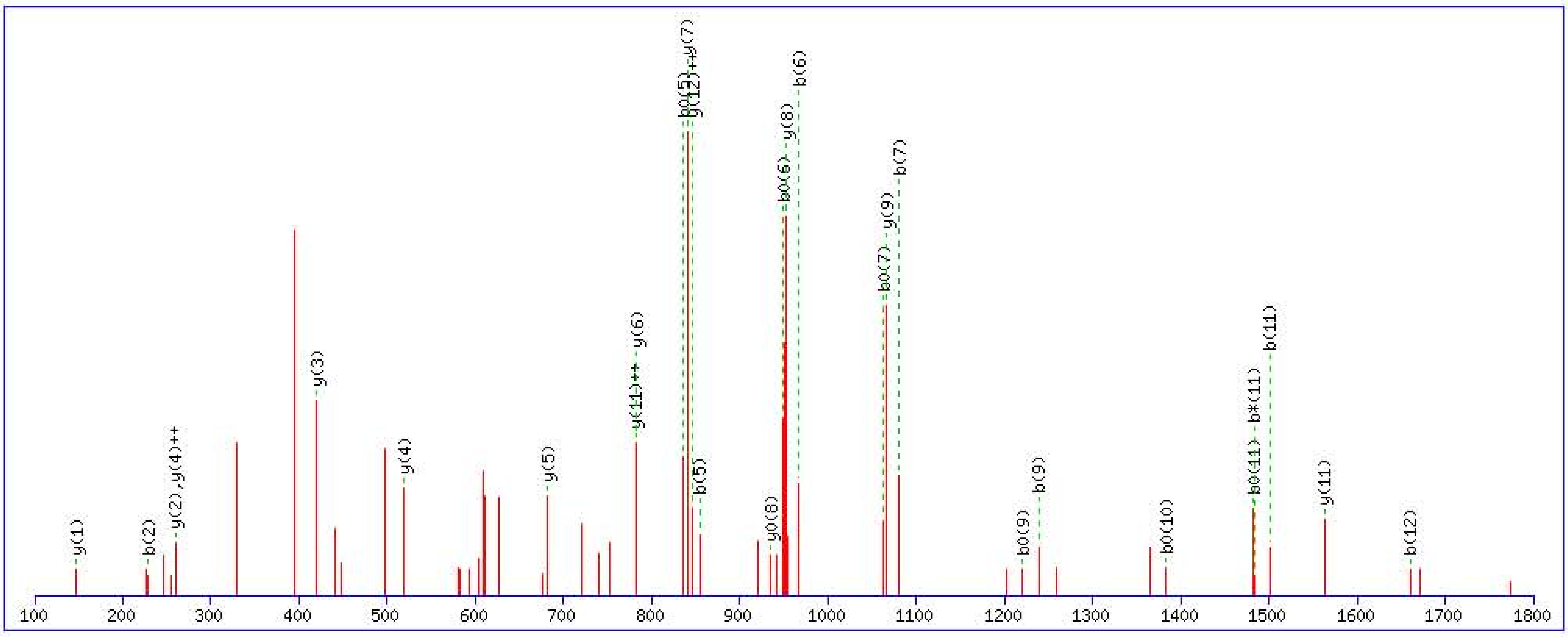
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EVEGQILGTYVCIK**
Found in **C4BPB_HUMAN**, C4b-binding protein beta chain OS=Homo sapiens GN=C4BPB PE=1 SV=1

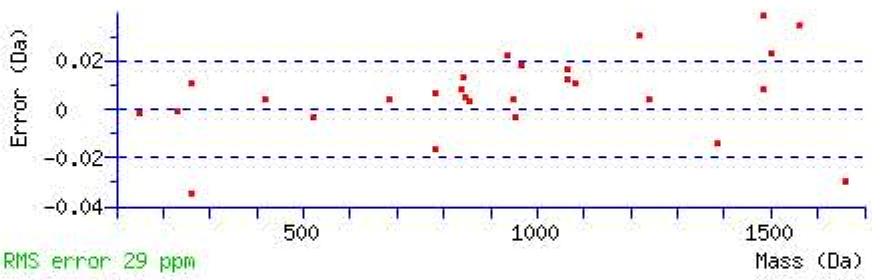
Match to Query 44915: 1919.003468 from(960.509010,2+) rtinseconds(2470) index(39236)
Title: Locus:1.1.1.3279.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

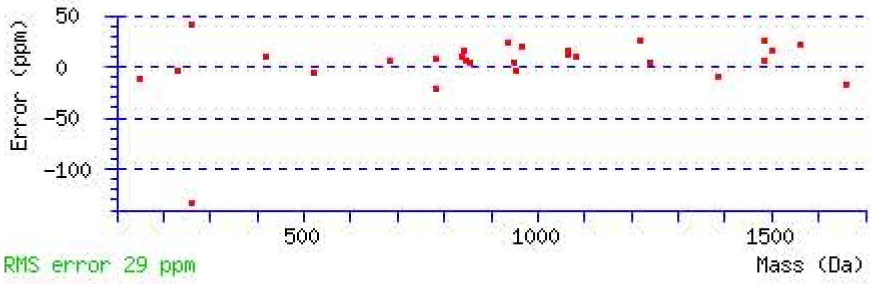
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1918.989639
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 56  Expect: 7.2e-005
Matches : 28/138 fragment ions using 53 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 14 |
| 2 | **229.118283** | 115.062780 | | | 211.107718 | 106.057497 | V | 1790.954328 | 895.980802 | 1773.927779 | 887.467528 | 1772.943763 | 886.975520 | 13 |
| 3 | 358.160876 | 179.584076 | | | 340.150311 | 170.578794 | E | 1691.885914 | 846.446595 | 1674.859365 | 837.933321 | 1673.875349 | 837.441313 | 12 |
| 4 | 415.182340 | 208.094808 | | | 397.171775 | 199.089526 | G | ***1562.843321*** | 781.925299 | 1545.816772 | 773.412024 | 1544.832756 | 772.920016 | 11 |
| 5 | **854.407666** | 427.707471 | 837.381117 | 419.194197 | 836.397101 | 418.702189 | Q | 1505.821857 | 753.414567 | 1488.795308 | 744.901292 | 1487.811292 | 744.409284 | 10 |
| 6 | **967.491730** | 484.249503 | 950.465181 | 475.736229 | 949.481165 | 475.244221 | I | ***1066.596531*** | 533.801904 | 1049.569982 | 525.288629 | 1048.585966 | 524.796621 | 9 |
| 7 | **1080.575794** | 540.791535 | 1063.549245 | 532.278261 | 1062.565229 | 531.786253 | L | ***953.512467*** | 477.259872 | 936.485918 | 468.746597 | 935.501902 | 468.254589 | 8 |
| 8 | 1137.597258 | 569.302267 | 1120.570709 | 560.788993 | 1119.586693 | 560.296985 | G | ***840.428403*** | 420.717840 | 823.401854 | 412.204565 | 822.417838 | 411.712557 | 7 |
| 9 | **1238.644937** | 619.826107 | 1221.618388 | 611.312832 | 1220.634372 | 610.820824 | T | ***783.406939*** | 392.207108 | 766.380390 | 383.693833 | 765.396374 | 383.201825 | 6 |
| 10 | 1401.708266 | 701.357771 | 1384.681717 | 692.844497 | 1383.697701 | 692.352489 | Y | ***682.359260*** | 341.683268 | 665.332711 | 333.169994 | | | 5 |
| 11 | **1500.776680** | 750.891978 | 1483.750131 | 742.378704 | 1482.766115 | 741.886696 | V | ***519.295931*** | 260.151604 | 502.269382 | 251.638329 | | | 4 |
| 12 | **1660.807329** | 830.907303 | 1643.780780 | 822.394028 | 1642.796764 | 821.902020 | C | ***420.227517*** | 210.617396 | 403.200968 | 202.104122 | | | 3 |
| 13 | 1773.891393 | 887.449335 | 1756.864844 | 878.936060 | 1755.880828 | 878.444052 | I | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 14 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EVEGQILGTYVCIK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.5 | 1918.989639 | 0.013829 | EVEGQILGTYVCIK |

**Mascot:** http://www.matrixscience.com/

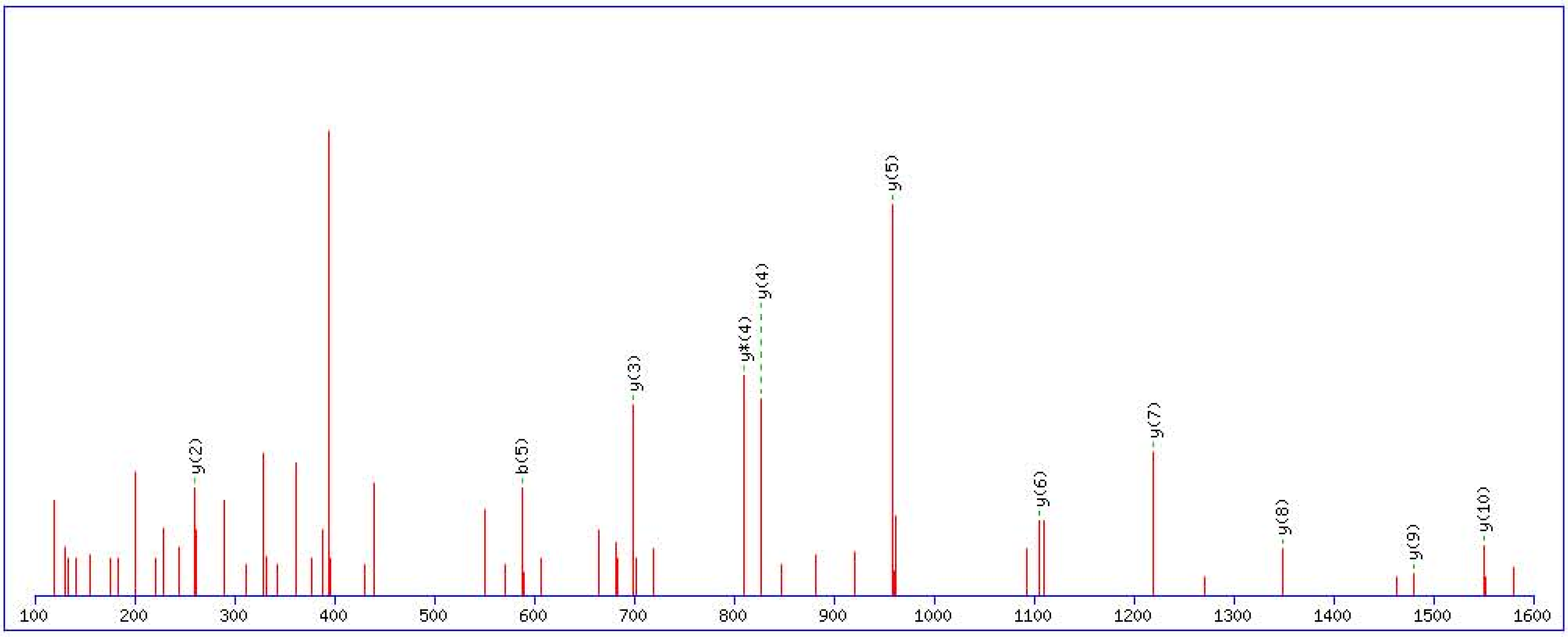
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NLCEAMENFMQQLK**
Found in **C4BPB_HUMAN**, C4b-binding protein beta chain OS=Homo sapiens GN=C4BPB PE=1 SV=1

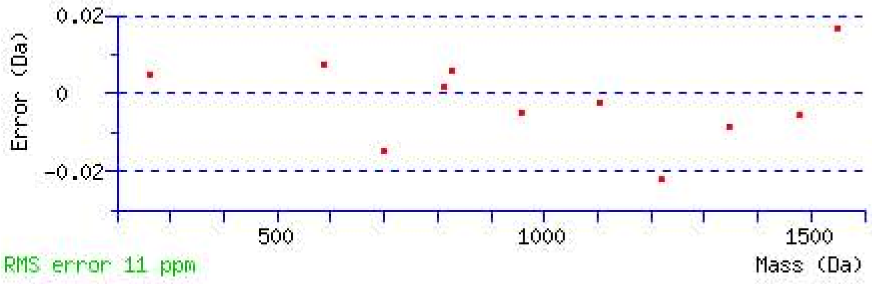
Match to Query 48688: 2065.953492 from(689.658440,3+) rtinseconds(3093) index(43559)
Title: Locus:1.1.1.3493.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●

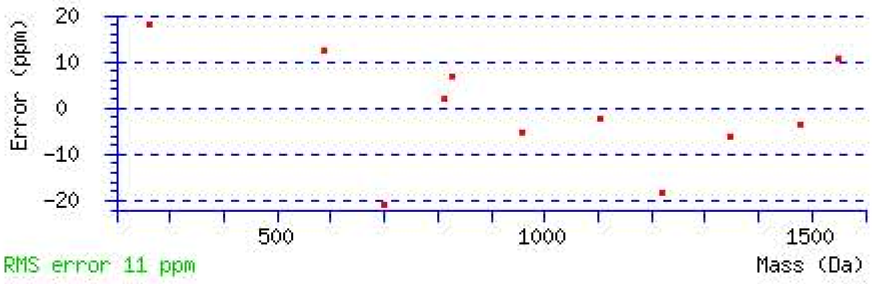


```
Monoisotopic mass of neutral peptide Mr(calc): 2065.945709
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 65  Expect: 4e-006
Matches : 11/136 fragment ions using 15 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 14 |
| 2 | 228.134267 | 114.570771 | 211.107718 | 106.057497 | | | L | 1952.910096 | 976.958686 | 1935.883547 | 968.445412 | 1934.899531 | 967.953404 | 13 |
| 3 | 388.164916 | 194.586096 | 371.138367 | 186.072822 | | | C | 1839.826032 | 920.416654 | 1822.799483 | 911.903380 | 1821.815467 | 911.411371 | 12 |
| 4 | 517.207509 | 259.107393 | 500.180960 | 250.594118 | 499.196944 | 250.102110 | E | 1679.795383 | 840.401329 | 1662.768834 | 831.888055 | 1661.784818 | 831.396047 | 11 |
| 5 | 588.244623 | 294.625950 | 571.218074 | 286.112675 | 570.234058 | 285.620667 | A | ***1550.752790*** | 775.880033 | 1533.726241 | 767.366759 | 1532.742225 | 766.874751 | 10 |
| 6 | 719.285108 | 360.146192 | 702.258559 | 351.632918 | 701.274543 | 351.140910 | M | ***1479.715676*** | 740.361476 | 1462.689127 | 731.848202 | 1461.705111 | 731.356194 | 9 |
| 7 | 848.327701 | 424.667489 | 831.301152 | 416.154214 | 830.317136 | 415.662206 | E | ***1348.675191*** | 674.841234 | 1331.648642 | 666.327959 | 1330.664626 | 665.835951 | 8 |
| 8 | 962.370628 | 481.688952 | 945.344079 | 473.175678 | 944.360063 | 472.683670 | N | ***1219.632598*** | 610.319937 | 1202.606049 | 601.806663 | | | 7 |
| 9 | 1109.439042 | 555.223159 | 1092.412493 | 546.709885 | 1091.428477 | 546.217876 | F | ***1105.589671*** | 553.298474 | 1088.563122 | 544.785199 | | | 6 |
| 10 | 1240.479527 | 620.743402 | 1223.452978 | 612.230127 | 1222.468962 | 611.738119 | M | ***958.521257*** | 479.764267 | 941.494708 | 471.250992 | | | 5 |
| 11 | 1368.538105 | 684.772690 | 1351.511556 | 676.259416 | 1350.527540 | 675.767408 | Q | ***827.480772*** | 414.244024 | 810.454223 | 405.730750 | | | 4 |
| 12 | 1807.763431 | 904.385354 | 1790.736882 | 895.872079 | 1789.752866 | 895.380071 | Q | ***699.422194*** | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 13 | 1920.847495 | 960.927386 | 1903.820946 | 952.414111 | 1902.836930 | 951.922103 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 14 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 11 ppm



RMS error 11 ppm

NCBI **BLAST** search of NLCEAMENFMQQLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.3 | 2065.945709 | 0.007783 | NLCEAMENFMQQLK |
| 50.9 | 2065.945709 | 0.007783 | NLCEAMENFMQQLK |

**Mascot:** http://www.matrixscience.com/

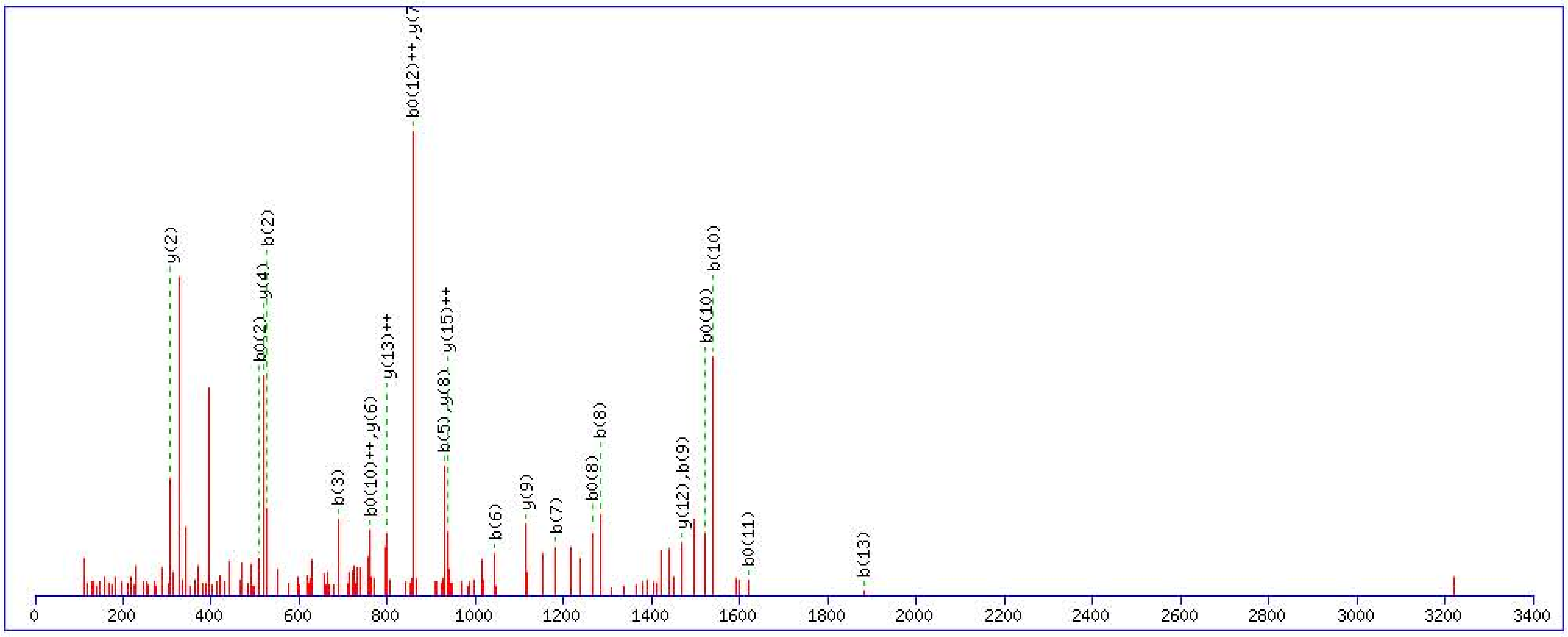
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SQCLEDHTWAPPFPICK**
Found in **C4BPB_HUMAN**, C4b-binding protein beta chain OS=Homo sapiens GN=C4BPB PE=1 SV=1

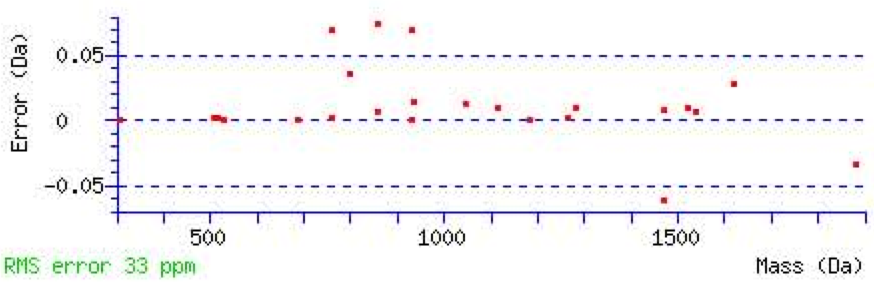
Match to Query 54240: 2396.131002 from(799.717610,3+) rtinseconds(2326) index(38370)
Title: Locus:1.1.1.3229.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

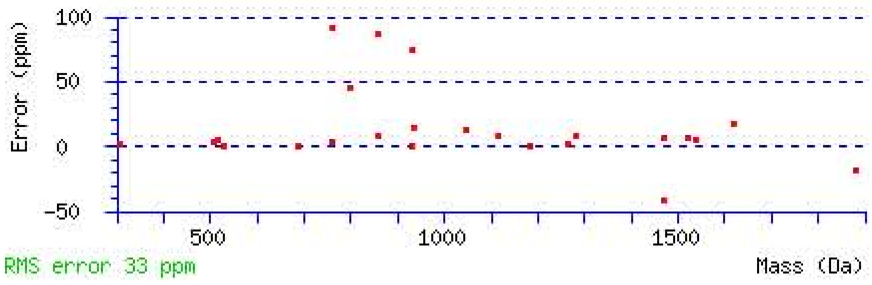
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2396.111572
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 56  Expect: 5.5e-005
Matches : 24/172 fragment ions using 32 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 17 |
| 2 | ***527.264630*** | 264.135953 | 510.238081 | 255.622679 | 509.254065 | 255.130671 | Q | 2310.086816 | 1155.547046 | 2293.060267 | 1147.033771 | 2292.076251 | 1146.541763 | 16 |
| 3 | ***687.295279*** | 344.151278 | 670.268730 | 335.638003 | 669.284714 | 335.145995 | C | 1870.861490 | 935.934383 | 1853.834941 | 927.421109 | 1852.850925 | 926.929101 | 15 |
| 4 | 800.379343 | 400.693310 | 783.352794 | 392.180035 | 782.368778 | 391.688027 | L | 1710.830841 | 855.919058 | 1693.804292 | 847.405784 | 1692.820276 | 846.913776 | 14 |
| 5 | ***929.421936*** | 465.214606 | 912.395387 | 456.701332 | 911.411371 | 456.209324 | E | 1597.746777 | 799.377026 | 1580.720228 | 790.863752 | 1579.736212 | 790.371744 | 13 |
| 6 | ***1044.448879*** | 522.728078 | 1027.422330 | 514.214803 | 1026.438314 | 513.722795 | D | ***1468.704184*** | 734.855730 | 1451.677635 | 726.342456 | 1450.693619 | 725.850447 | 12 |
| 7 | ***1181.507791*** | 591.257534 | 1164.481242 | 582.744259 | 1163.497226 | 582.252251 | H | 1353.677241 | 677.342258 | 1336.650692 | 668.828984 | 1335.666676 | 668.336976 | 11 |
| 8 | ***1282.555470*** | 641.781373 | 1265.528921 | 633.268099 | 1264.544905 | 632.776091 | T | 1216.618329 | 608.812802 | 1199.591780 | 600.299528 | 1198.607764 | 599.807520 | 10 |
| 9 | ***1468.634783*** | 734.821030 | 1451.608234 | 726.307755 | 1450.624218 | 725.815747 | W | ***1115.570650*** | 558.288963 | 1098.544101 | 549.775689 | | | 9 |
| 10 | ***1539.671897*** | 770.339587 | 1522.645348 | 761.826312 | 1521.661332 | 761.334304 | A | ***929.491337*** | 465.249306 | 912.464788 | 456.736032 | | | 8 |
| 11 | 1636.724661 | 818.865969 | 1619.698112 | 810.352694 | 1618.714096 | 809.860686 | P | ***858.454223*** | 429.730750 | 841.427674 | 421.217475 | | | 7 |
| 12 | 1733.777425 | 867.392351 | 1716.750876 | 858.879076 | 1715.766860 | 858.387068 | P | ***761.401459*** | 381.204367 | 744.374910 | 372.691093 | | | 6 |
| 13 | ***1880.845839*** | 940.926558 | 1863.819290 | 932.413283 | 1862.835274 | 931.921275 | F | 664.348695 | 332.677985 | 647.322146 | 324.164711 | | | 5 |
| 14 | 1977.898603 | 989.452940 | 1960.872054 | 980.939665 | 1959.888038 | 980.447657 | P | ***517.280281*** | 259.143778 | 500.253732 | 250.630504 | | | 4 |
| 15 | 2090.982667 | 1045.994971 | 2073.956118 | 1037.481697 | 2072.972102 | 1036.989689 | I | 420.227517 | 210.617396 | 403.200968 | 202.104122 | | | 3 |
| 16 | 2251.013316 | 1126.010296 | 2233.986767 | 1117.497021 | 2233.002751 | 1117.005013 | C | ***307.143453*** | 154.075364 | 290.116904 | 145.562090 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SQCLEDHTWAPPFPICK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.6 | 2396.111572 | 0.019430 | SQCLEDHTWAPPFPICK |

**Mascot:** http://www.matrixscience.com/

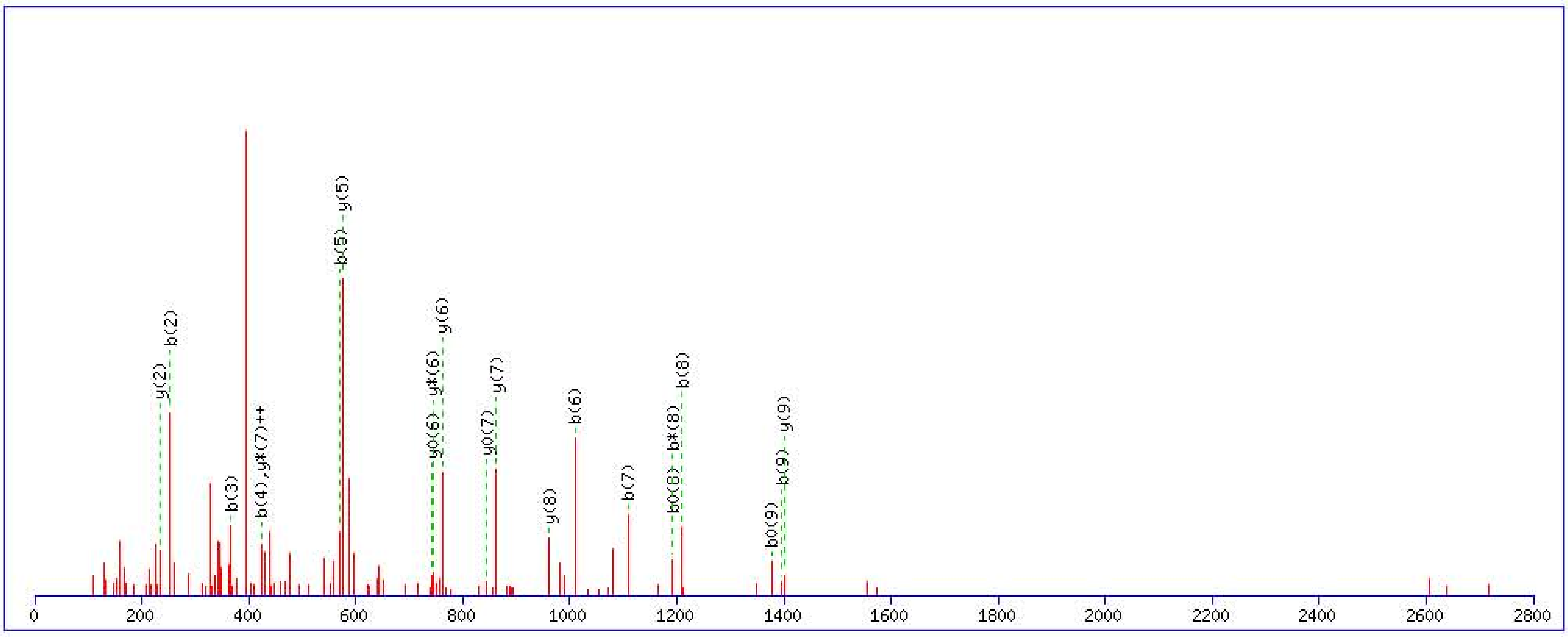
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DHLGFQVTWPDESK**
Found in **CPN2_HUMAN**, Carboxypeptidase N subunit 2 OS=Homo sapiens GN=CPN2 PE=1 SV=3

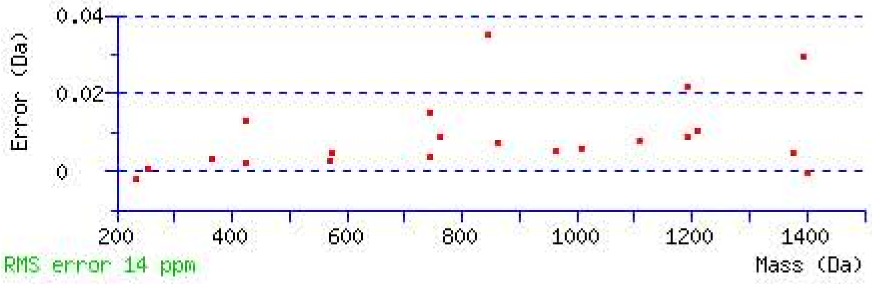
Match to Query 26446: 1968.958872 from(657.326900,3+) rtinseconds(2305) index(38268)
Title: Locus:1.1.1.3222.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

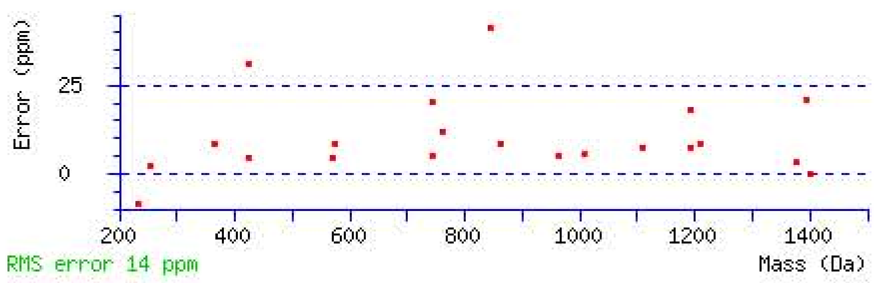
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1968.940399
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 38 **Expect:** 0.0011
**Matches :** 21/144 fragment ions using 39 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 14 |
| 2 | ***253.093131*** | 127.050203 | | | 235.082566 | 118.044921 | H | 1854.920718 | 927.963997 | 1837.894169 | 919.450723 | 1836.910153 | 918.958715 | 13 |
| 3 | ***366.177195*** | 183.592235 | | | 348.166630 | 174.586953 | L | 1717.861806 | 859.434541 | 1700.835257 | 850.921267 | 1699.851241 | 850.429259 | 12 |
| 4 | ***423.198659*** | 212.102967 | | | 405.188094 | 203.097685 | G | 1604.777742 | 802.892509 | 1587.751193 | 794.379235 | 1586.767177 | 793.887227 | 11 |
| 5 | ***570.267073*** | 285.637175 | | | 552.256508 | 276.631892 | F | 1547.756278 | 774.381777 | 1530.729729 | 765.868503 | 1529.745713 | 765.376495 | 10 |
| 6 | ***1009.492399*** | 505.249838 | 992.465850 | 496.736563 | 991.481834 | 496.244555 | Q | **1400.687864** | 700.847570 | 1383.661315 | 692.334296 | 1382.677299 | 691.842288 | 9 |
| 7 | ***1108.560813*** | 554.784045 | 1091.534264 | 546.270770 | 1090.550248 | 545.778762 | V | **961.462538** | 481.234907 | 944.435989 | 472.721633 | 943.451973 | 472.229625 | 8 |
| 8 | ***1209.608492*** | 605.307884 | 1192.581943 | 596.794610 | 1191.597927 | 596.302602 | T | **862.394124** | 431.700700 | 845.367575 | 423.187426 | 844.383559 | 422.695418 | 7 |
| 9 | ***1395.687805*** | 698.347541 | 1378.661256 | 689.834266 | 1377.677240 | 689.342258 | W | **761.346445** | 381.176861 | 744.319896 | 372.663586 | 743.335880 | 372.171578 | 6 |
| 10 | 1492.740569 | 746.873923 | 1475.714020 | 738.360648 | 1474.730004 | 737.868640 | P | **575.267132** | 288.137204 | 558.240583 | 279.623930 | 557.256567 | 279.131922 | 5 |
| 11 | 1607.767512 | 804.387394 | 1590.740963 | 795.874120 | 1589.756947 | 795.382112 | D | 478.214368 | 239.610822 | 461.187819 | 231.097548 | 460.203803 | 230.605540 | 4 |
| 12 | 1736.810105 | 868.908691 | 1719.783556 | 860.395416 | 1718.799540 | 859.903408 | E | 363.187425 | 182.097351 | 346.160876 | 173.584076 | 345.176860 | 173.092068 | 3 |
| 13 | 1823.842133 | 912.424705 | 1806.815584 | 903.911430 | 1805.831568 | 903.419422 | S | **234.144832** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 14 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of DHLGFQVTWPDESK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.9 | 1968.940399 | 0.018473 | DHLGFQVTWPDESK |
| 6.5 | 1968.949585 | 0.009287 | EGQMESVEAAMSSKTLKK |

**Mascot:** http://www.matrixscience.com/

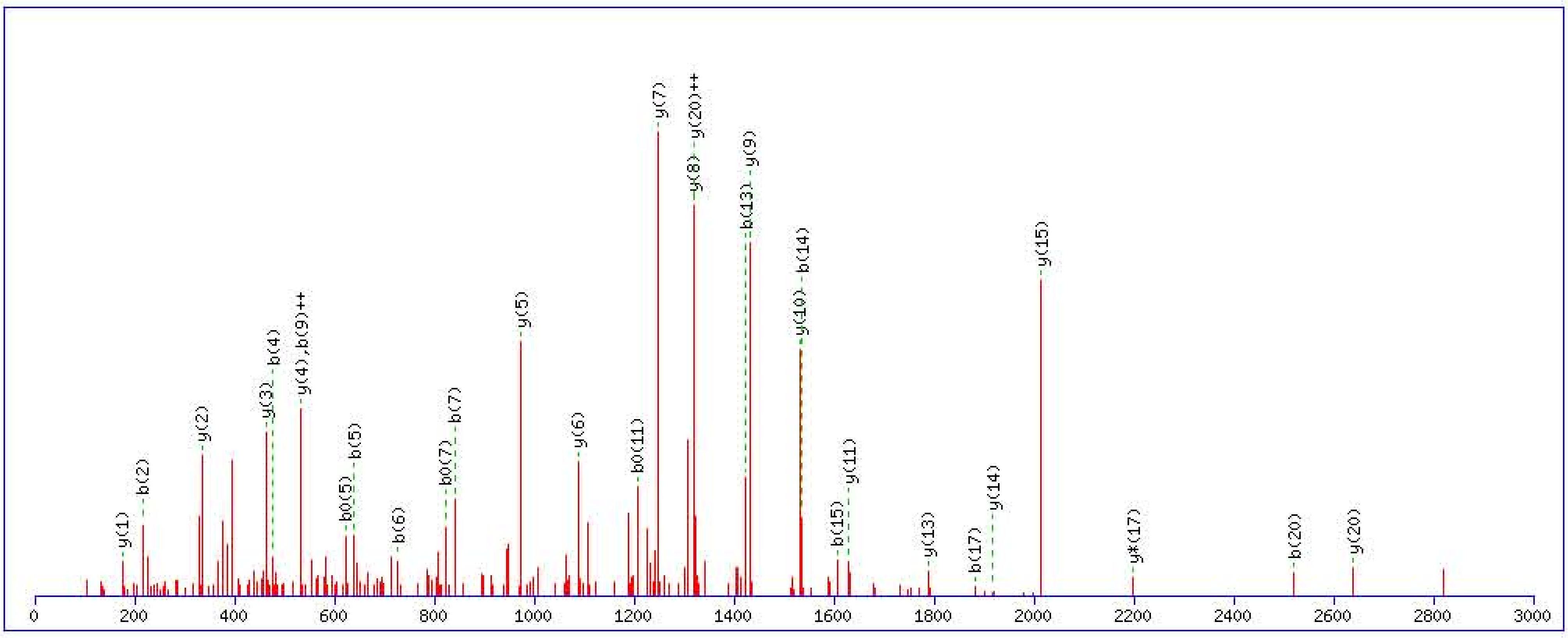
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SQCTYSNPEGTVVLACDQAQCR**
Found in **CPN2_HUMAN**, Carboxypeptidase N subunit 2 OS=Homo sapiens GN=CPN2 PE=1 SV=3

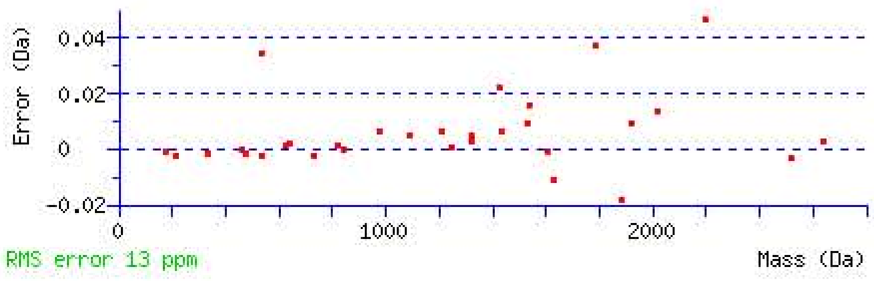
Match to Query 60277: 2854.270512 from(952.430780,3+) rtinseconds(2039) index(36632)
Title: Locus:1.1.1.3129.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

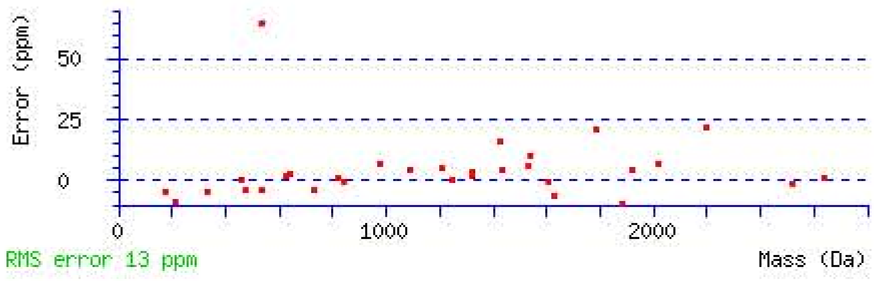
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2854.250671
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18     : Biotin:Thermo-21345 (Q)
Ions Score: 111  Expect: 5.1e-011
Matches : 31/240 fragment ions using 43 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 22 |
| 2 | **216.097882** | 108.552579 | 199.071333 | 100.039305 | 198.087317 | 99.547296 | Q | 2768.225907 | 1384.616591 | 2751.199358 | 1376.103317 | 2750.215342 | 1375.611309 | 21 |
| 3 | 376.128531 | 188.567904 | 359.101982 | 180.054629 | 358.117966 | 179.562621 | C | ***2640.167329*** | 1320.587302 | 2623.140780 | 1312.074028 | 2622.156764 | 1311.582020 | 20 |
| 4 | **477.176210** | 239.091743 | 460.149661 | 230.578469 | 459.165645 | 230.086461 | T | 2480.136680 | 1240.571978 | 2463.110131 | 1232.058703 | 2462.126115 | 1231.566695 | 19 |
| 5 | **640.239539** | 320.623408 | 623.212990 | 312.110133 | 622.228974 | 311.618125 | Y | 2379.089001 | 1190.048138 | 2362.062452 | 1181.534864 | 2361.078436 | 1181.042856 | 18 |
| 6 | **727.271567** | 364.139422 | 710.245018 | 355.626147 | 709.261002 | 355.134139 | S | 2216.025672 | 1108.516474 | 2198.999123 | 1100.003199 | 2198.015107 | 1099.511191 | 17 |
| 7 | **841.314494** | 421.160885 | 824.287945 | 412.647611 | 823.303929 | 412.155603 | N | 2128.993644 | 1065.000460 | 2111.967095 | 1056.487185 | 2110.983079 | 1055.995177 | 16 |
| 8 | 938.367258 | 469.687267 | 921.340709 | 461.173993 | 920.356693 | 460.681985 | P | ***2014.950717*** | 1007.978997 | 1997.924168 | 999.465722 | 1996.940152 | 998.973714 | 15 |
| 9 | 1067.409851 | 534.208564 | 1050.383302 | 525.695289 | 1049.399286 | 525.203281 | E | ***1917.897953*** | 959.452615 | 1900.871404 | 950.939340 | 1899.887388 | 950.447332 | 14 |
| 10 | 1124.431315 | 562.719296 | 1107.404766 | 554.206021 | 1106.420750 | 553.714013 | G | ***1788.855360*** | 894.931318 | 1771.828811 | 886.418044 | 1770.844795 | 885.926036 | 13 |
| 11 | 1225.478994 | 613.243135 | 1208.452445 | 604.729861 | 1207.468429 | 604.237853 | T | 1731.833896 | 866.420586 | 1714.807347 | 857.907312 | 1713.823331 | 857.415304 | 12 |
| 12 | 1324.547408 | 662.777342 | 1307.520859 | 654.264068 | 1306.536843 | 653.772060 | V | ***1630.786217*** | 815.896747 | 1613.759668 | 807.383472 | 1612.775652 | 806.891464 | 11 |
| 13 | **1423.615822** | 712.311549 | 1406.589273 | 703.798275 | 1405.605257 | 703.306267 | V | ***1531.717803*** | 766.362540 | 1514.691254 | 757.849265 | 1513.707238 | 757.357257 | 10 |
| 14 | **1536.699886** | 768.853581 | 1519.673337 | 760.340307 | 1518.689321 | 759.848299 | L | ***1432.649389*** | 716.828333 | 1415.622840 | 708.315058 | 1414.638824 | 707.823050 | 9 |
| 15 | **1607.737000** | 804.372138 | 1590.710451 | 795.858864 | 1589.726435 | 795.366856 | A | ***1319.565325*** | 660.286301 | 1302.538776 | 651.773026 | 1301.554760 | 651.281018 | 8 |
| 16 | 1767.767649 | 884.387463 | 1750.741100 | 875.874188 | 1749.757084 | 875.382180 | C | ***1248.528211*** | 624.767744 | 1231.501662 | 616.254469 | 1230.517646 | 615.762461 | 7 |
| 17 | **1882.794592** | 941.900934 | 1865.768043 | 933.387660 | 1864.784027 | 932.895652 | D | ***1088.497562*** | 544.752419 | 1071.471013 | 536.239145 | 1070.486997 | 535.747137 | 6 |
| 18 | 2322.019918 | 1161.513597 | 2304.993369 | 1153.000322 | 2304.009353 | 1152.508314 | Q | ***973.470619*** | 487.238948 | 956.444070 | 478.725673 | | | 5 |
| 19 | 2393.057032 | 1197.032154 | 2376.030483 | 1188.518879 | 2375.046467 | 1188.026872 | A | ***534.245293*** | 267.626285 | 517.218744 | 259.113010 | | | 4 |
| 20 | **2521.115610** | 1261.061443 | 2504.089061 | 1252.548169 | 2503.105045 | 1252.056161 | Q | ***463.208179*** | 232.107727 | 446.181630 | 223.594453 | | | 3 |
| 21 | 2681.146259 | 1341.076768 | 2664.119710 | 1332.563493 | 2663.135694 | 1332.071485 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 22 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SQCTYSNPEGTVVLACDQAQCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 111.4 | 2854.250671 | 0.019841 | SQCTYSNPEGTVVLACDQAQCR |
| 90.1 | 2854.250671 | 0.019841 | SQCTYSNPEGTVVLACDQAQCR |
| 9.3 | 2854.250671 | 0.019841 | SQCTYSNPEGTVVLACDQAQCR |

**Mascot:** http://www.matrixscience.com/

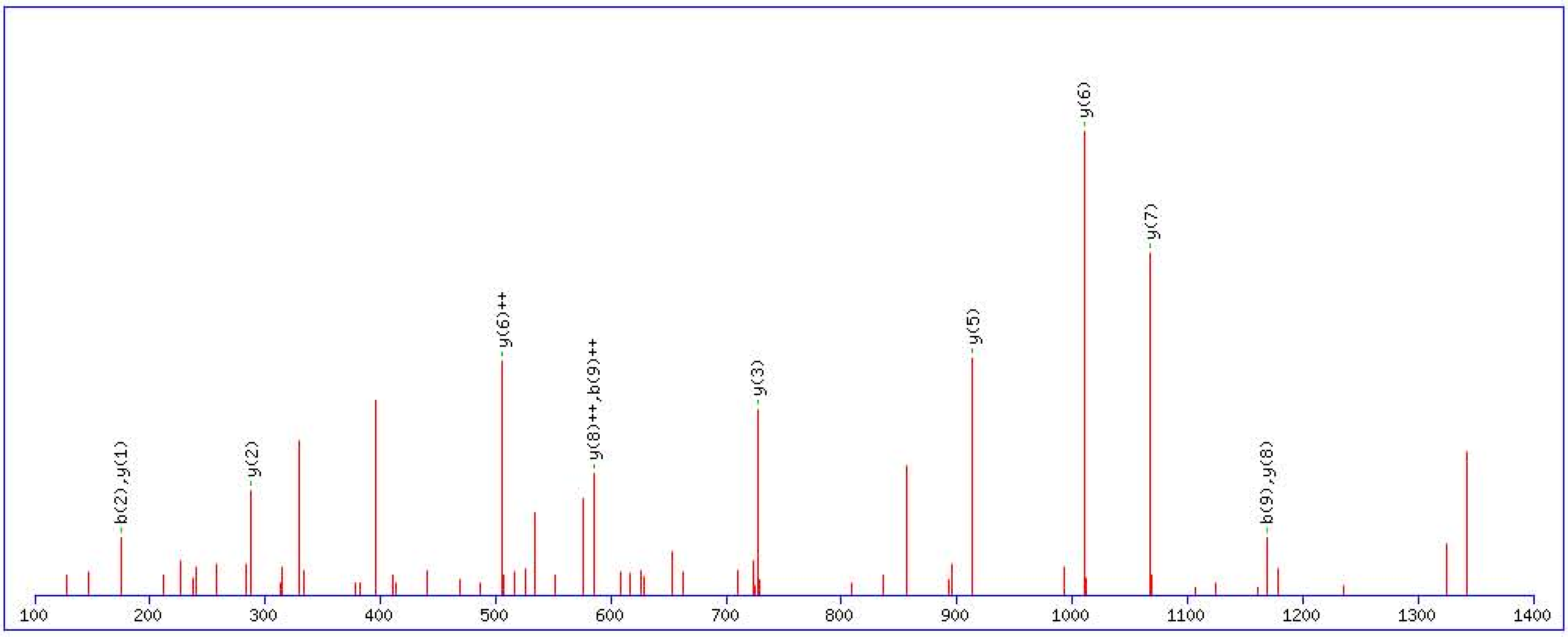
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SSTGPGEQLR**
Found in **COMP_HUMAN**, Cartilage oligomeric matrix protein OS=Homo sapiens GN=COMP PE=1 SV=2

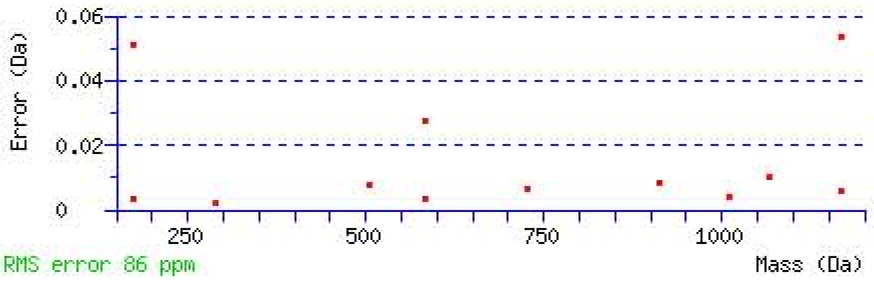
Match to Query 27036: 1341.673848 from(671.844200,2+) rtinseconds(1599) index(50236)
Title: Locus:1.1.1.1172.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

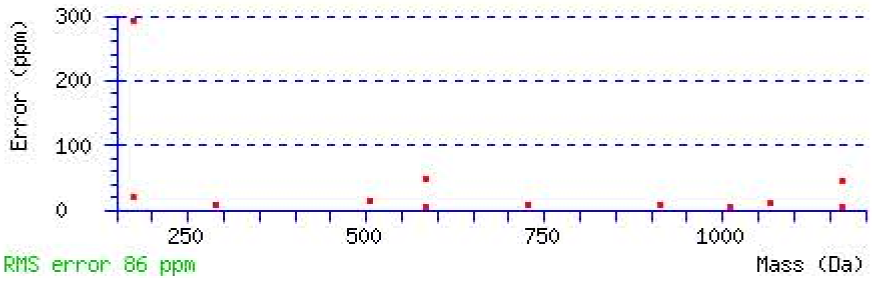
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1341.671082
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 67  Expect: 3.7e-006
Matches : 12/88 fragment ions using 12 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 10 |
| 2 | **175.071332** | 88.039304 | | | 157.060767 | 79.034021 | S | 1255.646334 | 628.326805 | 1238.619785 | 619.813530 | 1237.635769 | 619.321522 | 9 |
| 3 | 276.119011 | 138.563144 | | | 258.108446 | 129.557861 | T | ***1168.614306*** | 584.810791 | 1151.587757 | 576.297517 | 1150.603741 | 575.805508 | 8 |
| 4 | 333.140475 | 167.073875 | | | 315.129910 | 158.068593 | G | ***1067.566627*** | 534.286951 | 1050.540078 | 525.773677 | 1049.556062 | 525.281669 | 7 |
| 5 | 430.193239 | 215.600258 | | | 412.182674 | 206.594975 | P | ***1010.545163*** | 505.776219 | 993.518614 | 497.262945 | 992.534598 | 496.770937 | 6 |
| 6 | 487.214703 | 244.110989 | | | 469.204138 | 235.105707 | G | ***913.492399*** | 457.249837 | 896.465850 | 448.736563 | 895.481834 | 448.244555 | 5 |
| 7 | 616.257296 | 308.632286 | | | 598.246731 | 299.627004 | E | 856.470935 | 428.739105 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 8 | 1055.482622 | 528.244949 | 1038.456073 | 519.731675 | 1037.472057 | 519.239667 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704534 | | | 3 |
| 9 | **1168.566686** | **584.786981** | 1151.540137 | 576.273707 | 1150.556121 | 575.781698 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SSTGPGEQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 67.2 | 1341.671082 | 0.002766 | SSTGPGEQLR |
| 14.0 | 1341.674911 | -0.001063 | TSPERREPGTGR |
| 13.7 | 1341.663651 | 0.010197 | ESARDPKPEASR |
| 10.0 | 1341.663681 | 0.010167 | SSHKDSPRDVSK |
| 9.9 | 1341.688828 | -0.014980 | DDAQLSGLPSALR |
| 9.5 | 1341.682297 | -0.008449 | ASEQDVRAR |
| 9.5 | 1341.693512 | -0.019664 | ASEQERRR |
| 8.6 | 1341.686325 | -0.012477 | SMKQLTSHPWK |
| 7.0 | 1341.653793 | 0.020055 | GFAEHGKQQQGR |
| 6.4 | 1341.686340 | -0.012492 | GSGIQWDLR |

**Mascot:** http://www.matrixscience.com/

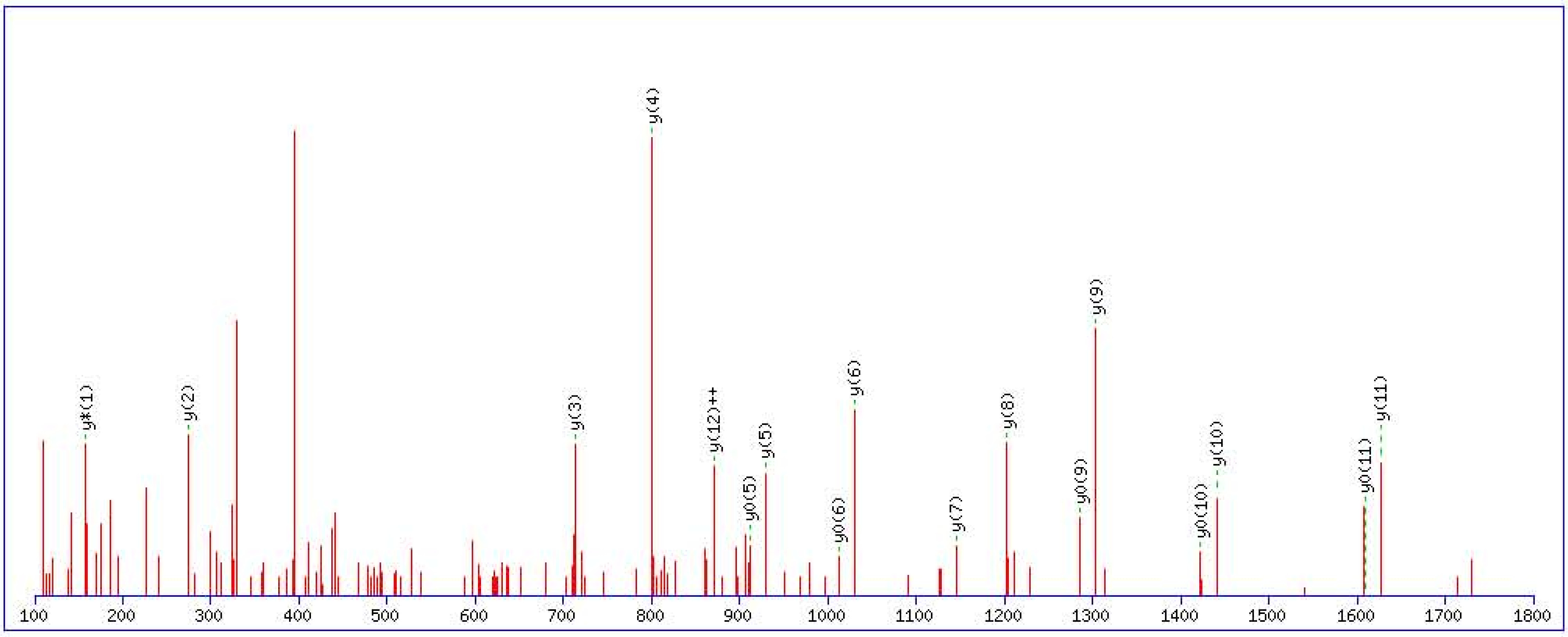
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NALWHTGDTESQVR**
Found in **COMP_HUMAN**, Cartilage oligomeric matrix protein OS=Homo sapiens GN=COMP PE=1 SV=2

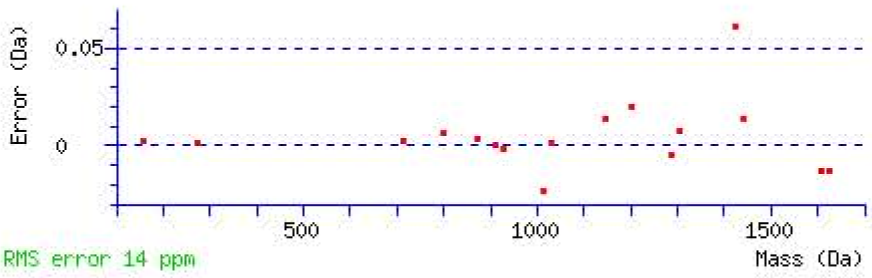
Match to Query 45032: 1923.932982 from(642.318270,3+) rtinseconds(1791) index(51457)
Title: Locus:1.1.1.1239.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

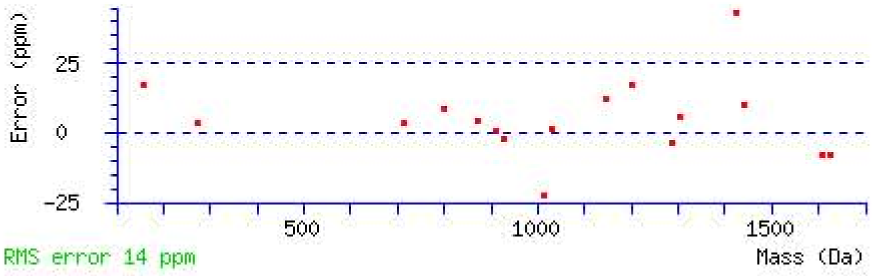
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1923.926132
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 58  Expect: 3.7e-005
Matches : 17/140 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 14 |
| 2 | 186.087317 | 93.547296 | 169.060768 | 85.034022 | | | A | 1810.890481 | 905.948879 | 1793.863932 | 897.435604 | 1792.879916 | 896.943596 | 13 |
| 3 | 299.171381 | 150.089328 | 282.144832 | 141.576054 | | | L | 1739.853367 | 870.430322 | 1722.826818 | 861.917047 | 1721.842802 | 861.425039 | 12 |
| 4 | 485.250694 | 243.128985 | 468.224145 | 234.615711 | | | W | ***1626.769303*** | 813.888290 | 1609.742754 | 805.375015 | 1608.758738 | 804.883007 | 11 |
| 5 | 622.309606 | 311.658441 | 605.283057 | 303.145167 | | | H | ***1440.689990*** | 720.848633 | 1423.663441 | 712.335359 | 1422.679425 | 711.843351 | 10 |
| 6 | 723.357285 | 362.182281 | 706.330736 | 353.669006 | 705.346720 | 353.176998 | T | ***1303.631078*** | 652.319177 | 1286.604529 | 643.805903 | 1285.620513 | 643.313895 | 9 |
| 7 | 780.378749 | 390.693013 | 763.352200 | 382.179738 | 762.368184 | 381.687730 | G | ***1202.583399*** | 601.795338 | 1185.556850 | 593.282063 | 1184.572834 | 592.790055 | 8 |
| 8 | 895.405692 | 448.206484 | 878.379143 | 439.693210 | 877.395127 | 439.201202 | D | ***1145.561935*** | 573.284606 | 1128.535386 | 564.771331 | 1127.551370 | 564.279323 | 7 |
| 9 | 996.453371 | 498.730324 | 979.426822 | 490.217049 | 978.442806 | 489.725041 | T | ***1030.534992*** | 515.771134 | 1013.508443 | 507.257860 | 1012.524427 | 506.765852 | 6 |
| 10 | 1125.495964 | 563.251620 | 1108.469415 | 554.738346 | 1107.485399 | 554.246337 | E | ***929.487313*** | 465.247295 | 912.460764 | 456.734020 | 911.476748 | 456.242012 | 5 |
| 11 | 1212.527992 | 606.767634 | 1195.501443 | 598.254360 | 1194.517427 | 597.762352 | S | ***800.444720*** | 400.725998 | 783.418171 | 392.212724 | 782.434155 | 391.720716 | 4 |
| 12 | 1651.753318 | 826.380297 | 1634.726769 | 817.867023 | 1633.742753 | 817.375015 | Q | ***713.412692*** | 357.209984 | 696.386143 | 348.696710 | | | 3 |
| 13 | 1750.821732 | 875.914504 | 1733.795183 | 867.401230 | 1732.811167 | 866.909222 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084047 | | | 2 |
| 14 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |



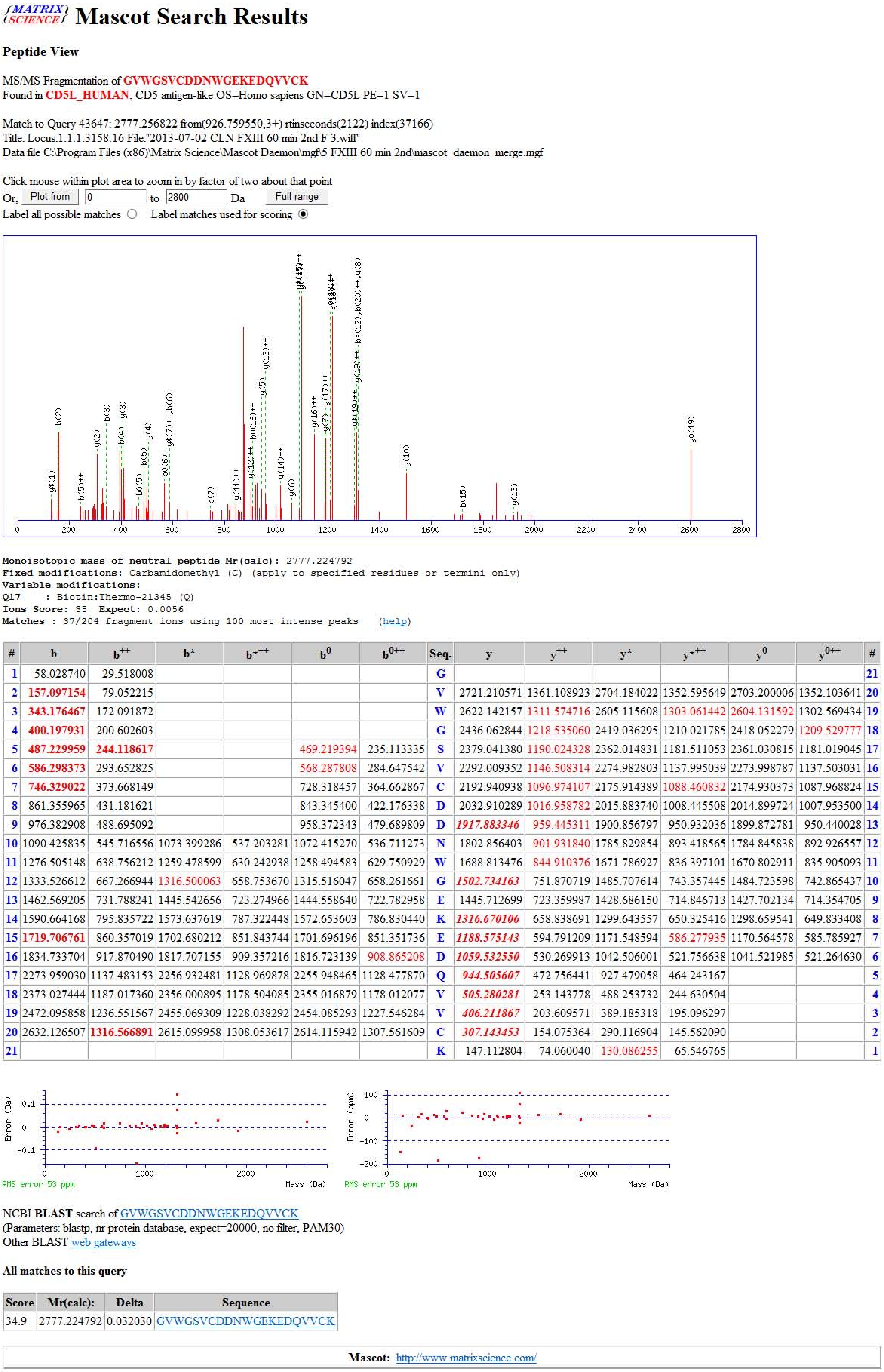


NCBI **BLAST** search of NALWHTGDTESQVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.5 | 1923.926132 | 0.006850 | NALWHTGDTESQVR |

**Mascot:** http://www.matrixscience.com/



# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GVWGSVCDDNWGEKEDQVVCK**
Found in **CD5L_HUMAN**, CD5 antigen-like OS=Homo sapiens GN=CD5L PE=1 SV=1

Match to Query 43647: 2777.256822 from(926.759550,3+) rtinseconds(2122) index(37166)
Title: Locus:1.1.1.3158.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 2777.224792
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q17     : Biotin:Thermo-21345 (Q)
Ions Score: 35  Expect: 0.0056
Matches : 37/204 fragment ions using 100 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 21 |
| 2 | **157.097154** | 79.052215 | | | | | V | 2721.210571 | 1361.108923 | 2704.184022 | 1352.595649 | 2703.200006 | 1352.103641 | 20 |
| 3 | **343.176467** | 172.091872 | | | | | W | 2622.142157 | 1311.574716 | 2605.115608 | 1303.061442 | 2604.131592 | 1302.569434 | 19 |
| 4 | **400.197931** | 200.602603 | | | | | G | 2436.062844 | 1218.535060 | 2419.036295 | 1210.021785 | 2418.052279 | 1209.529777 | 18 |
| 5 | **487.229959** | **244.118617** | | | 469.219394 | 235.113335 | S | 2379.041380 | 1190.024328 | 2362.014831 | 1181.511053 | 2361.030815 | 1181.019045 | 17 |
| 6 | **586.298373** | 293.652825 | | | 568.287808 | 284.647542 | V | 2292.009352 | 1146.508314 | 2274.982803 | 1137.995039 | 2273.998787 | 1137.503031 | 16 |
| 7 | **746.329022** | 373.668149 | | | 728.318457 | 364.662867 | C | 2192.940938 | 1096.974107 | 2175.914389 | 1088.460832 | 2174.930373 | 1087.968824 | 15 |
| 8 | 861.355965 | 431.181621 | | | 843.345400 | 422.176338 | D | 2032.910289 | 1016.958782 | 2015.883740 | 1008.445508 | 2014.899724 | 1007.953500 | 14 |
| 9 | 976.382908 | 488.695092 | | | 958.372343 | 479.689809 | D | ***1917.883346*** | 959.445311 | 1900.856797 | 950.932036 | 1899.872781 | 950.440028 | 13 |
| 10 | 1090.425835 | 545.716556 | 1073.399286 | 537.203281 | 1072.415270 | 536.711273 | N | 1802.856403 | 901.931840 | 1785.829854 | 893.418565 | 1784.845838 | 892.926557 | 12 |
| 11 | 1276.505148 | 638.756212 | 1259.478599 | 630.242938 | 1258.494583 | 629.750929 | W | 1688.813476 | 844.910376 | 1671.786927 | 836.397101 | 1670.802911 | 835.905093 | 11 |
| 12 | 1333.526612 | 667.266944 | 1316.500063 | 658.753670 | 1315.516047 | 658.261661 | G | ***1502.734163*** | 751.870719 | 1485.707614 | 743.357445 | 1484.723598 | 742.865437 | 10 |
| 13 | 1462.569205 | 731.788241 | 1445.542656 | 723.274966 | 1444.558640 | 722.782958 | E | 1445.712699 | 723.359987 | 1428.686150 | 714.846713 | 1427.702134 | 714.354705 | 9 |
| 14 | 1590.664168 | 795.835722 | 1573.637619 | 787.322448 | 1572.653603 | 786.830440 | K | ***1316.670106*** | 658.838691 | 1299.643557 | 650.325416 | 1298.659541 | 649.833408 | 8 |
| 15 | **1719.706761** | 860.357019 | 1702.680212 | 851.843744 | 1701.696196 | 851.351736 | E | ***1188.575143*** | 594.791209 | 1171.548594 | 586.277935 | 1170.564578 | 585.785927 | 7 |
| 16 | 1834.733704 | 917.870490 | 1817.707155 | 909.357216 | 1816.723139 | 908.865208 | D | ***1059.532550*** | 530.269913 | 1042.506001 | 521.756638 | 1041.521985 | 521.264630 | 6 |
| 17 | 2273.959030 | 1137.483153 | 2256.932481 | 1128.969878 | 2255.948465 | 1128.477870 | Q | ***944.505607*** | 472.756441 | 927.479058 | 464.243167 | | | 5 |
| 18 | 2373.027444 | 1187.017360 | 2356.000895 | 1178.504085 | 2355.016879 | 1178.012077 | V | ***505.280281*** | 253.143778 | 488.253732 | 244.630504 | | | 4 |
| 19 | 2472.095858 | 1236.551567 | 2455.069309 | 1228.038292 | 2454.085293 | 1227.546284 | V | ***406.211867*** | 203.609571 | 389.185318 | 195.096297 | | | 3 |
| 20 | 2632.126507 | **1316.566891** | 2615.099958 | 1308.053617 | 2614.115942 | 1307.561609 | C | ***307.143453*** | 154.075364 | 290.116904 | 145.562090 | | | 2 |
| 21 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |

NCBI **BLAST** search of GVWGSVCDDNWGEKEDQVVCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 34.9 | 2777.224792 | 0.032030 | GVWGSVCDDNWGEKEDQVVCK |

**Mascot:** http://www.matrixscience.com/

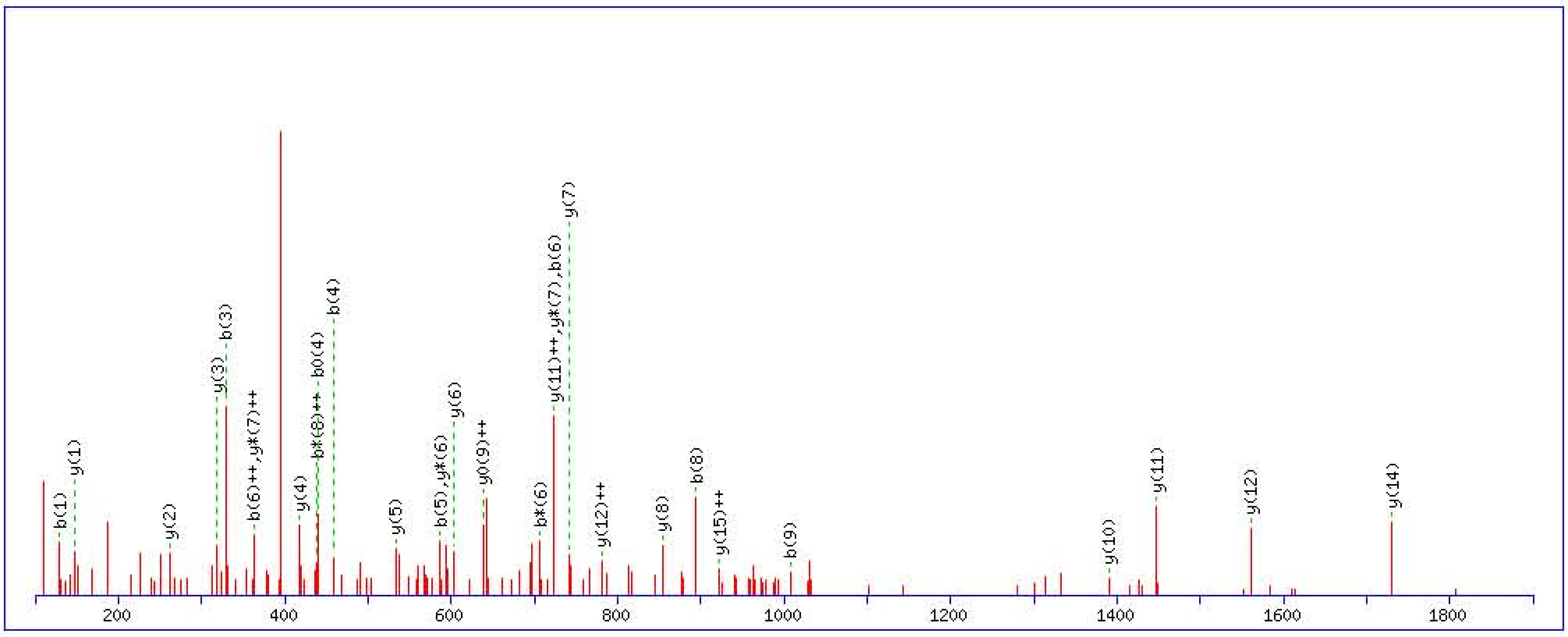
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KAEEEHLGILGPQLHADVGDK**
Found in **CERU_HUMAN**, Ceruloplasmin OS=Homo sapiens GN=CP PE=1 SV=1

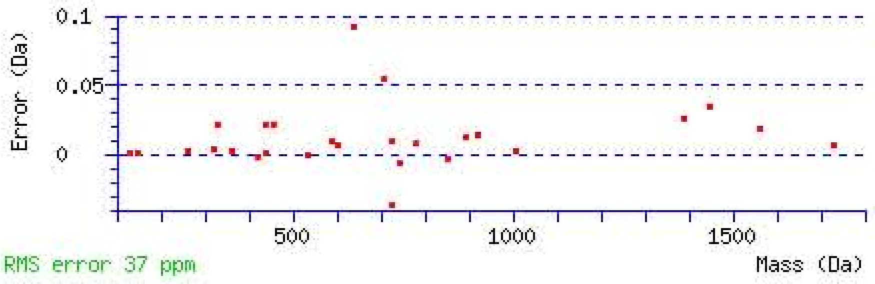
Match to Query 57310: 2566.331816 from(642.590230,4+) rtinseconds(1979) index(52716)
Title: Locus:1.1.1.1304.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

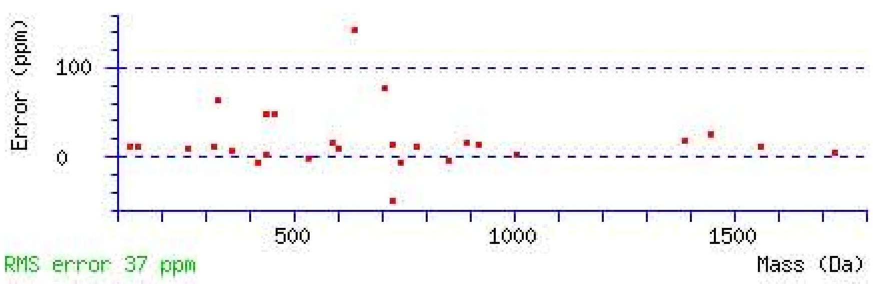
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2566.321335
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13    : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 7.9e-007
Matches : 30/234 fragment ions using 58 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 21 |
| 2 | 200.139353 | 100.573315 | 183.112804 | 92.060040 | | | A | 2439.233673 | 1220.120474 | 2422.207124 | 1211.607200 | 2421.223108 | 1211.115192 | 20 |
| 3 | ***329.181946*** | 165.094611 | 312.155397 | 156.581336 | 311.171381 | 156.089328 | E | 2368.196559 | 1184.601917 | 2351.170010 | 1176.088643 | 2350.185994 | 1175.596635 | 19 |
| 4 | ***458.224539*** | 229.615907 | 441.197990 | 221.102633 | 440.213974 | 220.610625 | E | 2239.153966 | 1120.080621 | 2222.127417 | 1111.567346 | 2221.143401 | 1111.075338 | 18 |
| 5 | ***587.267132*** | 294.137204 | 570.240583 | 285.623930 | 569.256567 | 285.131922 | E | 2110.111373 | 1055.559324 | 2093.084824 | 1047.046050 | 2092.100808 | 1046.554042 | 17 |
| 6 | ***724.326044*** | 362.666660 | 707.299495 | 354.153386 | 706.315479 | 353.661378 | H | 1981.068780 | 991.038028 | 1964.042231 | 982.524753 | 1963.058215 | 982.032745 | 16 |
| 7 | 837.410108 | 419.208692 | 820.383559 | 410.695418 | 819.399543 | 410.203410 | L | 1844.009868 | 922.508572 | 1826.983319 | 913.995297 | 1825.999303 | 913.503289 | 15 |
| 8 | ***894.431572*** | 447.719424 | 877.405023 | 439.206150 | 876.421007 | 438.714142 | G | ***1730.925804*** | 865.966540 | 1713.899255 | 857.453265 | 1712.915239 | 856.961257 | 14 |
| 9 | ***1007.515636*** | 504.261456 | 990.489087 | 495.748182 | 989.505071 | 495.256174 | I | 1673.904340 | 837.455808 | 1656.877791 | 828.942533 | 1655.893775 | 828.450525 | 13 |
| 10 | 1120.599700 | 560.803488 | 1103.573151 | 552.290214 | 1102.589135 | 551.798205 | L | ***1560.820276*** | 780.913776 | 1543.793727 | 772.400501 | 1542.809711 | 771.908493 | 12 |
| 11 | 1177.621164 | 589.314220 | 1160.594615 | 580.800946 | 1159.610599 | 580.308937 | G | ***1447.736212*** | 724.371744 | 1430.709663 | 715.858469 | 1429.725647 | 715.366461 | 11 |
| 12 | 1274.673928 | 637.840602 | 1257.647379 | 629.327328 | 1256.663363 | 628.835319 | P | ***1390.714748*** | 695.861012 | 1373.688199 | 687.347737 | 1372.704183 | 686.855729 | 10 |
| 13 | 1713.899254 | 857.453265 | 1696.872705 | 848.939991 | 1695.888689 | 848.447983 | Q | 1293.661984 | 647.334630 | 1276.635435 | 638.821355 | 1275.651419 | 638.329347 | 9 |
| 14 | 1826.983318 | 913.995297 | 1809.956769 | 905.482023 | 1808.972753 | 904.990015 | L | ***854.436658*** | 427.721967 | 837.410109 | 419.208692 | 836.426093 | 418.716684 | 8 |
| 15 | 1964.042230 | 982.524753 | 1947.015681 | 974.011479 | 1946.031665 | 973.519471 | H | ***741.352594*** | 371.179935 | 724.326045 | 362.666660 | 723.342029 | 362.174652 | 7 |
| 16 | 2035.079344 | 1018.043310 | 2018.052795 | 1009.530036 | 2017.068779 | 1009.038028 | A | ***604.293682*** | 302.650479 | 587.267133 | 294.137204 | 586.283117 | 293.645196 | 6 |
| 17 | 2150.106287 | 1075.556781 | 2133.079738 | 1067.043507 | 2132.095722 | 1066.551499 | D | ***533.256568*** | 267.131922 | 516.230019 | 258.618647 | 515.246003 | 258.126639 | 5 |
| 18 | 2249.174701 | 1125.090988 | 2232.148152 | 1116.577714 | 2231.164136 | 1116.085706 | V | ***418.229625*** | 209.618450 | 401.203076 | 201.105176 | 400.219060 | 200.613168 | 4 |
| 19 | 2306.196165 | 1153.601720 | 2289.169616 | 1145.088446 | 2288.185600 | 1144.596438 | G | ***319.161211*** | 160.084243 | 302.134662 | 151.570969 | 301.150646 | 151.078961 | 3 |
| 20 | 2421.223108 | 1211.115192 | 2404.196559 | 1202.601917 | 2403.212543 | 1202.109909 | D | ***262.139747*** | 131.573511 | 245.113198 | 123.060237 | 244.129182 | 122.568229 | 2 |
| 21 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of KAEEEHLGILGPQLHADVGDK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.8 | 2566.321335 | 0.010481 | KAEEEHLGILGPQLHADVGDK |
| 0.7 | 2566.329437 | 0.002379 | QMHGLRTLNIGQCVRITDK |

**Mascot:** http://www.matrixscience.com/

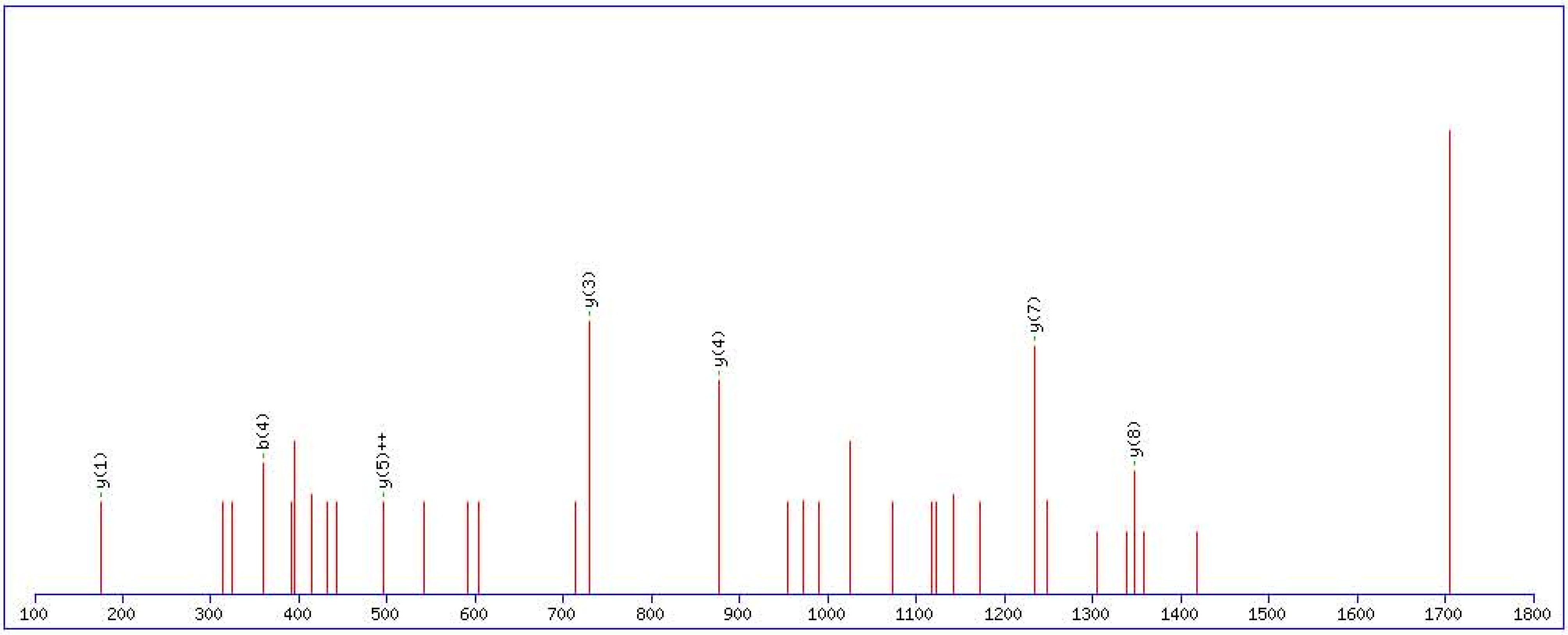
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ASSIIDELFQDR**
Found in **CLUS_HUMAN**, Clusterin OS=Homo sapiens GN=CLU PE=1 SV=1

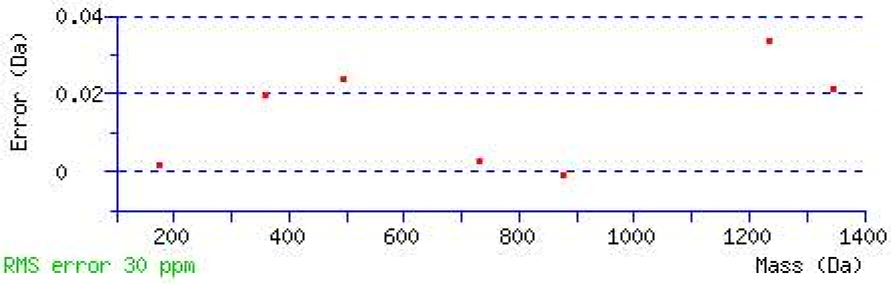
Match to Query 40552: 1703.862508 from(852.938530,2+) rtinseconds(2841) index(26710)
Title: Locus:1.1.1.990.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

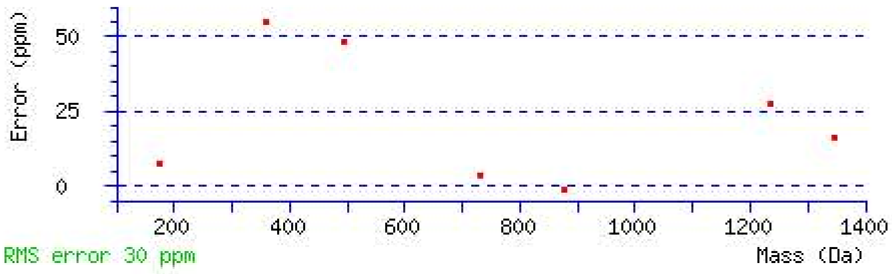
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1703.855240
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.0032
**Matches :** 7/110 fragment ions using 12 most intense peaks (help)

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 12 |
| 2 | 159.076418 | 80.041847 | | | 141.065853 | 71.036564 | S | 1633.825419 | 817.416348 | 1616.798870 | 808.903073 | 1615.814854 | 808.411065 | 11 |
| 3 | 246.108446 | 123.557861 | | | 228.097881 | 114.552578 | S | 1546.793391 | 773.900333 | 1529.766842 | 765.387059 | 1528.782826 | 764.895051 | 10 |
| 4 | **359.192510** | 180.099893 | | | 341.181945 | 171.094610 | I | 1459.761363 | 730.384320 | 1442.734814 | 721.871045 | 1441.750798 | 721.379037 | 9 |
| 5 | 472.276574 | 236.641925 | | | 454.266009 | 227.636642 | I | ***1346.677299*** | 673.842288 | 1329.650750 | 665.329013 | 1328.666734 | 664.837005 | 8 |
| 6 | 587.303517 | 294.155397 | | | 569.292952 | 285.150114 | D | ***1233.593235*** | 617.300256 | 1216.566686 | 608.786981 | 1215.582670 | 608.294973 | 7 |
| 7 | 716.346110 | 358.676693 | | | 698.335545 | 349.671411 | E | 1118.566292 | 559.786784 | 1101.539743 | 551.273510 | 1100.555727 | 550.781501 | 6 |
| 8 | 829.430174 | 415.218725 | | | 811.419609 | 406.213443 | L | 989.523699 | 495.265488 | 972.497150 | 486.752213 | 971.513134 | 486.260205 | 5 |
| 9 | 976.498588 | 488.752932 | | | 958.488023 | 479.747650 | F | ***876.439635*** | 438.723456 | 859.413086 | 430.210181 | 858.429070 | 429.718173 | 4 |
| 10 | 1415.723914 | 708.365595 | 1398.697365 | 699.852321 | 1397.713349 | 699.360312 | Q | ***729.371221*** | 365.189249 | 712.344672 | 356.675974 | 711.360656 | 356.183966 | 3 |
| 11 | 1530.750857 | 765.879067 | 1513.724308 | 757.365792 | 1512.740292 | 756.873784 | D | 290.145895 | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ASSIIDELFQDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.9 | 1703.855240 | 0.007268 | ASSIIDELFQDR |
| 0.3 | 1703.877731 | -0.015223 | AVGMASDIPGLHLPGGGR |

**Mascot:** http://www.matrixscience.com/

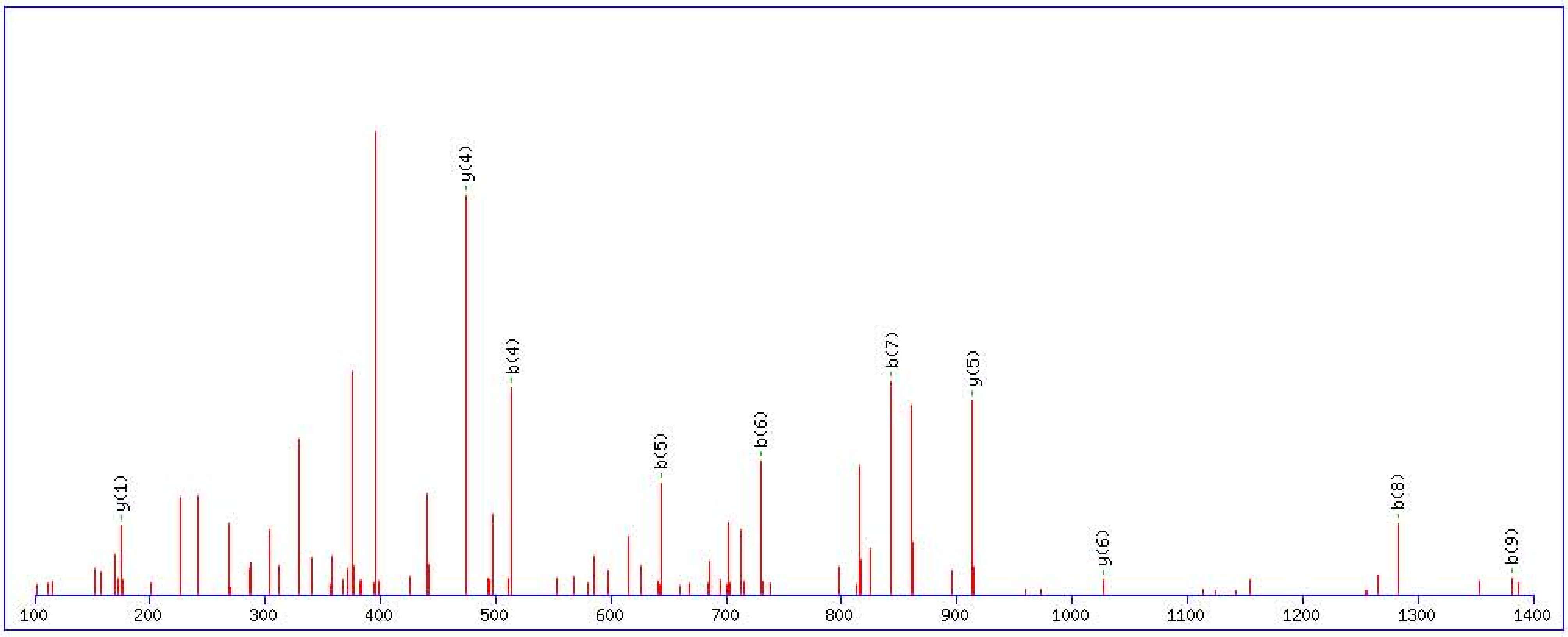
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RELDESLQVAER**
Found in **CLUS_HUMAN**, Clusterin OS=Homo sapiens GN=CLU PE=1 SV=1

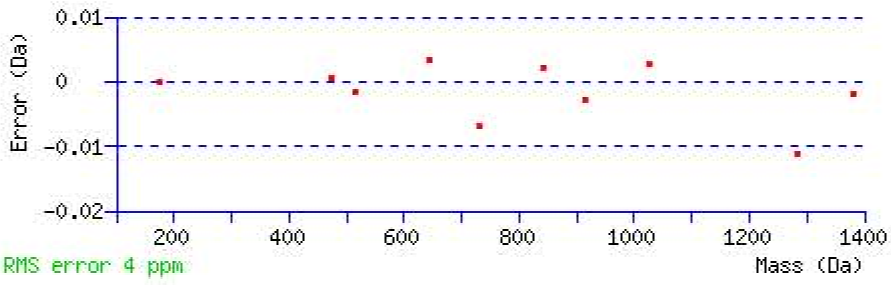
Match to Query 41759: 1754.894262 from(585.972030,3+) rtinseconds(1753) index(34789)
Title: Locus:1.1.1.3030.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

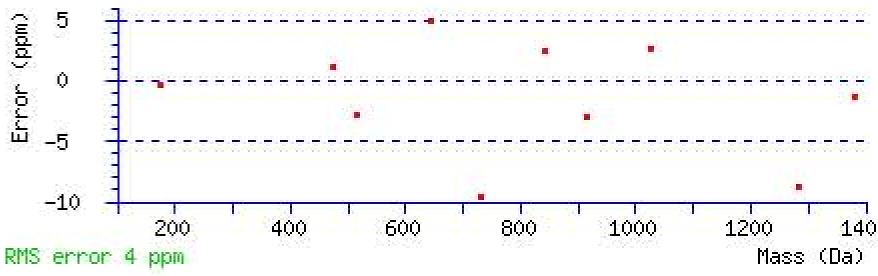
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1754.898483
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q8 : Biotin:Thermo-21345 (Q)
**Ions Score:** 42 **Expect:** 0.00052
**Matches :** 10/128 fragment ions using 13 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 12 |
| 2 | 286.150980 | 143.579128 | 269.124431 | 135.065854 | 268.140415 | 134.573846 | E | 1599.804684 | 800.405980 | 1582.778135 | 791.892706 | 1581.794119 | 791.400698 | 11 |
| 3 | 399.235044 | 200.121160 | 382.208495 | 191.607886 | 381.224479 | 191.115878 | L | 1470.762091 | 735.884684 | 1453.735542 | 727.371409 | 1452.751526 | 726.879401 | 10 |
| 4 | ***514.261987*** | 257.634632 | 497.235438 | 249.121357 | 496.251422 | 248.629349 | D | 1357.678027 | 679.342652 | 1340.651478 | 670.829377 | 1339.667462 | 670.337369 | 9 |
| 5 | ***643.304580*** | 322.155928 | 626.278031 | 313.642654 | 625.294015 | 313.150646 | E | 1242.651084 | 621.829180 | 1225.624535 | 613.315906 | 1224.640519 | 612.823898 | 8 |
| 6 | ***730.336608*** | 365.671942 | 713.310059 | 357.158668 | 712.326043 | 356.666660 | S | 1113.608491 | 557.307884 | 1096.581942 | 548.794609 | 1095.597926 | 548.302601 | 7 |
| 7 | ***843.420672*** | 422.213974 | 826.394123 | 413.700700 | 825.410107 | 413.208692 | L | ***1026.576463*** | 513.791870 | 1009.549914 | 505.278595 | 1008.565898 | 504.786587 | 6 |
| 8 | ***1282.645998*** | 641.826637 | 1265.619449 | 633.313363 | 1264.635433 | 632.821355 | Q | ***913.492399*** | 457.249838 | 896.465850 | 448.736563 | 895.481834 | 448.244555 | 5 |
| 9 | ***1381.714412*** | 691.360844 | 1364.687863 | 682.847570 | 1363.703847 | 682.355562 | V | ***474.267073*** | 237.637175 | 457.240524 | 229.123900 | 456.256508 | 228.631892 | 4 |
| 10 | 1452.751526 | 726.879401 | 1435.724977 | 718.366127 | 1434.740961 | 717.874119 | A | 375.198659 | 188.102968 | 358.172110 | 179.589693 | 357.188094 | 179.097685 | 3 |
| 11 | 1581.794119 | 791.400698 | 1564.767570 | 782.887423 | 1563.783554 | 782.395415 | E | 304.161545 | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RELDESLQVAER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 42.2 | 1754.898483 | -0.004221 | RELDESLQVAER |
| 6.8 | 1754.873306 | 0.020956 | EREQKEIEAMHSLR |
| 4.1 | 1754.880737 | 0.013525 | QQLLACAGVEAER |
| 3.7 | 1754.898483 | -0.004221 | AEAQGKQEVESLR |
| 2.3 | 1754.898483 | -0.004221 | RLEESDVLQEAR |
| 1.8 | 1754.917130 | -0.022868 | LCVTIQEANQLR |
| 1.4 | 1754.898483 | -0.004221 | AEAQGKQEVESLR |
| 0.7 | 1754.896011 | -0.001749 | FCSPHQSLLSIR |
| 0.4 | 1754.898514 | -0.004252 | DQGSPTLSANVSLR |

**Mascot:** http://www.matrixscience.com/

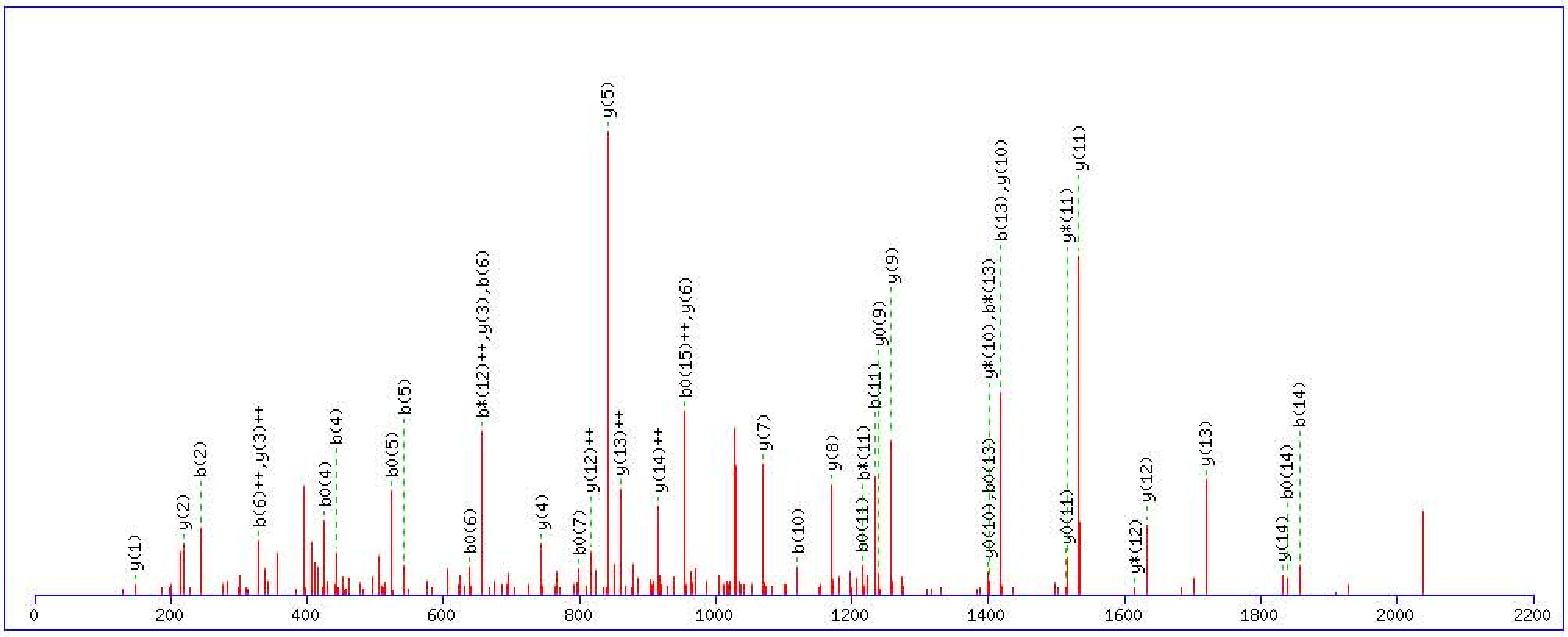
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EILSVDCSTNNPSQAK**
Found in **CLUS_HUMAN**, Clusterin OS=Homo sapiens GN=CLU PE=1 SV=1

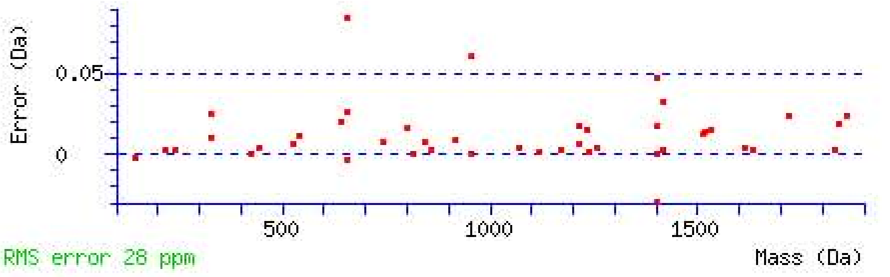
Match to Query 48789: 2073.006368 from(1037.510460,2+) rtinseconds(1835) index(51777)
Title: Locus:1.1.1.1254.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

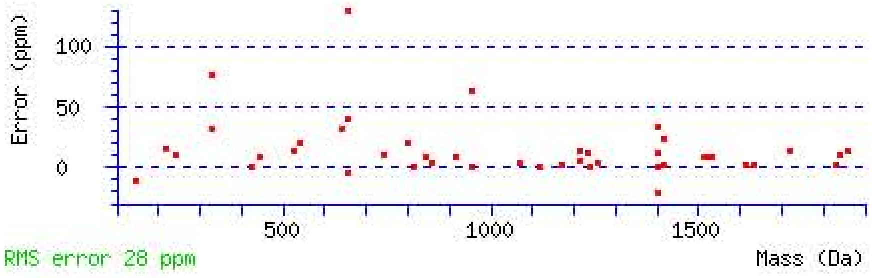
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2072.987061
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q14** : Biotin:Thermo-21345 (Q)
**Ions Score:** 119 **Expect:** 2.5e-011
**Matches** : 44/156 fragment ions using 52 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 16 |
| 2 | **243.133933** | 122.070605 | | | 225.123368 | 113.065322 | I | 1944.951759 | 972.979517 | 1927.925210 | 964.466243 | 1926.941194 | 963.974235 | 15 |
| 3 | 356.217997 | 178.612637 | | | 338.207432 | 169.607354 | L | ***1831.867695*** | 916.437485 | 1814.841146 | 907.924211 | 1813.857130 | 907.432203 | 14 |
| 4 | **443.250025** | 222.128650 | | | 425.239460 | 213.123368 | S | ***1718.783631*** | 859.895454 | 1701.757082 | 851.382179 | 1700.773066 | 850.890171 | 13 |
| 5 | **542.318439** | 271.662858 | | | 524.307874 | 262.657575 | V | ***1631.751603*** | 816.379439 | 1614.725054 | 807.866165 | 1613.741038 | 807.374157 | 12 |
| 6 | **657.345382** | 329.176329 | | | 639.334817 | 320.171046 | D | ***1532.683189*** | 766.845233 | 1515.656640 | 758.331958 | 1514.672624 | 757.839950 | 11 |
| 7 | 817.376031 | 409.191654 | | | 799.365466 | 400.186371 | C | ***1417.656246*** | 709.331761 | 1400.629697 | 700.818487 | 1399.645681 | 700.326479 | 10 |
| 8 | 904.408059 | 452.707668 | | | 886.397494 | 443.702385 | S | ***1257.625597*** | 629.316437 | 1240.599048 | 620.803162 | 1239.615032 | 620.311154 | 9 |
| 9 | 1005.455738 | 503.231507 | | | 987.445173 | 494.226225 | T | ***1170.593569*** | 585.800422 | 1153.567020 | 577.287148 | 1152.583004 | 576.795140 | 8 |
| 10 | **1119.498665** | 560.252971 | 1102.472116 | 551.739696 | 1101.488100 | 551.247688 | N | ***1069.545890*** | 535.276583 | 1052.519341 | 526.763309 | 1051.535325 | 526.271301 | 7 |
| 11 | **1233.541592** | 617.274434 | 1216.515043 | 608.761160 | 1215.531027 | 608.269152 | N | ***955.502963*** | 478.255119 | 938.476414 | 469.741845 | 937.492398 | 469.249837 | 6 |
| 12 | 1330.594356 | 665.800816 | 1313.567807 | 657.287542 | 1312.583791 | 656.795534 | P | ***841.460036*** | 421.233656 | 824.433487 | 412.720381 | 823.449471 | 412.228373 | 5 |
| 13 | **1417.626384** | 709.316830 | 1400.599835 | 700.803556 | 1399.615819 | 700.311548 | S | ***744.407272*** | 372.707274 | 727.380723 | 364.193999 | 726.396707 | 363.701991 | 4 |
| 14 | **1856.851710** | 928.929493 | 1839.825161 | 920.416219 | 1838.841145 | 919.924211 | Q | ***657.375244*** | 329.191260 | 640.348695 | 320.677985 | | | 3 |
| 15 | 1927.888824 | 964.448050 | 1910.862275 | 955.934776 | 1909.878259 | 955.442768 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 16 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EILSVDCSTNNPSQAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 119.1 | 2072.987061 | 0.019307 | EILSVDCSTNNPSQAK |
| 5.7 | 2073.031265 | -0.024897 | YMEHEERPKALNDLGKK |
| 5.0 | 2073.029984 | -0.023616 | LQDDSVETVTSIEQAK |
| 2.5 | 2072.994492 | 0.011876 | ELVKSGVLGADGVCMTFMK |
| 1.0 | 2073.016708 | -0.010340 | EGQIIKVYGDKDADGFYR |
| 0.3 | 2072.994904 | 0.011464 | MQDPNADTEWNDILRKK |

**Mascot:** http://www.matrixscience.com/

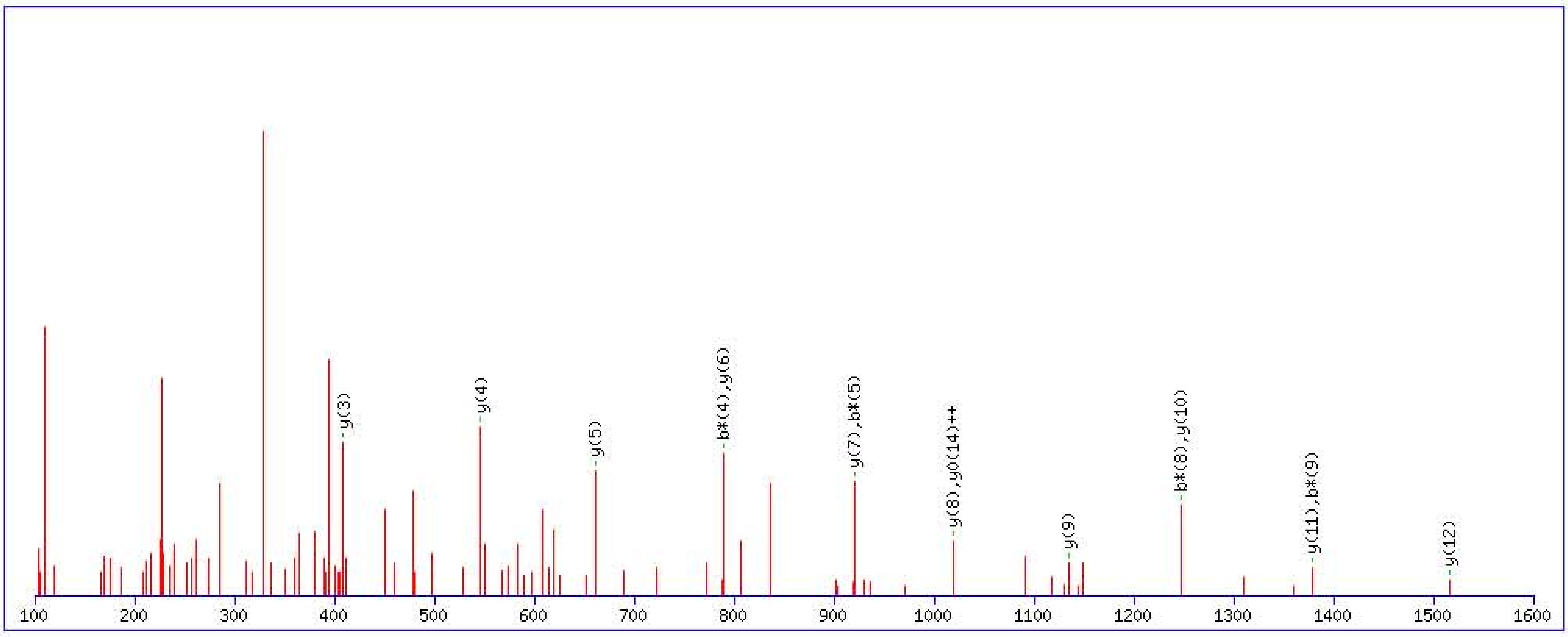
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QQTHMLDVMQDHFSR**
Found in **CLUS_HUMAN**, Clusterin OS=Homo sapiens GN=CLU PE=1 SV=1

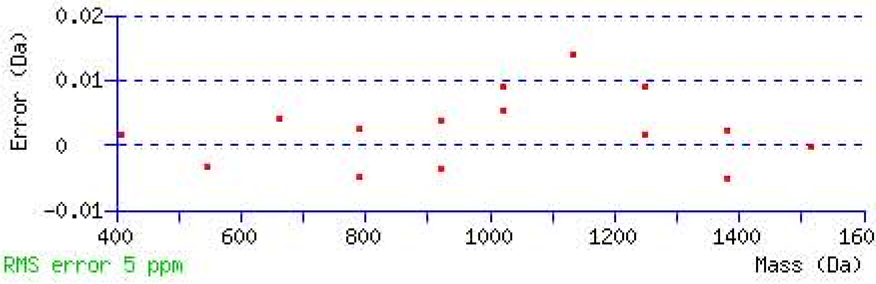
Match to Query 50711: 2183.004096 from(546.758300,4+) rtinseconds(2009) index(36443)
Title: Locus:1.1.1.3119.4 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

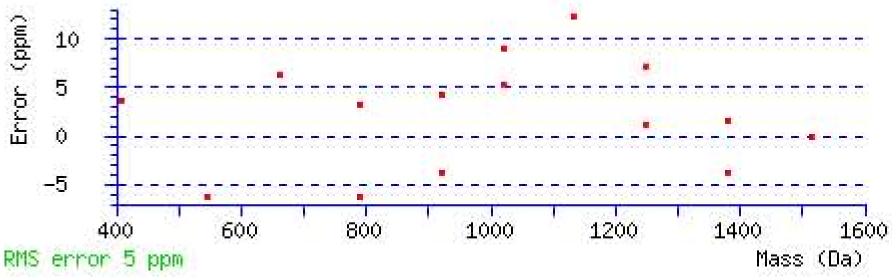
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2183.007446
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 77  Expect: 2.7e-007
Matches : 15/162 fragment ions using 14 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.065854 | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 15 |
| 2 | 568.291180 | 284.649228 | 551.264631 | 276.135954 | | | Q | 2055.956135 | 1028.481705 | 2038.929586 | 1019.968431 | 2037.945570 | 1019.476423 | 14 |
| 3 | 669.338859 | 335.173068 | 652.312310 | 326.659793 | 651.328294 | 326.167785 | T | 1616.730809 | 808.869043 | 1599.704260 | 800.355768 | 1598.720244 | 799.863760 | 13 |
| 4 | 806.397771 | 403.702524 | 789.371222 | 395.189249 | 788.387206 | 394.697241 | H | ***1515.683130*** | 758.345203 | 1498.656581 | 749.831929 | 1497.672565 | 749.339921 | 12 |
| 5 | 937.438256 | 469.222766 | 920.411707 | 460.709492 | 919.427691 | 460.217484 | M | ***1378.624218*** | 689.815747 | 1361.597669 | 681.302473 | 1360.613653 | 680.810465 | 11 |
| 6 | 1050.522320 | 525.764798 | 1033.495771 | 517.251524 | 1032.511755 | 516.759516 | L | ***1247.583733*** | 624.295505 | 1230.557184 | 615.782230 | 1229.573168 | 615.290222 | 10 |
| 7 | 1165.549263 | 583.278270 | 1148.522714 | 574.764995 | 1147.538698 | 574.272987 | D | ***1134.499669*** | 567.753473 | 1117.473120 | 559.240198 | 1116.489104 | 558.748190 | 9 |
| 8 | 1264.617677 | 632.812477 | 1247.591128 | 624.299202 | 1246.607112 | 623.807194 | V | ***1019.472726*** | 510.240001 | 1002.446177 | 501.726727 | 1001.462161 | 501.234719 | 8 |
| 9 | 1395.658162 | 698.332719 | 1378.631613 | 689.819445 | 1377.647597 | 689.327437 | M | ***920.404312*** | 460.705794 | 903.377763 | 452.192520 | 902.393747 | 451.700512 | 7 |
| 10 | 1523.716740 | 762.362008 | 1506.690191 | 753.848734 | 1505.706175 | 753.356726 | Q | ***789.363827*** | 395.185552 | 772.337278 | 386.672277 | 771.353262 | 386.180269 | 6 |
| 11 | 1638.743683 | 819.875480 | 1621.717134 | 811.362205 | 1620.733118 | 810.870197 | D | ***661.305249*** | 331.156263 | 644.278700 | 322.642988 | 643.294684 | 322.150980 | 5 |
| 12 | 1775.802595 | 888.404936 | 1758.776046 | 879.891661 | 1757.792030 | 879.399653 | H | ***546.278306*** | 273.642791 | 529.251757 | 265.129517 | 528.267741 | 264.637509 | 4 |
| 13 | 1922.871009 | 961.939143 | 1905.844460 | 953.425868 | 1904.860444 | 952.933860 | F | ***409.219394*** | 205.113335 | 392.192845 | 196.600061 | 391.208829 | 196.108053 | 3 |
| 14 | 2009.903037 | 1005.455157 | 1992.876488 | 996.941882 | 1991.892472 | 996.449874 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 15 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QQTHMLDVMQDHFSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 76.5 | 2183.007446 | -0.003350 | QQTHMLDVMQDHFSR |
| 76.5 | 2183.007446 | -0.003350 | QQTHMLDVMQDHFSR |

**Mascot:** http://www.matrixscience.com/

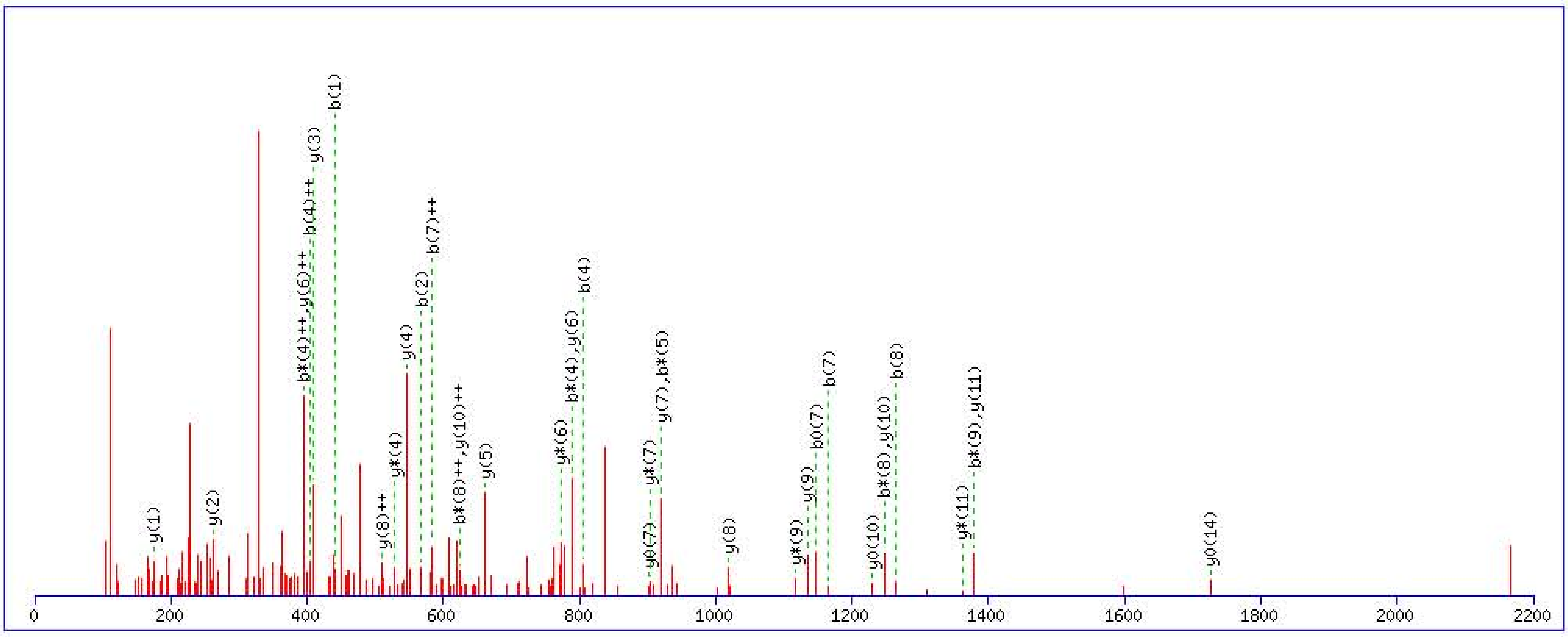
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QQTHMLDVMQDHFSR**
Found in **CLUS_HUMAN**, Clusterin OS=Homo sapiens GN=CLU PE=1 SV=1

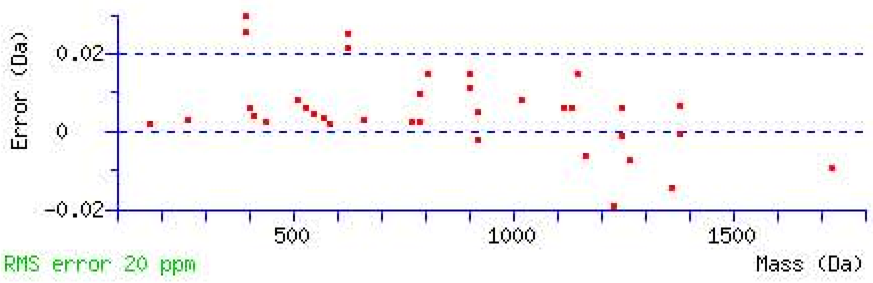
Match to Query 50713: 2183.012176 from(546.760320,4+) rtinseconds(1981) index(21586)
Title: Locus:1.1.1.692.3 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

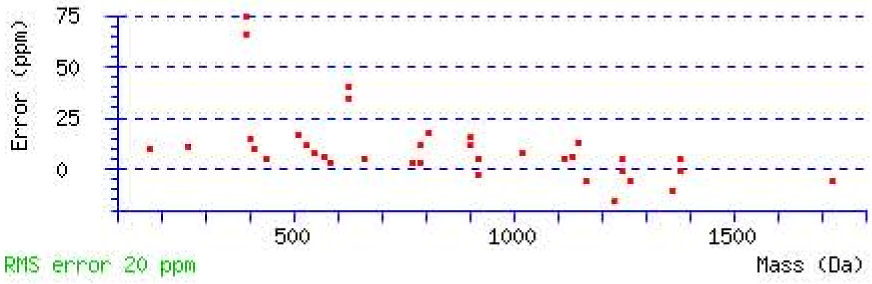
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2183.007446
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1     : Biotin:Thermo-21345 (Q)
Ions Score: 53  Expect: 6.7e-005
Matches : 36/162 fragment ions using 62 most intense peaks   (help)
```

| # | b | b$^{++}$ | b$^{*}$ | b$^{*++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y$^{*}$ | y$^{*++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **440.232602** | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 15 |
| 2 | **568.291180** | 284.649228 | 551.264631 | 276.135954 | | | Q | 1744.789387 | 872.898332 | 1727.762838 | 864.385057 | 1726.778822 | 863.893049 | 14 |
| 3 | 669.338859 | 335.173068 | 652.312310 | 326.659793 | 651.328294 | 326.167785 | T | 1616.730809 | 808.869043 | 1599.704260 | 800.355768 | 1598.720244 | 799.863760 | 13 |
| 4 | **806.397771** | **403.702524** | 789.371222 | 395.189249 | 788.387206 | 394.697241 | H | 1515.683130 | 758.345203 | 1498.656581 | 749.831929 | 1497.672565 | 749.339921 | 12 |
| 5 | 937.438256 | 469.222766 | 920.411707 | 460.709492 | 919.427691 | 460.217484 | M | ***1378.624218*** | 689.815747 | 1361.597669 | 681.302473 | 1360.613653 | 680.810465 | 11 |
| 6 | 1050.522320 | 525.764798 | 1033.495771 | 517.251524 | 1032.511755 | 516.759516 | L | ***1247.583733*** | 624.295505 | 1230.557184 | 615.782230 | 1229.573168 | 615.290222 | 10 |
| 7 | **1165.549263** | **583.278270** | 1148.522714 | 574.764995 | 1147.538698 | 574.272987 | D | ***1134.499669*** | 567.753473 | 1117.473120 | 559.240198 | 1116.489104 | 558.748190 | 9 |
| 8 | **1264.617677** | 632.812477 | 1247.591128 | 624.299202 | 1246.607112 | 623.807194 | V | ***1019.472726*** | 510.240001 | 1002.446177 | 501.726727 | 1001.462161 | 501.234719 | 8 |
| 9 | 1395.658162 | 698.332719 | 1378.631613 | 689.819445 | 1377.647597 | 689.327437 | M | ***920.404312*** | 460.705794 | 903.377763 | 452.192520 | 902.393747 | 451.700512 | 7 |
| 10 | 1523.716740 | 762.362008 | 1506.690191 | 753.848734 | 1505.706175 | 753.356726 | Q | ***789.363827*** | 395.185552 | 772.337278 | 386.672277 | 771.353262 | 386.180269 | 6 |
| 11 | 1638.743683 | 819.875480 | 1621.717134 | 811.362205 | 1620.733118 | 810.870197 | D | ***661.305249*** | 331.156263 | 644.278700 | 322.642988 | 643.294684 | 322.150980 | 5 |
| 12 | 1775.802595 | 888.404936 | 1758.776046 | 879.891661 | 1757.792030 | 879.399653 | H | ***546.278306*** | 273.642791 | 529.251757 | 265.129517 | 528.267741 | 264.637509 | 4 |
| 13 | 1922.871009 | 961.939143 | 1905.844460 | 953.425868 | 1904.860444 | 952.933860 | F | ***409.219394*** | 205.113335 | 392.192845 | 196.600061 | 391.208829 | 196.108053 | 3 |
| 14 | 2009.903037 | 1005.455157 | 1992.876488 | 996.941882 | 1991.892472 | 996.449874 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QQTHMLDVMQDHFSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 53.1 | 2183.007446 | 0.004730 | QQTHMLDVMQDHFSR |
| 50.5 | 2183.007446 | 0.004730 | QQTHMLDVMQDHFSR |

**Mascot:** http://www.matrixscience.com/

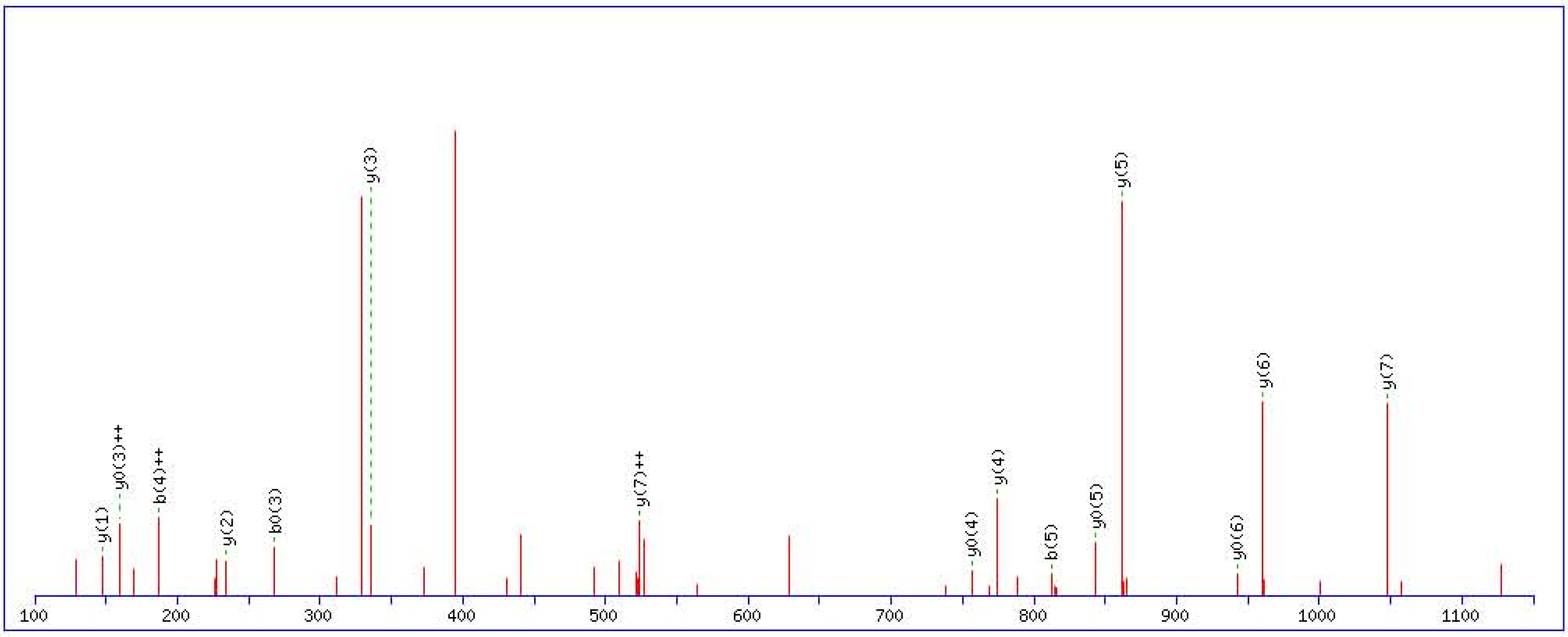
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VSVSQTSK**
Found in **FA9_HUMAN**, Coagulation factor IX OS=Homo sapiens GN=F9 PE=1 SV=2

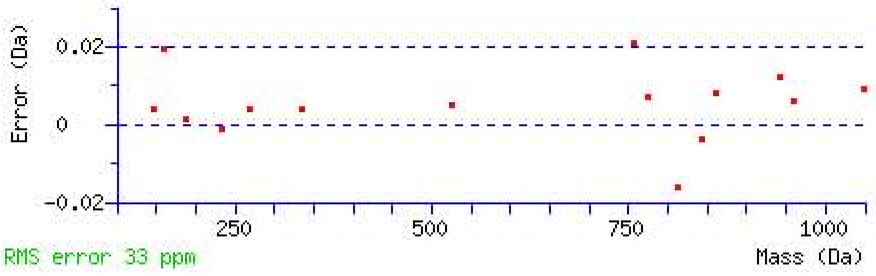
Match to Query 21478: 1145.612008 from(573.813280,2+) rtinseconds(1448) index(49162)
Title: Locus:1.1.1.1119.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

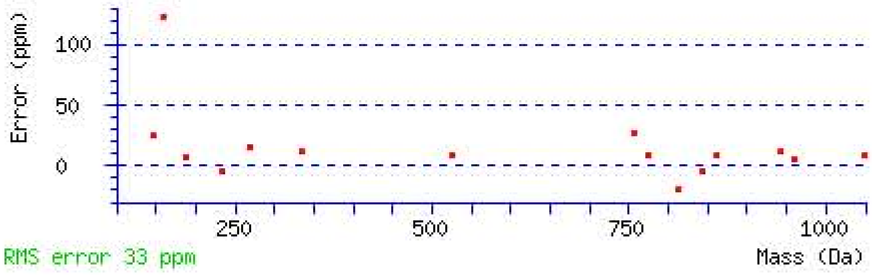
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1150 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1145.611450
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 0.00027
Matches : 16/72 fragment ions using 26 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | **187.107718** | 94.057497 | | | 169.097153 | 85.052214 | S | ***1047.550307*** | 524.278792 | 1030.523758 | 515.765517 | 1029.539742 | 515.273509 | 7 |
| 3 | 286.176132 | 143.591704 | | | 268.165567 | 134.586422 | V | ***960.518279*** | 480.762778 | 943.491730 | 472.249503 | 942.507714 | 471.757495 | 6 |
| 4 | 373.208160 | 187.107718 | | | 355.197595 | 178.102435 | S | ***861.449865*** | 431.228571 | 844.423316 | 422.715296 | 843.439300 | 422.223288 | 5 |
| 5 | **812.433486** | 406.720381 | 795.406937 | 398.207107 | 794.422921 | 397.715099 | Q | ***774.417837*** | 387.712557 | 757.391288 | 379.199282 | 756.407272 | 378.707274 | 4 |
| 6 | 913.481165 | 457.244221 | 896.454616 | 448.730946 | 895.470600 | 448.238938 | T | ***335.192511*** | 168.099893 | 318.165962 | 159.586619 | 317.181946 | 159.094611 | 3 |
| 7 | 1000.513193 | 500.760235 | 983.486644 | 492.246960 | 982.502628 | 491.754952 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062779 | 216.134267 | 108.570771 | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VSVSQTSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.5 | 1145.611450 | 0.000558 | VSVSQTSK |
| 8.0 | 1145.611420 | 0.000588 | KSIMVQSPEK |
| 6.7 | 1145.622650 | -0.010642 | VDNAMSRLLK |
| 3.9 | 1145.629196 | -0.017188 | GEVLGLSSSLGK |
| 3.9 | 1145.629181 | -0.017173 | VAKEVVEASSK |
| 3.7 | 1145.604034 | 0.007974 | STPSSSPSLRK |
| 3.3 | 1145.623337 | -0.011329 | WVDGGKPLFK |
| 2.8 | 1145.608047 | 0.003961 | WTKEKTEPK |
| 2.2 | 1145.622650 | -0.010642 | VSMDLRANLK |
| 1.1 | 1145.629166 | -0.017158 | EDKLEAVKSK |

**Mascot:** http://www.matrixscience.com/

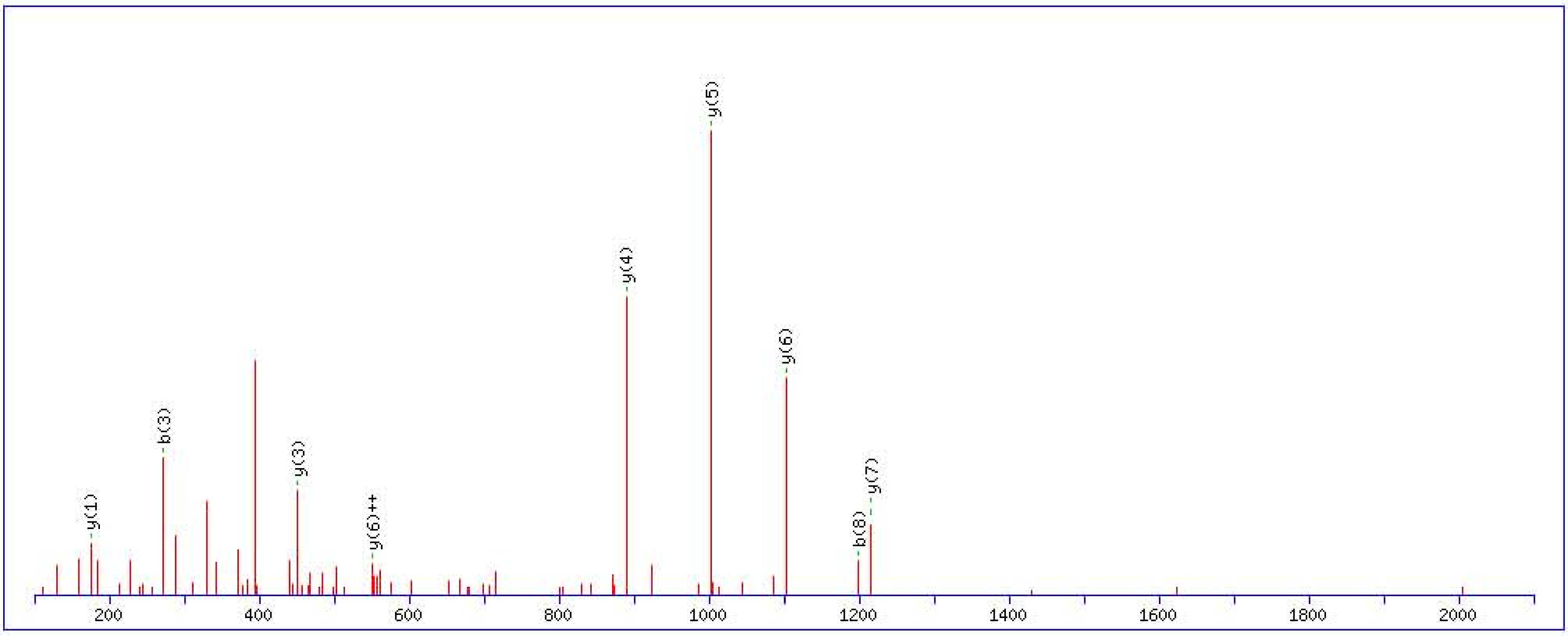
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SALVLQYLR**
Found in **FA9_HUMAN**, Coagulation factor IX OS=Homo sapiens GN=F9 PE=1 SV=2

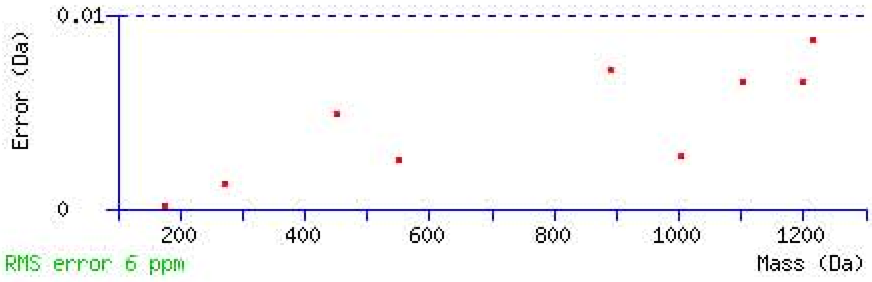
Match to Query 29293: 1372.803028 from(687.408790,2+) rtinseconds(2436) index(55616)
Title: Locus:1.1.1.1463.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

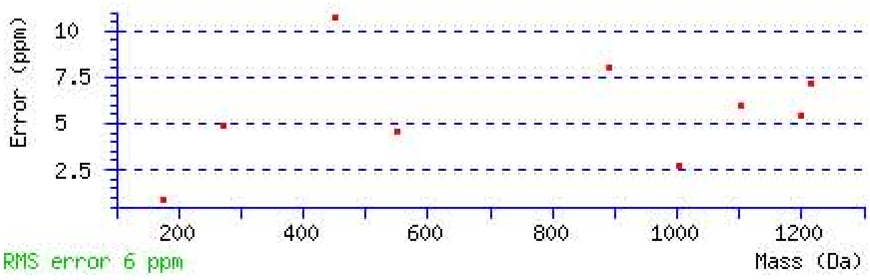
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1372.790054
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 0.00015
Matches : 9/70 fragment ions using 12 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | 9 |
| 2 | 159.076418 | 80.041847 | | | 141.065853 | 71.036564 | A | 1286.765327 | 643.886301 | 1269.738778 | 635.373027 | 8 |
| 3 | **272.160482** | 136.583879 | | | 254.149917 | 127.578597 | L | ***1215.728213*** | 608.367744 | 1198.701664 | 599.854470 | 7 |
| 4 | 371.228896 | 186.118086 | | | 353.218331 | 177.112804 | V | ***1102.644149*** | 551.825713 | 1085.617600 | 543.312438 | 6 |
| 5 | 484.312960 | 242.660118 | | | 466.302395 | 233.654836 | L | ***1003.575735*** | 502.291505 | 986.549186 | 493.778231 | 5 |
| 6 | 923.538286 | 462.272781 | 906.511737 | 453.759507 | 905.527721 | 453.267499 | Q | ***890.491671*** | 445.749473 | 873.465122 | 437.236199 | 4 |
| 7 | 1086.601615 | 543.804446 | 1069.575066 | 535.291171 | 1068.591050 | 534.799163 | Y | ***451.266345*** | 226.136810 | 434.239796 | 217.623536 | 3 |
| 8 | **1199.685679** | 600.346477 | 1182.659130 | 591.833203 | 1181.675114 | 591.341195 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | 1 |





NCBI **BLAST** search of SALVLQYLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.2 | 1372.790054 | 0.012974 | SALVLQYLR |
| 8.1 | 1372.782669 | 0.020359 | LSNKFNSVIPVR |
| 7.0 | 1372.790039 | 0.012989 | KELQILYR |
| 1.1 | 1372.801270 | 0.001758 | ALKMPYRILPR |
| 0.6 | 1372.797913 | 0.005115 | LRLLSGYLWPR |

**Mascot:** http://www.matrixscience.com/

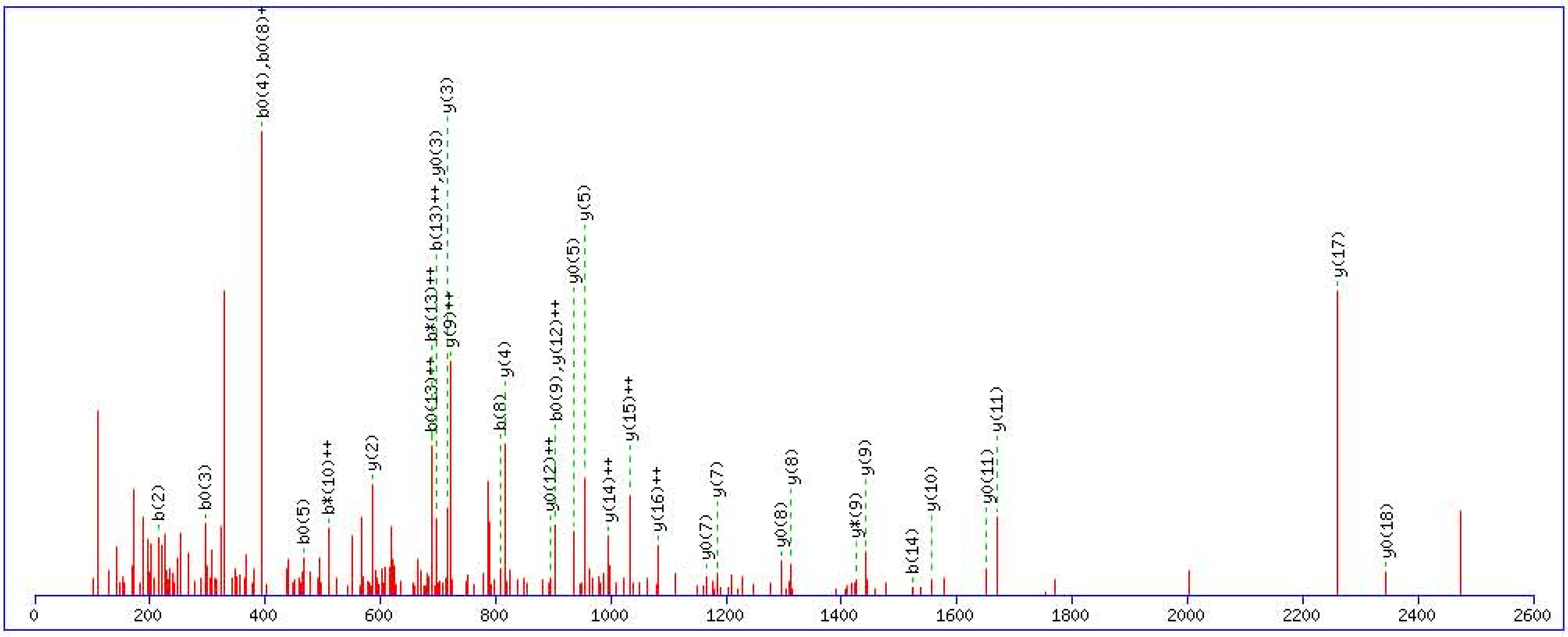
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ITVVAGEHNIEETEHTEQK**
Found in **FA9_HUMAN**, Coagulation factor IX OS=Homo sapiens GN=F9 PE=1 SV=2

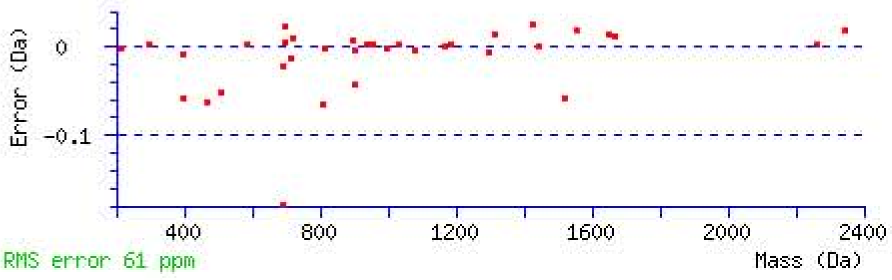
Match to Query 55964: 2474.215896 from(619.561250,4+) rtinseconds(1653) index(50592)
Title: Locus:1.1.1.1191.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

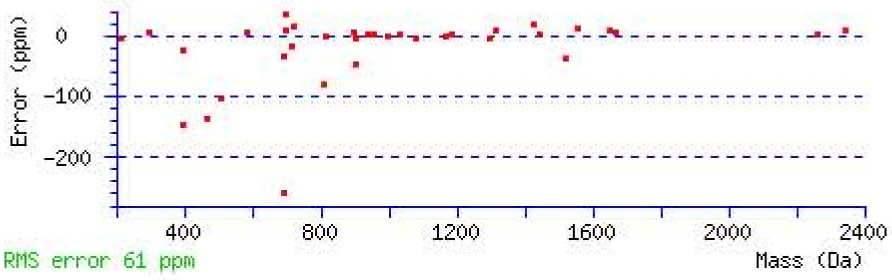
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [0] to [2600] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2474.211121
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18    : Biotin:Thermo-21345 (Q)
Ions Score: 43  Expect: 0.0012
Matches : 35/194 fragment ions using 68 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 19 |
| 2 | **215.139019** | 108.073147 | | | 197.128454 | 99.067865 | T | 2362.134353 | 1181.570814 | 2345.107804 | 1173.057540 | 2344.123788 | 1172.565532 | 18 |
| 3 | 314.207433 | 157.607354 | | | 296.196868 | 148.602072 | V | ***2261.086674*** | 1131.046975 | 2244.060125 | 1122.533700 | 2243.076109 | 1122.041692 | 17 |
| 4 | 413.275847 | 207.141561 | | | 395.265282 | 198.136279 | V | 2162.018260 | 1081.512768 | 2144.991711 | 1072.999493 | 2144.007695 | 1072.507485 | 16 |
| 5 | 484.312961 | 242.660119 | | | 466.302396 | 233.654836 | A | 2062.949846 | 1031.978561 | 2045.923297 | 1023.465286 | 2044.939281 | 1022.973278 | 15 |
| 6 | 541.334425 | 271.170851 | | | 523.323860 | 262.165568 | G | 1991.912732 | 996.460004 | 1974.886183 | 987.946730 | 1973.902167 | 987.454722 | 14 |
| 7 | 670.377018 | 335.692147 | | | 652.366453 | 326.686865 | E | 1934.891268 | 967.949272 | 1917.864719 | 959.435998 | 1916.880703 | 958.943990 | 13 |
| 8 | **807.435930** | 404.221603 | | | 789.425365 | 395.216321 | H | 1805.848675 | 903.427976 | 1788.822126 | 894.914701 | 1787.838110 | 894.422693 | 12 |
| 9 | 921.478857 | 461.243067 | 904.452308 | 452.729792 | 903.468292 | 452.237784 | N | ***1668.789763*** | 834.898520 | 1651.763214 | 826.385245 | 1650.779198 | 825.893237 | 11 |
| 10 | 1034.562921 | 517.785099 | 1017.536372 | 509.271824 | 1016.552356 | 508.779816 | I | ***1554.746836*** | 777.877056 | 1537.720287 | 769.363782 | 1536.736271 | 768.871774 | 10 |
| 11 | 1163.605514 | 582.306395 | 1146.578965 | 573.793121 | 1145.594949 | 573.301113 | E | ***1441.662772*** | 721.335024 | 1424.636223 | 712.821750 | 1423.652207 | 712.329742 | 9 |
| 12 | 1292.648107 | 646.827692 | 1275.621558 | 638.314417 | 1274.637542 | 637.822409 | E | ***1312.620179*** | 656.813728 | 1295.593630 | 648.300453 | 1294.609614 | 647.808445 | 8 |
| 13 | 1393.695786 | 697.351531 | 1376.669237 | 688.838257 | 1375.685221 | 688.346249 | T | ***1183.577586*** | 592.292431 | 1166.551037 | 583.779157 | 1165.567021 | 583.287149 | 7 |
| 14 | **1522.738379** | 761.872828 | 1505.711830 | 753.359553 | 1504.727814 | 752.867545 | E | 1082.529907 | 541.768592 | 1065.503358 | 533.255317 | 1064.519342 | 532.763309 | 6 |
| 15 | 1659.797291 | 830.402284 | 1642.770742 | 821.889009 | 1641.786726 | 821.397001 | H | ***953.487314*** | 477.247295 | 936.460765 | 468.734021 | 935.476749 | 468.242013 | 5 |
| 16 | 1760.844970 | 880.926123 | 1743.818421 | 872.412849 | 1742.834405 | 871.920841 | T | ***816.428402*** | 408.717839 | 799.401853 | 400.204565 | 798.417837 | 399.712557 | 4 |
| 17 | 1889.887563 | 945.447420 | 1872.861014 | 936.934145 | 1871.876998 | 936.442137 | E | ***715.380723*** | 358.194000 | 698.354174 | 349.680725 | 697.370158 | 349.188717 | 3 |
| 18 | 2329.112889 | 1165.060082 | 2312.086340 | 1156.546808 | 2311.102324 | 1156.054800 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 19 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of ITVVAGEHNIEETEHTEQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.3 | 2474.211121 | 0.004775 | ITVVAGEHNIEETEHTEQK |

**Mascot:** http://www.matrixscience.com/

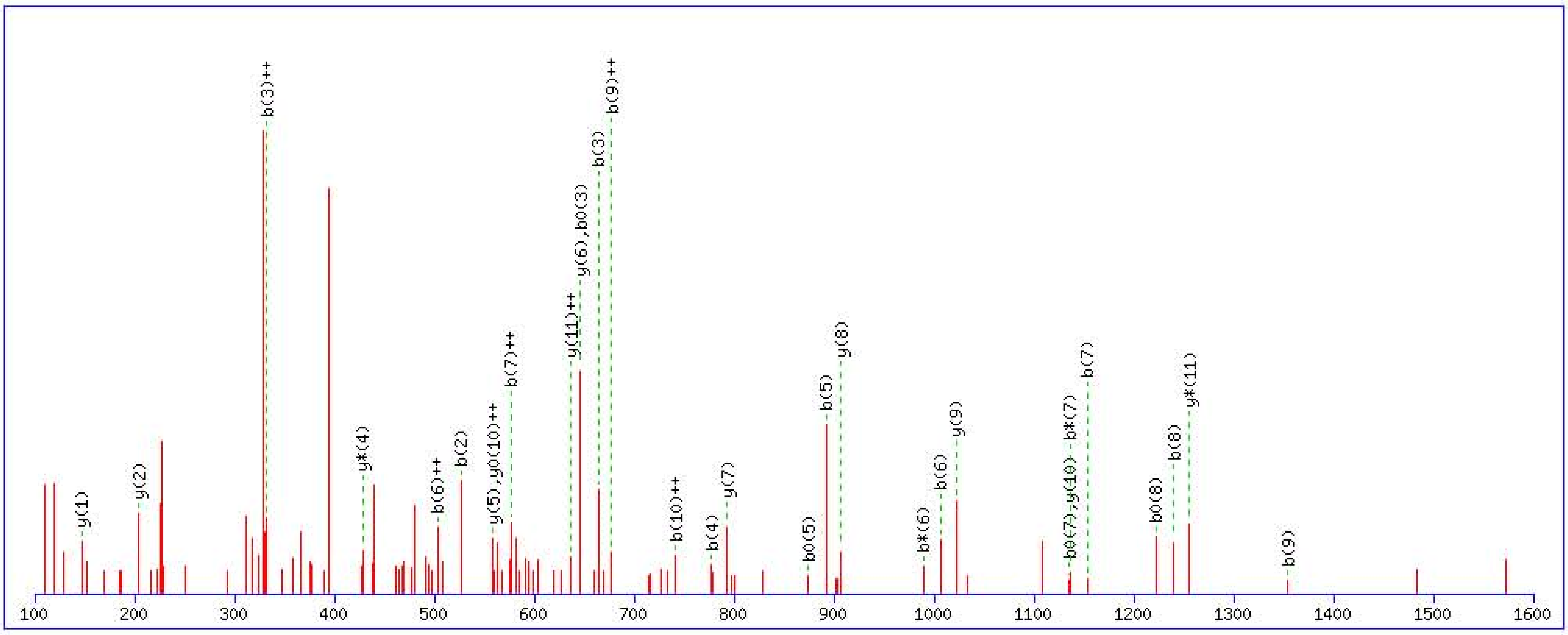
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SQHLDNFSNQIGK**
Found in **FA5_HUMAN**, Coagulation factor V OS=Homo sapiens GN=F5 PE=1 SV=4

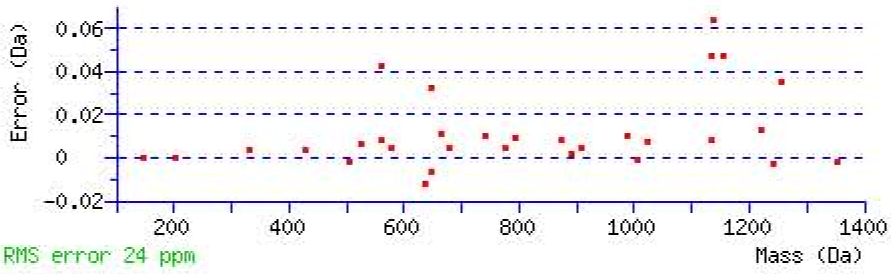
Match to Query 42681: 1797.889002 from(600.303610,3+) rtinseconds(1796) index(51491)
Title: Locus:1.1.1.1241.4 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

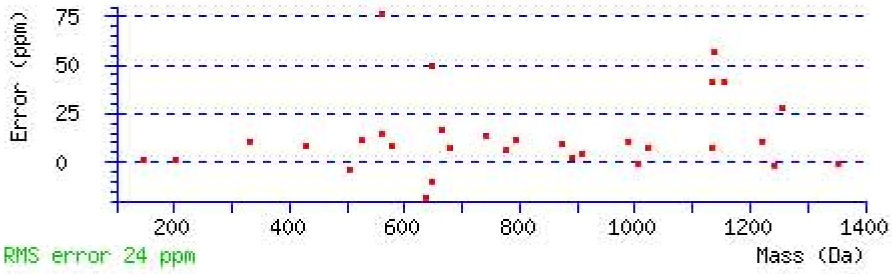
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1797.883194
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 48  Expect: 0.00041
Matches : 31/132 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 13 |
| 2 | ***527.264630*** | 264.135953 | 510.238081 | 255.622679 | 509.254065 | 255.130671 | Q | 1711.858451 | 856.432863 | 1694.831902 | 847.919589 | 1693.847886 | 847.427581 | 12 |
| 3 | ***664.323542*** | **332.665409** | 647.296993 | 324.152134 | 646.312977 | 323.660126 | H | 1272.633125 | 636.820200 | 1255.606576 | 628.306926 | 1254.622560 | 627.814918 | 11 |
| 4 | ***777.407606*** | 389.207441 | 760.381057 | 380.694166 | 759.397041 | 380.202159 | L | ***1135.574213*** | 568.290744 | 1118.547664 | 559.777470 | 1117.563648 | 559.285462 | 10 |
| 5 | ***892.434549*** | 446.720913 | 875.408000 | 438.207638 | 874.423984 | 437.715630 | D | ***1022.490149*** | 511.748712 | 1005.463600 | 503.235438 | 1004.479584 | 502.743430 | 9 |
| 6 | ***1006.477476*** | **503.742376** | 989.450927 | 495.229101 | 988.466911 | 494.737093 | N | ***907.463206*** | 454.235241 | 890.436657 | 445.721966 | 889.452641 | 445.229958 | 8 |
| 7 | ***1153.545890*** | **577.276583** | 1136.519341 | 568.763308 | 1135.535325 | 568.271300 | F | ***793.420279*** | 397.213777 | 776.393730 | 388.700503 | 775.409714 | 388.208495 | 7 |
| 8 | ***1240.577918*** | 620.792597 | 1223.551369 | 612.279323 | 1222.567353 | 611.787314 | S | ***646.351865*** | 323.679570 | 629.325316 | 315.166296 | 628.341300 | 314.674288 | 6 |
| 9 | ***1354.620845*** | **677.814060** | 1337.594296 | 669.300786 | 1336.610280 | 668.808778 | N | ***559.319837*** | 280.163556 | 542.293288 | 271.650282 | | | 5 |
| 10 | 1482.679423 | **741.843349** | 1465.652874 | 733.330075 | 1464.668858 | 732.838067 | Q | 445.276910 | 223.142093 | 428.250361 | 214.628818 | | | 4 |
| 11 | 1595.763487 | 798.385381 | 1578.736938 | 789.872107 | 1577.752922 | 789.380099 | I | 317.218332 | 159.112804 | 300.191783 | 150.599529 | | | 3 |
| 12 | 1652.784951 | 826.896113 | 1635.758402 | 818.382839 | 1634.774386 | 817.890831 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SQHLDNFSNQIGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.6 | 1797.883194 | 0.005808 | SQHLDNFSNQIGK |

**Mascot:** http://www.matrixscience.com/

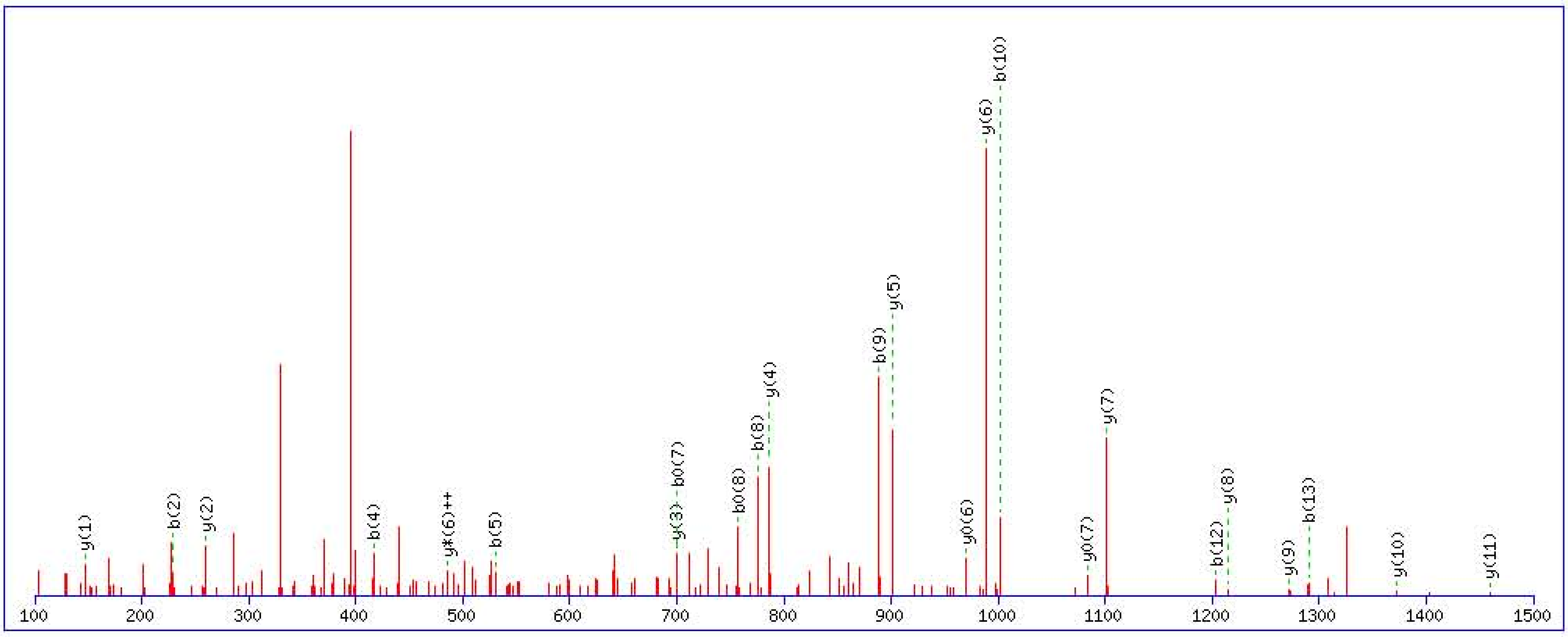
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **MPMGLSTGIISDSQIK**
Found in **FA5_HUMAN**, Coagulation factor V OS=Homo sapiens GN=F5 PE=1 SV=4

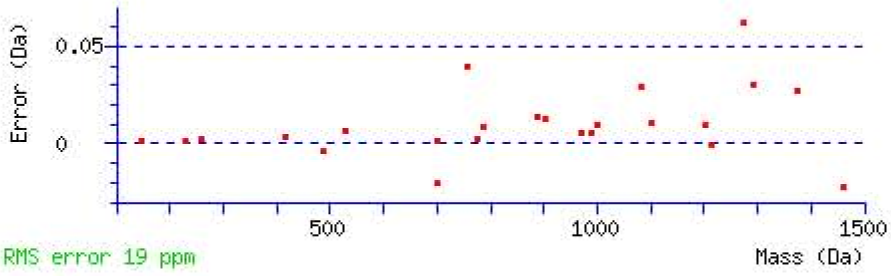
Match to Query 46222: 1988.032482 from(663.684770,3+) rtinseconds(2496) index(55899)
Title: Locus:1.1.1.1484.4 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

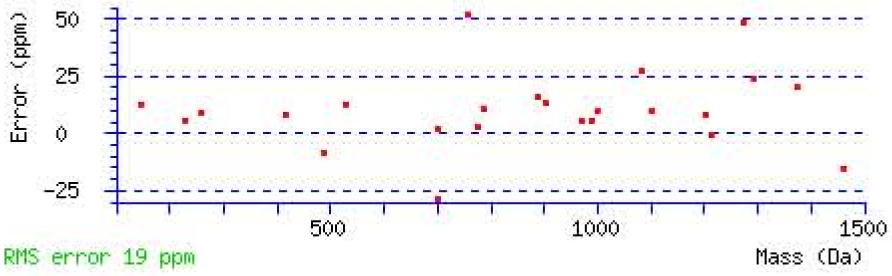
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1988.014465
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 59  Expect: 5.8e-006
Matches : 24/138 fragment ions using 50 most intense peaks   (help)
```

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 16 |
| 2 | **229.100525** | 115.053900 | | | | | P | 1857.981269 | 929.494273 | 1840.954720 | 920.980998 | 1839.970704 | 920.488990 | 15 |
| 3 | 360.141010 | 180.574143 | | | | | M | 1760.928505 | 880.967891 | 1743.901956 | 872.454616 | 1742.917940 | 871.962608 | 14 |
| 4 | **417.162474** | 209.084875 | | | | | G | 1629.888020 | 815.447648 | 1612.861471 | 806.934374 | 1611.877455 | 806.442366 | 13 |
| 5 | **530.246538** | 265.626907 | | | | | L | 1572.866556 | 786.936916 | 1555.840007 | 778.423642 | 1554.855991 | 777.931634 | 12 |
| 6 | 617.278566 | 309.142921 | | | 599.268001 | 300.137638 | S | ***1459.782492*** | 730.394884 | 1442.755943 | 721.881610 | 1441.771927 | 721.389602 | 11 |
| 7 | 718.326245 | 359.666761 | | | 700.315680 | 350.661478 | T | ***1372.750464*** | 686.878870 | 1355.723915 | 678.365596 | 1354.739899 | 677.873588 | 10 |
| 8 | **775.347709** | 388.177493 | | | 757.337144 | 379.172210 | G | ***1271.702785*** | 636.355031 | 1254.676236 | 627.841756 | 1253.692220 | 627.349748 | 9 |
| 9 | **888.431773** | 444.719525 | | | 870.421208 | 435.714242 | I | ***1214.681321*** | 607.844299 | 1197.654772 | 599.331024 | 1196.670756 | 598.839016 | 8 |
| 10 | **1001.515837** | 501.261557 | | | 983.505272 | 492.256274 | I | ***1101.597257*** | 551.302267 | 1084.570708 | 542.788992 | 1083.586692 | 542.296984 | 7 |
| 11 | 1088.547865 | 544.777571 | | | 1070.537300 | 535.772288 | S | ***988.513193*** | 494.760235 | 971.486644 | 486.246960 | 970.502628 | 485.754952 | 6 |
| 12 | **1203.574808** | 602.291042 | | | 1185.564243 | 593.285760 | D | ***901.481165*** | 451.244221 | 884.454616 | 442.730946 | 883.470600 | 442.238938 | 5 |
| 13 | **1290.606836** | 645.807056 | | | 1272.596271 | 636.801774 | S | ***786.454222*** | 393.730749 | 769.427673 | 385.217475 | 768.443657 | 384.725467 | 4 |
| 14 | 1729.832162 | 865.419719 | 1712.805613 | 856.906445 | 1711.821597 | 856.414437 | Q | ***699.422194*** | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 15 | 1842.916226 | 921.961751 | 1825.889677 | 913.448477 | 1824.905661 | 912.956469 | I | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 16 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of MPMGLSTGIISDSQIK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 59.1 | 1988.014465 | 0.018017 | MPMGLSTGIISDSQIK |
| 3.3 | 1988.051331 | -0.018849 | MTHKLVFLEDGTSQVRK |

**Mascot:** http://www.matrixscience.com/

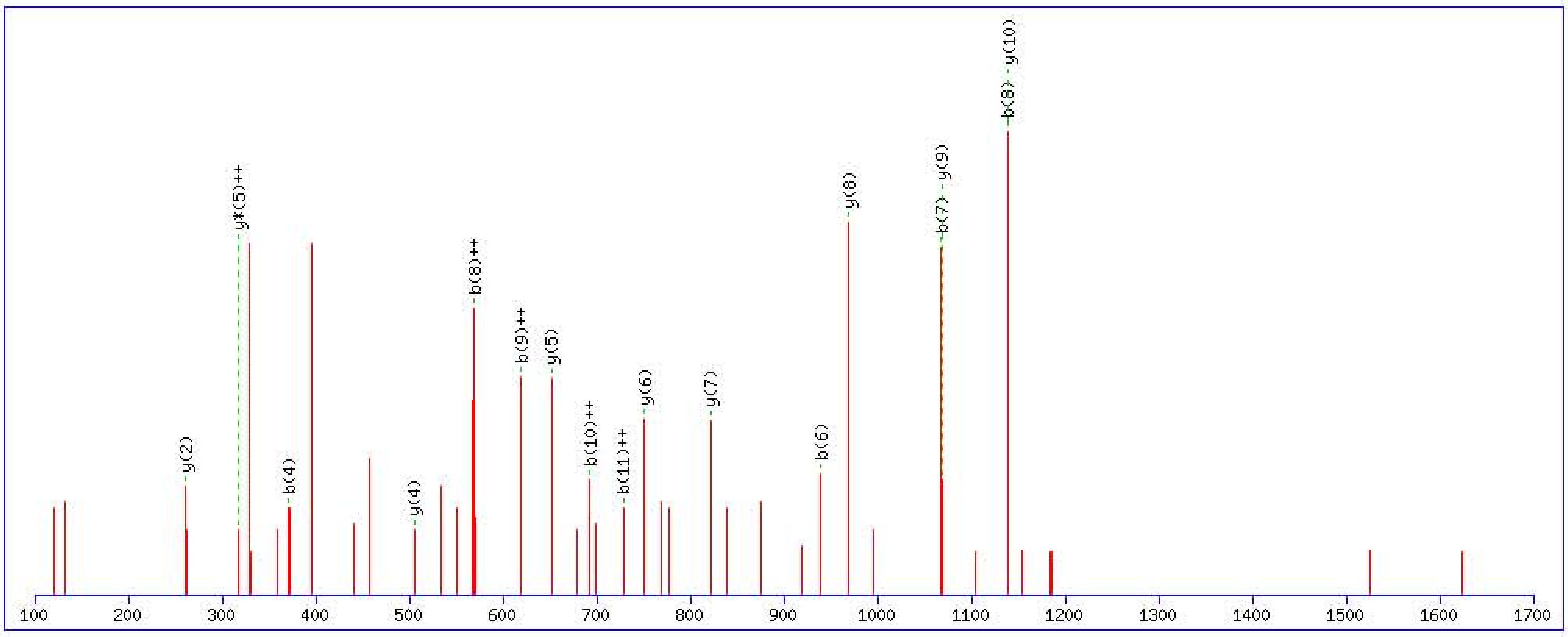
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AADIEQQAVFAVFDENK**
Found in **FA5_HUMAN**, Coagulation factor V OS=Homo sapiens GN=F5 PE=1 SV=4

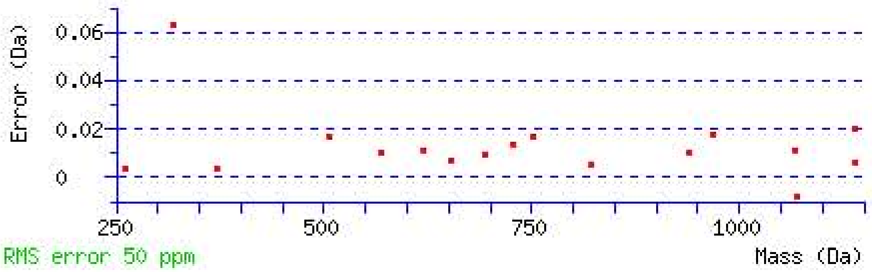
Match to Query 51132: 2205.098172 from(736.040000,3+) rtinseconds(2786) index(57735)
Title: Locus:1.1.1.1584.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

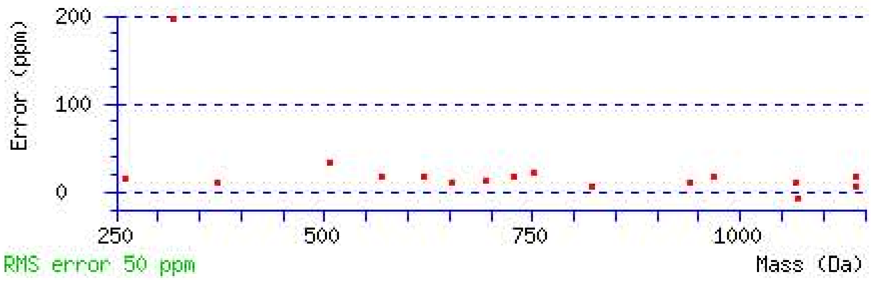
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2205.077591
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 38 **Expect:** 0.00039
**Matches :** 17/174 fragment ions using 34 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 17 |
| 2 | 143.081504 | 72.044390 | | | | | A | 2135.047769 | 1068.027522 | 2118.021220 | 1059.514248 | 2117.037204 | 1059.022240 | 16 |
| 3 | 258.108447 | 129.557862 | | | 240.097882 | 120.552579 | D | 2064.010655 | 1032.508965 | 2046.984106 | 1023.995691 | 2046.000090 | 1023.503683 | 15 |
| 4 | **371.192511** | 186.099894 | | | 353.181946 | 177.094611 | I | 1948.983712 | 974.995494 | 1931.957163 | 966.482220 | 1930.973147 | 965.990212 | 14 |
| 5 | 500.235104 | 250.621190 | | | 482.224539 | 241.615908 | E | 1835.899648 | 918.453462 | 1818.873099 | 909.940188 | 1817.889083 | 909.448180 | 13 |
| 6 | **939.460430** | 470.233853 | 922.433881 | 461.720579 | 921.449865 | 461.228571 | Q | 1706.857055 | 853.932166 | 1689.830506 | 845.418891 | 1688.846490 | 844.926883 | 12 |
| 7 | **1067.519008** | 534.263142 | 1050.492459 | 525.749868 | 1049.508443 | 525.257860 | Q | 1267.631729 | 634.319503 | 1250.605180 | 625.806228 | 1249.621164 | 625.314220 | 11 |
| 8 | **1138.556122** | **569.781699** | 1121.529573 | 561.268425 | 1120.545557 | 560.776416 | A | ***1139.573151*** | 570.290214 | 1122.546602 | 561.776939 | 1121.562586 | 561.284931 | 10 |
| 9 | 1237.624536 | **619.315906** | 1220.597987 | 610.802632 | 1219.613971 | 610.310624 | V | ***1068.536037*** | 534.771657 | 1051.509488 | 526.258382 | 1050.525472 | 525.766374 | 9 |
| 10 | 1384.692950 | **692.850113** | 1367.666401 | 684.336839 | 1366.682385 | 683.844831 | F | ***969.467623*** | 485.237450 | 952.441074 | 476.724175 | 951.457058 | 476.232167 | 8 |
| 11 | 1455.730064 | **728.368670** | 1438.703515 | 719.855396 | 1437.719499 | 719.363388 | A | ***822.399209*** | 411.703243 | 805.372660 | 403.189968 | 804.388644 | 402.697960 | 7 |
| 12 | 1554.798478 | 777.902877 | 1537.771929 | 769.389603 | 1536.787913 | 768.897595 | V | ***751.362095*** | 376.184686 | 734.335546 | 367.671411 | 733.351530 | 367.179403 | 6 |
| 13 | 1701.866892 | 851.437084 | 1684.840343 | 842.923810 | 1683.856327 | 842.431802 | F | ***652.293681*** | 326.650479 | 635.267132 | 318.137204 | 634.283116 | 317.645196 | 5 |
| 14 | 1816.893835 | 908.950556 | 1799.867286 | 900.437281 | 1798.883270 | 899.945273 | D | ***505.225267*** | 253.116271 | 488.198718 | 244.602997 | 487.214702 | 244.110989 | 4 |
| 15 | 1945.936428 | 973.471852 | 1928.909879 | 964.958578 | 1927.925863 | 964.466570 | E | 390.198324 | 195.602800 | 373.171775 | 187.089525 | 372.187759 | 186.597517 | 3 |
| 16 | 2059.979355 | 1030.493315 | 2042.952806 | 1021.980041 | 2041.968790 | 1021.488033 | N | ***261.155731*** | 131.081503 | 244.129182 | 122.568229 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AADIEQQAVFAVFDENK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.3 | 2205.077591 | 0.020581 | AADIEQQAVFAVFDENK |
| 36.6 | 2205.077591 | 0.020581 | AADIEQQAVFAVFDENK |
| 1.9 | 2205.129929 | -0.031757 | YPGRNGAQMMVHIVFKVAR |
| 0.8 | 2205.107452 | -0.009280 | TNLQFMGQAFKSIHEK |

**Mascot:** http://www.matrixscience.com/

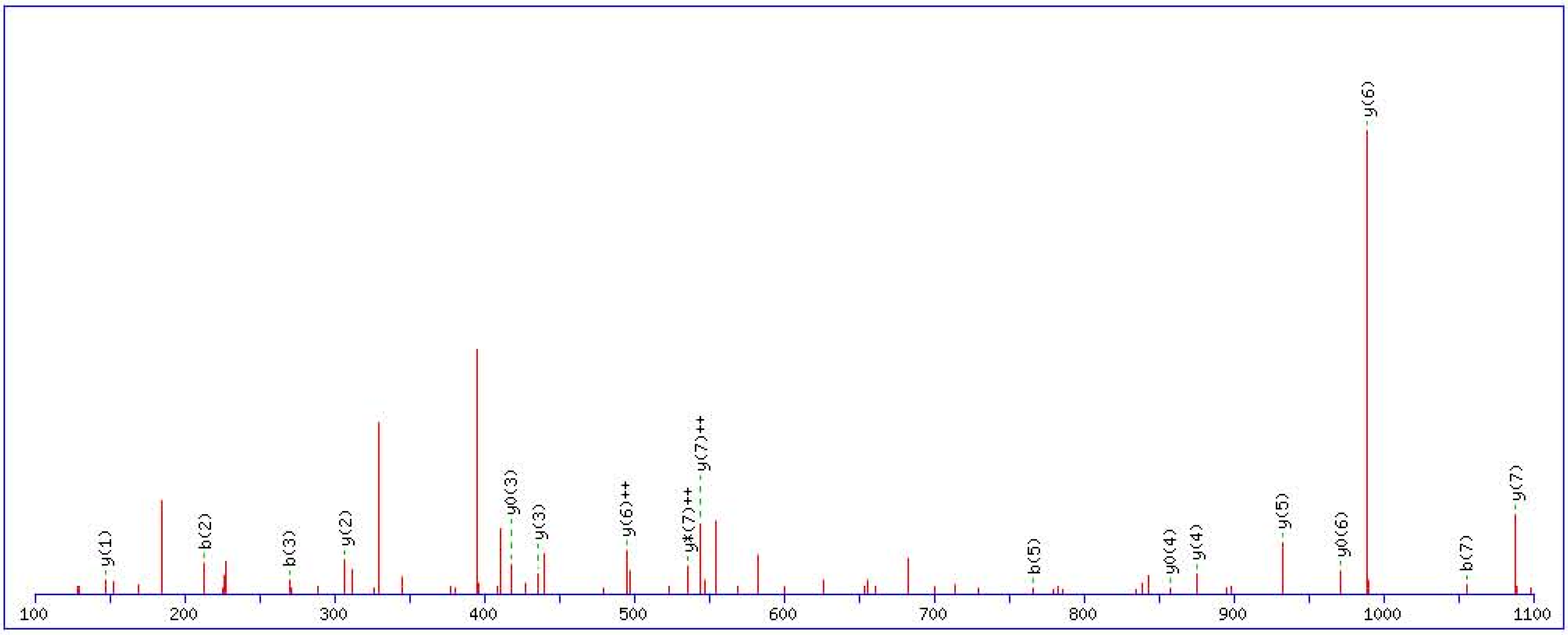
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **IVGGQECK**
Found in **FA10_HUMAN**, Coagulation factor X OS=Homo sapiens GN=F10 PE=1 SV=2

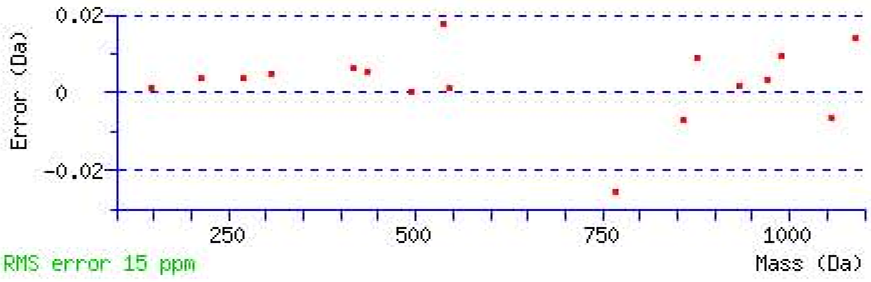
Match to Query 23316: 1200.600788 from(601.307670,2+) rtinseconds(1450) index(49182)
Title: Locus:1.1.1.1120.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

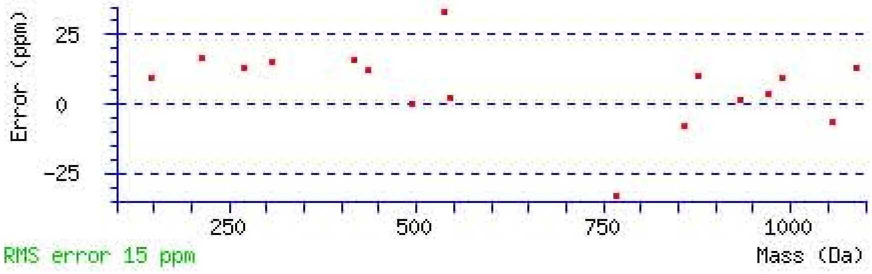
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1200.599503
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q5** : Biotin:Thermo-21345 (Q)
**Ions Score:** 30 **Expect:** 0.0039
**Matches :** 17/62 fragment ions using 48 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 8 |
| 2 | **213.159754** | 107.083515 | | | | | V | ***1088.522714*** | 544.764995 | 1071.496165 | 536.251721 | 1070.512149 | 535.759713 | 7 |
| 3 | **270.181218** | 135.594247 | | | | | G | ***989.454300*** | 495.230788 | 972.427751 | 486.717514 | 971.443735 | 486.225506 | 6 |
| 4 | 327.202682 | 164.104979 | | | | | G | ***932.432836*** | 466.720056 | 915.406287 | 458.206782 | 914.422271 | 457.714774 | 5 |
| 5 | **766.428008** | 383.717642 | 749.401459 | 375.204368 | | | Q | ***875.411372*** | 438.209324 | 858.384823 | 429.696050 | 857.400807 | 429.204042 | 4 |
| 6 | 895.470601 | 448.238939 | 878.444052 | 439.725664 | 877.460036 | 439.233656 | E | ***436.186046*** | 218.596661 | 419.159497 | 210.083386 | 418.175481 | 209.591378 | 3 |
| 7 | **1055.501250** | 528.254263 | 1038.474701 | 519.740989 | 1037.490685 | 519.248981 | C | ***307.143453*** | 154.075364 | 290.116904 | 145.562090 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IVGGQECK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.7 | 1200.599503 | 0.001285 | IVGGQECK |
| 3.7 | 1200.598587 | 0.002201 | ILADLEEENR |
| 3.3 | 1200.599503 | 0.001285 | LIQGDGCK |
| 0.5 | 1200.596100 | 0.004688 | LVKYMYDNR |
| 0.1 | 1200.599487 | 0.001301 | LLNDQCK |

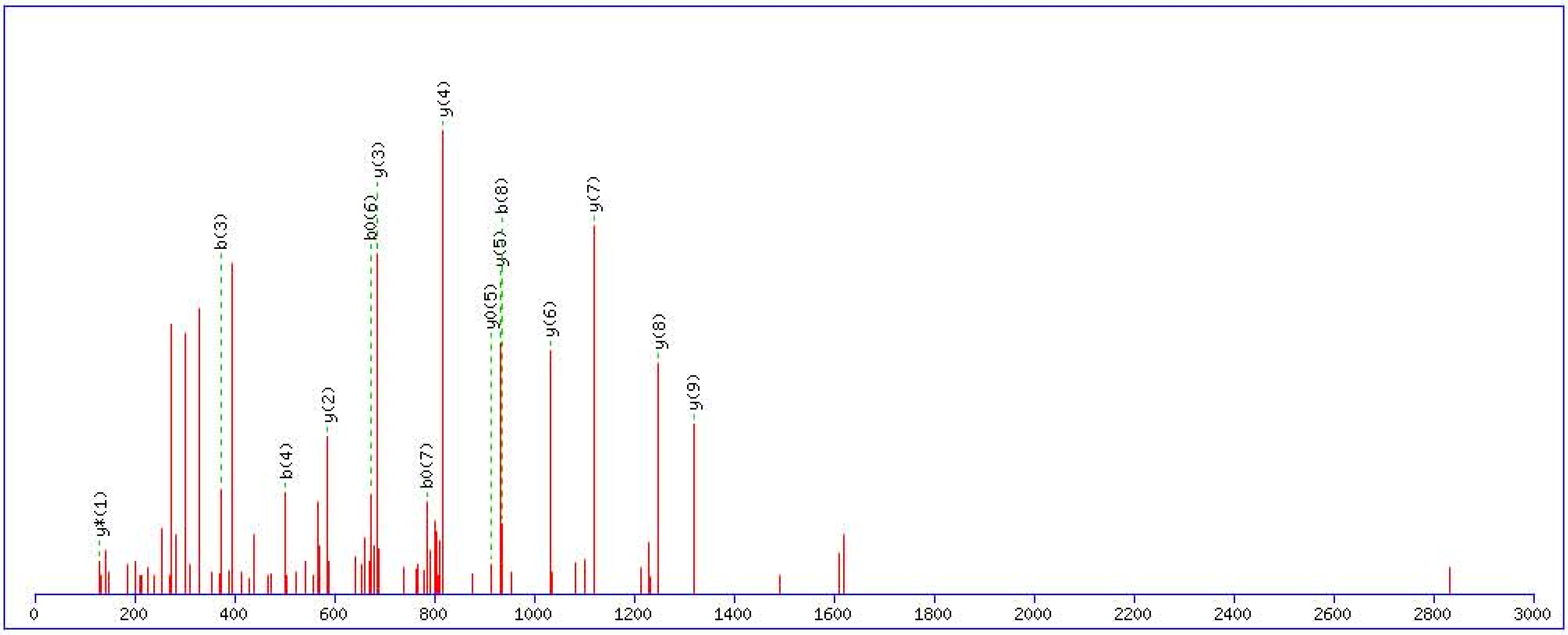
# {MATRIX}{SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DWAESTLMTQK**
Found in **FA10_HUMAN**, Coagulation factor X OS=Homo sapiens GN=F10 PE=1 SV=2

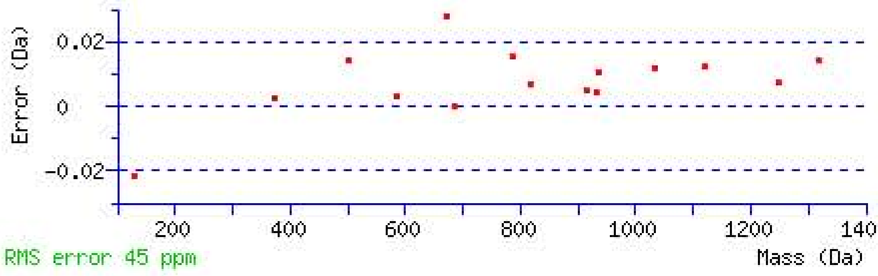
Match to Query 37931: 1619.779988 from(810.897270,2+) rtinseconds(2304) index(54875)
Title: Locus:1.1.1.1417.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

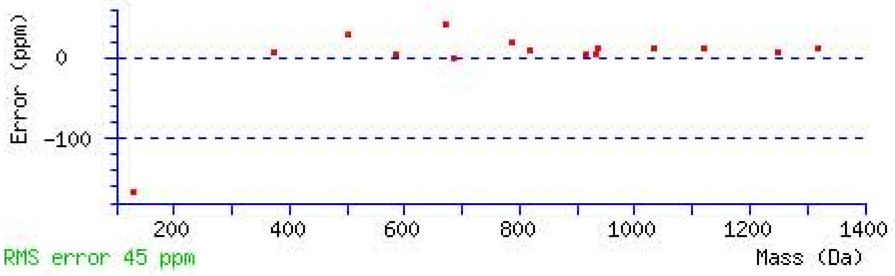
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1619.768738
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 52  Expect: 0.00012
Matches : 15/98 fragment ions using 25 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 11 |
| 2 | 302.113532 | 151.560404 | | | 284.102967 | 142.555122 | W | 1505.749085 | 753.378180 | 1488.722536 | 744.864906 | 1487.738520 | 744.372898 | 10 |
| 3 | **373.150646** | 187.078961 | | | 355.140081 | 178.073679 | A | ***1319.669772*** | 660.338524 | 1302.643223 | 651.825250 | 1301.659207 | 651.333241 | 9 |
| 4 | **502.193239** | 251.600258 | | | 484.182674 | 242.594975 | E | ***1248.632658*** | 624.819967 | 1231.606109 | 616.306693 | 1230.622093 | 615.814685 | 8 |
| 5 | 589.225267 | 295.116272 | | | 571.214702 | 286.110989 | S | ***1119.590065*** | 560.298671 | 1102.563516 | 551.785396 | 1101.579500 | 551.293388 | 7 |
| 6 | 690.272946 | 345.640111 | | | 672.262381 | 336.634829 | T | ***1032.558037*** | 516.782657 | 1015.531488 | 508.269382 | 1014.547472 | 507.777374 | 6 |
| 7 | 803.357010 | 402.182143 | | | 785.346445 | 393.176861 | L | ***931.510358*** | 466.258817 | 914.483809 | 457.745543 | 913.499793 | 457.253535 | 5 |
| 8 | **934.397495** | 467.702386 | | | 916.386930 | 458.697103 | M | ***818.426294*** | 409.716785 | 801.399745 | 401.203510 | 800.415729 | 400.711502 | 4 |
| 9 | 1035.445174 | 518.226225 | | | 1017.434609 | 509.220942 | T | ***687.385809*** | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 10 | 1474.670500 | 737.838888 | 1457.643951 | 729.325614 | 1456.659935 | 728.833605 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 11 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of DWAESTLMTQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.0 | 1619.768738 | 0.011250 | DWAESTLMTQK |

**Mascot:** http://www.matrixscience.com/

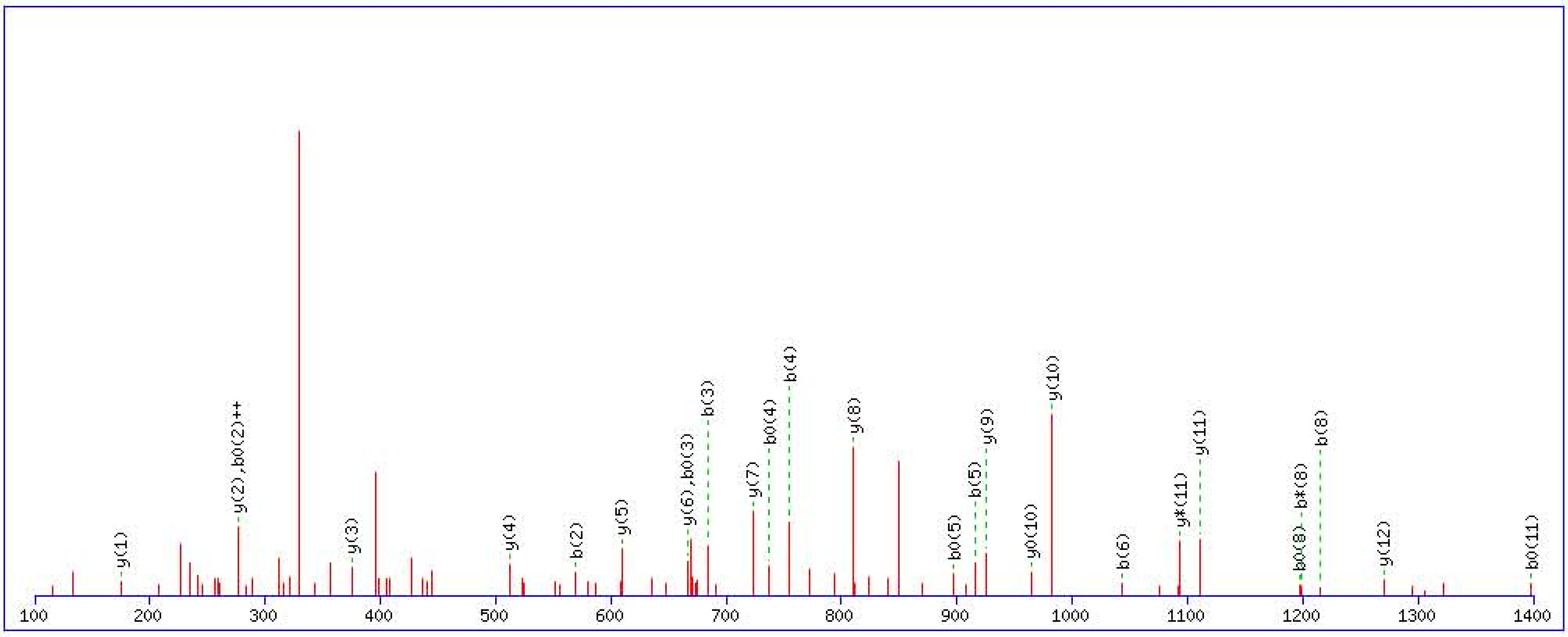
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QEDACQGDSGGPHVTR**
Found in **FA10_HUMAN**, Coagulation factor X OS=Homo sapiens GN=F10 PE=1 SV=2

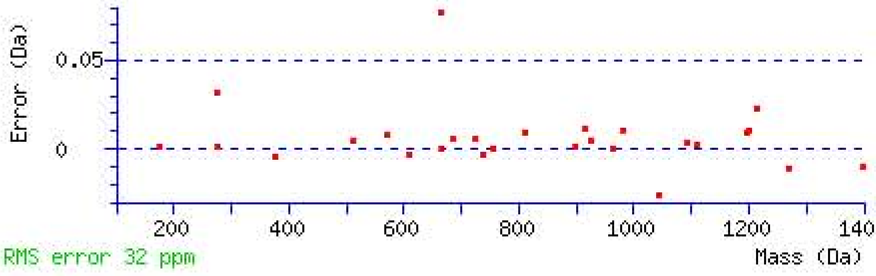
Match to Query 47758: 2023.888212 from(675.636680,3+) rtinseconds(1339) index(48484)
Title: Locus:1.1.1.1081.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

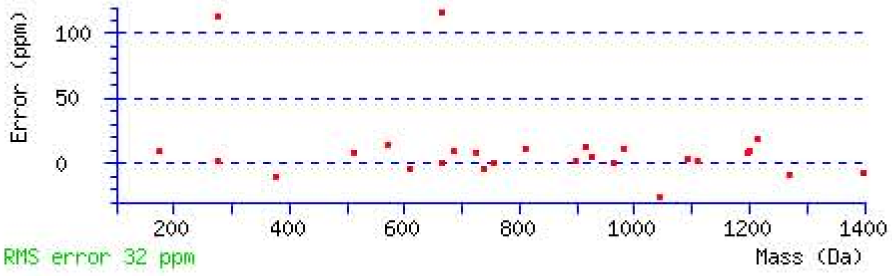
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2023.884033
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q1** : Biotin:Thermo-21345 (Q)
**Ions Score:** 71 **Expect:** 4.4e-007
**Matches :** 27/176 fragment ions using 48 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 16 |
| 2 | **569.275195** | 285.141236 | 552.248646 | 276.627961 | 551.264630 | 276.135953 | E | 1585.665961 | 793.336618 | 1568.639412 | 784.823344 | 1567.655396 | 784.331336 | 15 |
| 3 | **684.302138** | 342.654707 | 667.275589 | 334.141433 | 666.291573 | 333.649425 | D | 1456.623368 | 728.815322 | 1439.596819 | 720.302047 | 1438.612803 | 719.810039 | 14 |
| 4 | **755.339252** | 378.173264 | 738.312703 | 369.659989 | 737.328687 | 369.167982 | A | 1341.596425 | 671.301851 | 1324.569876 | 662.788576 | 1323.585860 | 662.296568 | 13 |
| 5 | **915.369901** | 458.188589 | 898.343352 | 449.675314 | 897.359336 | 449.183306 | C | ***1270.559311*** | 635.783294 | 1253.532762 | 627.270019 | 1252.548746 | 626.778011 | 12 |
| 6 | **1043.428479** | 522.217877 | 1026.401930 | 513.704603 | 1025.417914 | 513.212595 | Q | ***1110.528662*** | 555.767969 | 1093.502113 | 547.254695 | 1092.518097 | 546.762686 | 11 |
| 7 | 1100.449943 | 550.728609 | 1083.423394 | 542.215335 | 1082.439378 | 541.723327 | G | ***982.470084*** | 491.738680 | 965.443535 | 483.225406 | 964.459519 | 482.733398 | 10 |
| 8 | **1215.476886** | 608.242081 | 1198.450337 | 599.728807 | 1197.466321 | 599.236798 | D | ***925.448620*** | 463.227948 | 908.422071 | 454.714674 | 907.438055 | 454.222666 | 9 |
| 9 | 1302.508914 | 651.758095 | 1285.482365 | 643.244821 | 1284.498349 | 642.752813 | S | ***810.421677*** | 405.714477 | 793.395128 | 397.201202 | 792.411112 | 396.709194 | 8 |
| 10 | 1359.530378 | 680.268827 | 1342.503829 | 671.755553 | 1341.519813 | 671.263544 | G | ***723.389649*** | 362.198463 | 706.363100 | 353.685188 | 705.379084 | 353.193180 | 7 |
| 11 | 1416.551842 | 708.779559 | 1399.525293 | 700.266284 | 1398.541277 | 699.774276 | G | ***666.368185*** | 333.687731 | 649.341636 | 325.174456 | 648.357620 | 324.682448 | 6 |
| 12 | 1513.604606 | 757.305941 | 1496.578057 | 748.792667 | 1495.594041 | 748.300658 | P | ***609.346721*** | 305.176999 | 592.320172 | 296.663724 | 591.336156 | 296.171716 | 5 |
| 13 | 1650.663518 | 825.835397 | 1633.636969 | 817.322122 | 1632.652953 | 816.830114 | H | ***512.293957*** | 256.650617 | 495.267408 | 248.137342 | 494.283392 | 247.645334 | 4 |
| 14 | 1749.731932 | 875.369604 | 1732.705383 | 866.856330 | 1731.721367 | 866.364321 | V | ***375.235045*** | 188.121161 | 358.208496 | 179.607886 | 357.224480 | 179.115878 | 3 |
| 15 | 1850.779611 | 925.893443 | 1833.753062 | 917.380169 | 1832.769046 | 916.888161 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 16 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QEDACQGDSGGPHVTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 71.0 | 2023.884033 | 0.004179 | QEDACQGDSGGPHVTR |
| 41.7 | 2023.884033 | 0.004179 | QEDACQGDSGGPHVTR |

**Mascot:** http://www.matrixscience.com/

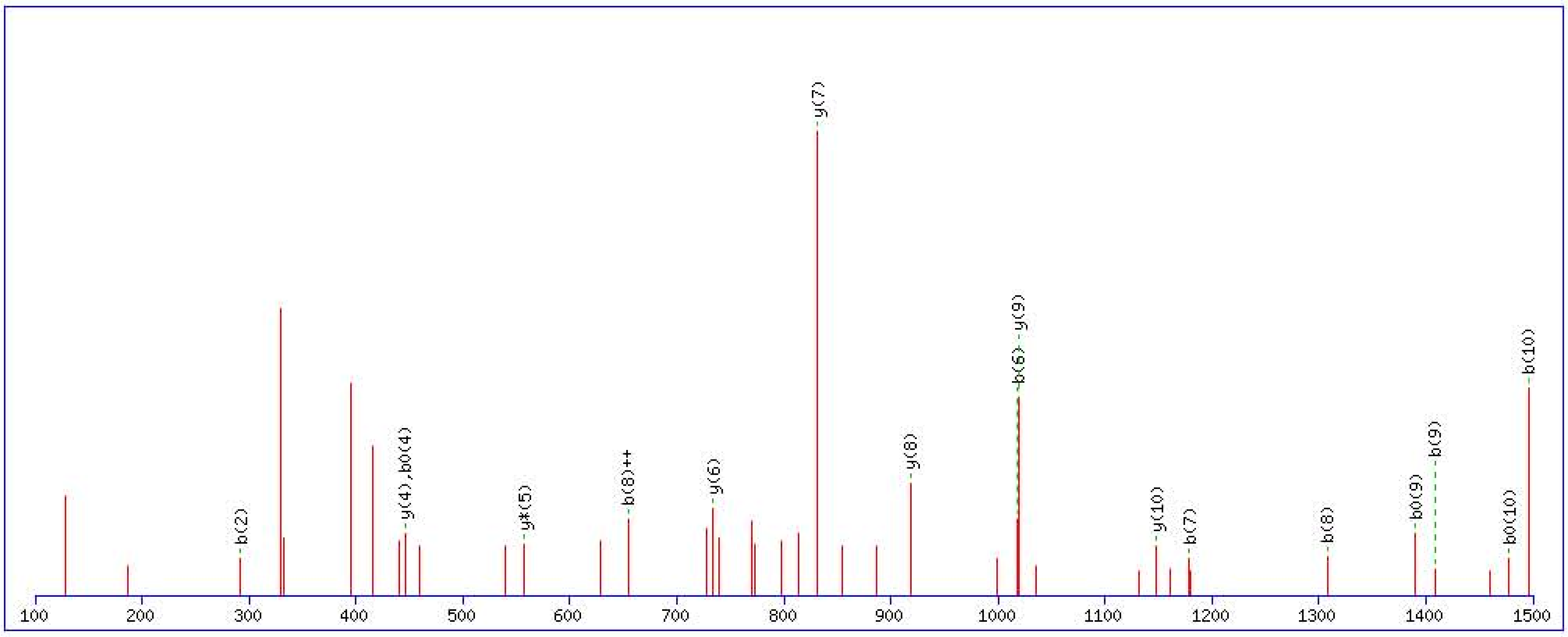
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YKDGDQCETSPCQNQGK**
Found in **FA10_HUMAN**, Coagulation factor X OS=Homo sapiens GN=F10 PE=1 SV=2

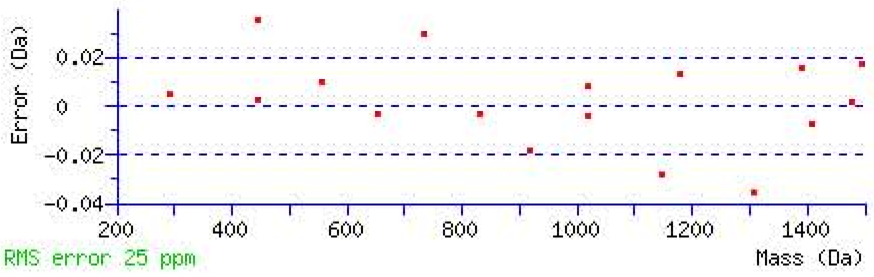
Match to Query 53442: 2324.989452 from(776.003760,3+) rtinseconds(1308) index(48295)
Title: Locus:1.1.1.1070.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

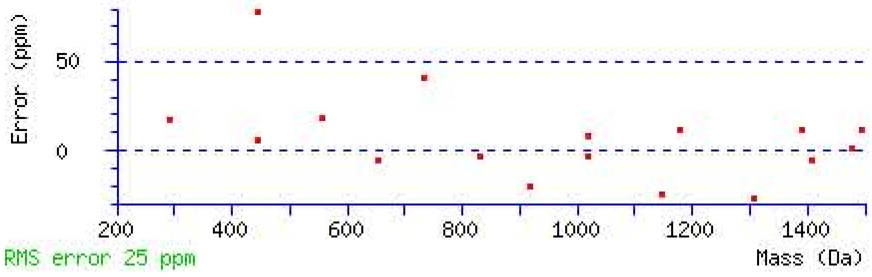
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2324.982407
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 37  Expect: 0.00055
Matches : 17/172 fragment ions using 25 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 17 |
| 2 | ***292.165568*** | 146.586422 | 275.139019 | 138.073148 | | | K | 2162.926352 | 1081.966814 | 2145.899803 | 1073.453539 | 2144.915787 | 1072.961531 | 16 |
| 3 | 407.192511 | 204.099894 | 390.165962 | 195.586619 | 389.181946 | 195.094611 | D | 2034.831389 | 1017.919333 | 2017.804840 | 1009.406058 | 2016.820824 | 1008.914050 | 15 |
| 4 | 464.213975 | 232.610626 | 447.187426 | 224.097351 | 446.203410 | 223.605343 | G | 1919.804446 | 960.405861 | 1902.777897 | 951.892587 | 1901.793881 | 951.400579 | 14 |
| 5 | 579.240918 | 290.124097 | 562.214369 | 281.610823 | 561.230353 | 281.118815 | D | 1862.782982 | 931.895129 | 1845.756433 | 923.381855 | 1844.772417 | 922.889847 | 13 |
| 6 | ***1018.466244*** | 509.736760 | 1001.439695 | 501.223486 | 1000.455679 | 500.731478 | Q | 1747.756039 | 874.381658 | 1730.729490 | 865.868383 | 1729.745474 | 865.376375 | 12 |
| 7 | ***1178.496893*** | 589.752085 | 1161.470344 | 581.238810 | 1160.486328 | 580.746802 | C | 1308.530713 | 654.768995 | 1291.504164 | 646.255720 | 1290.520148 | 645.763712 | 11 |
| 8 | ***1307.539486*** | 654.273381 | 1290.512937 | 645.760107 | 1289.528921 | 645.268098 | E | ***1148.500064*** | 574.753670 | 1131.473515 | 566.240396 | 1130.489499 | 565.748388 | 10 |
| 9 | ***1408.587165*** | 704.797220 | 1391.560616 | 696.283946 | 1390.576600 | 695.791938 | T | ***1019.457471*** | 510.232374 | 1002.430922 | 501.719099 | 1001.446906 | 501.227091 | 9 |
| 10 | ***1495.619193*** | 748.313235 | 1478.592644 | 739.799960 | 1477.608628 | 739.307952 | S | ***918.409792*** | 459.708534 | 901.383243 | 451.195260 | 900.399227 | 450.703252 | 8 |
| 11 | 1592.671957 | 796.839617 | 1575.645408 | 788.326342 | 1574.661392 | 787.834334 | P | ***831.377764*** | 416.192520 | 814.351215 | 407.679246 | | | 7 |
| 12 | 1752.702606 | 876.854941 | 1735.676057 | 868.341667 | 1734.692041 | 867.849659 | C | ***734.325000*** | 367.666138 | 717.298451 | 359.152864 | | | 6 |
| 13 | 1880.761184 | 940.884230 | 1863.734635 | 932.370956 | 1862.750619 | 931.878948 | Q | 574.294351 | 287.650814 | 557.267802 | 279.137539 | | | 5 |
| 14 | 1994.804111 | 997.905694 | 1977.777562 | 989.392419 | 1976.793546 | 988.900411 | N | ***446.235773*** | 223.621524 | 429.209224 | 215.108250 | | | 4 |
| 15 | 2122.862689 | 1061.934982 | 2105.836140 | 1053.421708 | 2104.852124 | 1052.929700 | Q | 332.192846 | 166.600061 | 315.166297 | 158.086787 | | | 3 |
| 16 | 2179.884153 | 1090.445714 | 2162.857604 | 1081.932440 | 2161.873588 | 1081.440432 | G | 204.134268 | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of YKDGDQCETSPCQNQGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.0 | 2324.982407 | 0.007045 | YKDGDQCETSPCQNQGK |

**Mascot:** http://www.matrixscience.com/

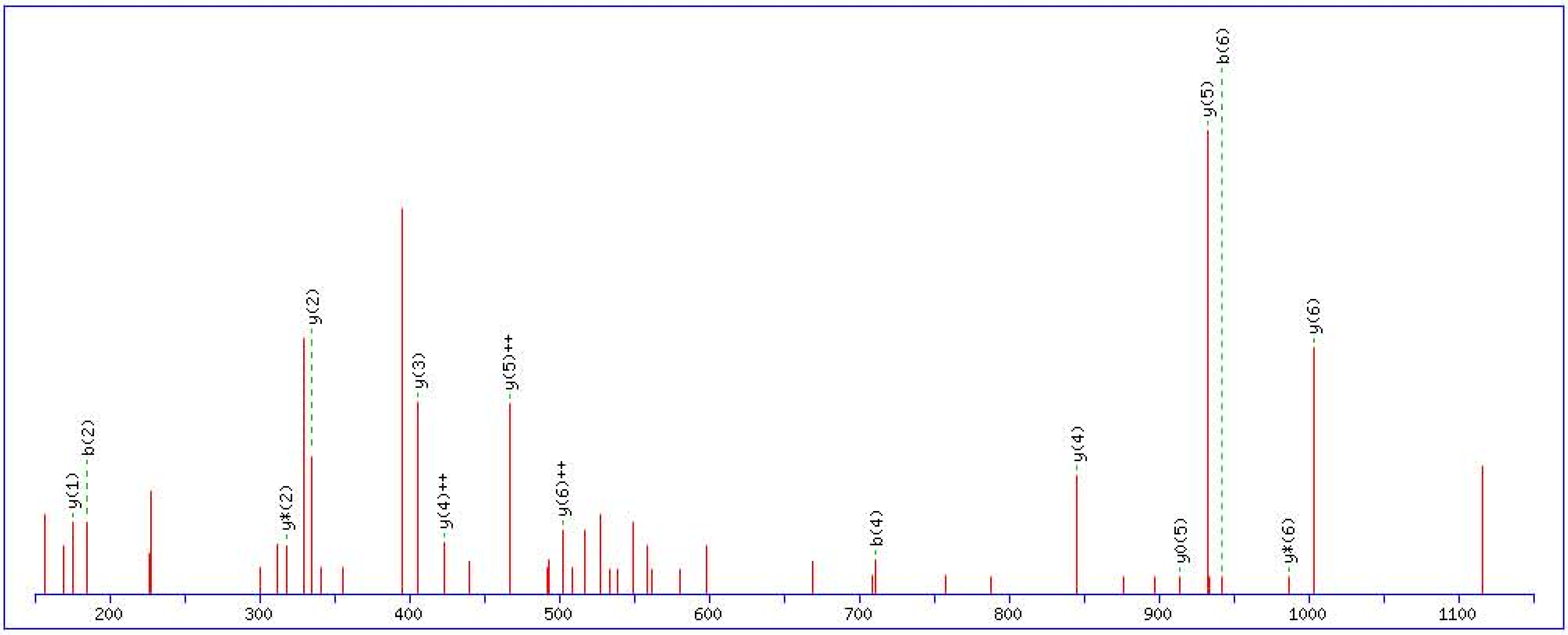
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LASQACR**
Found in **FA12_HUMAN**, Coagulation factor XII OS=Homo sapiens GN=F12 PE=1 SV=3

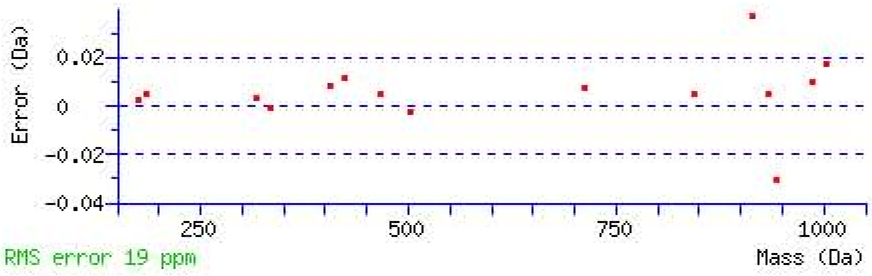
Match to Query 19749: 1115.555988 from(558.785270,2+) rtinseconds(1362) index(64812)
Title: Locus:1.1.1.1411.21 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

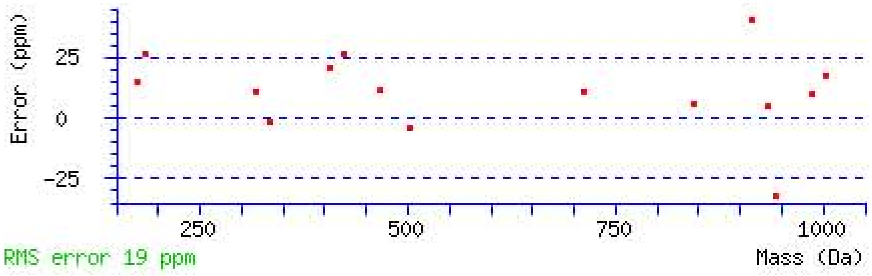
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 150 to 1150 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1115.557953
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.0083
Matches : 15/54 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 7 |
| 2 | **185.128454** | 93.067865 | | | | | A | ***1003.481183*** | 502.244230 | 986.454634 | 493.730955 | 985.470618 | 493.238947 | 6 |
| 3 | 272.160482 | 136.583879 | | | 254.149917 | 127.578596 | S | ***932.444069*** | 466.725673 | 915.417520 | 458.212398 | 914.433504 | 457.720390 | 5 |
| 4 | **711.385808** | 356.196542 | 694.359259 | 347.683268 | 693.375243 | 347.191260 | Q | ***845.412041*** | 423.209659 | 828.385492 | 414.696384 | | | 4 |
| 5 | 782.422922 | 391.715099 | 765.396373 | 383.201824 | 764.412357 | 382.709816 | A | ***406.186715*** | 203.596995 | 389.160166 | 195.083721 | | | 3 |
| 6 | **942.453571** | 471.730424 | 925.427022 | 463.217149 | 924.443006 | 462.725141 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LASQACR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.4 | 1115.557953 | -0.001965 | LASQACR |
| 8.7 | 1115.543350 | 0.012638 | SFCYISALR |
| 5.1 | 1115.539352 | 0.016636 | ACLTSGTPGPR |
| 4.8 | 1115.550552 | 0.005436 | LAAGSRCPER |
| 2.0 | 1115.543350 | 0.012638 | LEYKFCTR |
| 1.9 | 1115.539322 | 0.016666 | QSAQESR |
| 0.6 | 1115.546722 | 0.009266 | LAQDACK |

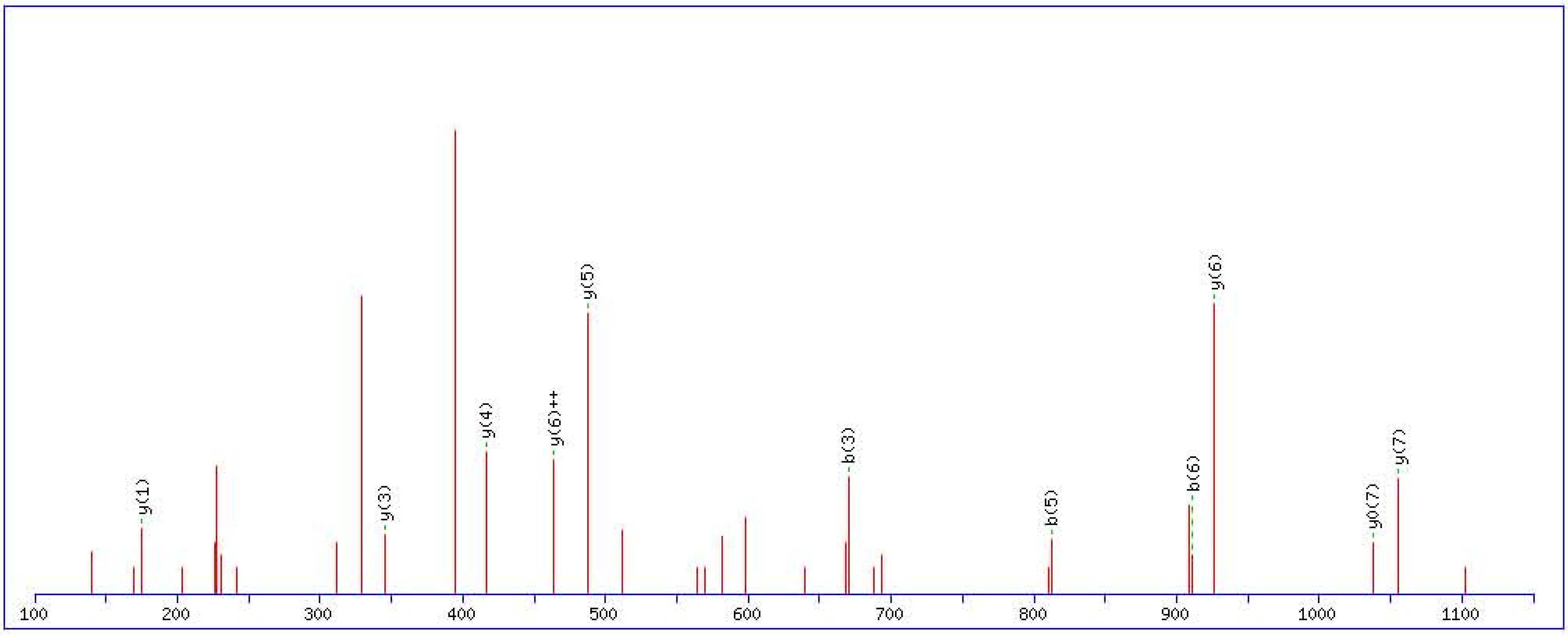
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TEQAAVAR**
Found in **FA12_HUMAN**, Coagulation factor XII OS=Homo sapiens GN=F12 PE=1 SV=3

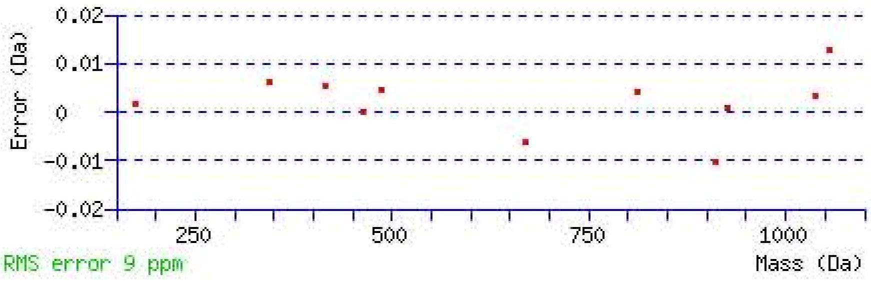
Match to Query 21799: 1155.602148 from(578.808350,2+) rtinseconds(1376) index(17578)
Title: Locus:1.1.1.481.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

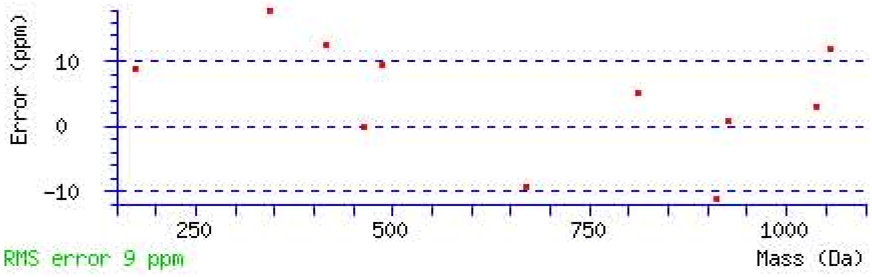
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1150] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1155.607010
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.016
Matches : 11/68 fragment ions using 26 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 |  |  | 84.044390 | 42.525833 | **T** |  |  |  |  |  |  | 8 |
| 2 | 231.097548 | 116.052412 |  |  | 213.086983 | 107.047130 | **E** | ***1055.566627*** | 528.286951 | 1038.540078 | 519.773677 | 1037.556062 | 519.281669 | 7 |
| 3 | **670.322874** | 335.665075 | 653.296325 | 327.151801 | 652.312309 | 326.659793 | **Q** | ***926.524034*** | 463.765655 | 909.497485 | 455.252380 |  |  | 6 |
| 4 | 741.359988 | 371.183632 | 724.333439 | 362.670358 | 723.349423 | 362.178350 | **A** | ***487.298708*** | 244.152992 | 470.272159 | 235.639717 |  |  | 5 |
| 5 | **812.397102** | 406.702189 | 795.370553 | 398.188915 | 794.386537 | 397.696907 | **A** | ***416.261594*** | 208.634435 | 399.235045 | 200.121160 |  |  | 4 |
| 6 | **911.465516** | 456.236396 | 894.438967 | 447.723121 | 893.454951 | 447.231113 | **V** | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 |  |  | 3 |
| 7 | 982.502630 | 491.754953 | 965.476081 | 483.241678 | 964.492065 | 482.749670 | **A** | 246.156066 | 123.581671 | 229.129517 | 115.068396 |  |  | 2 |
| 8 |  |  |  |  |  |  | **R** | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 |  |  | 1 |





NCBI **BLAST** search of TEQAAVAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.6 | 1155.607010 | -0.004862 | TEQAAVAR |
| 8.3 | 1155.588394 | 0.013754 | VEQIEAGTPGR |
| 5.2 | 1155.588379 | 0.013769 | TEVPLAENQR |

**Mascot:** http://www.matrixscience.com/

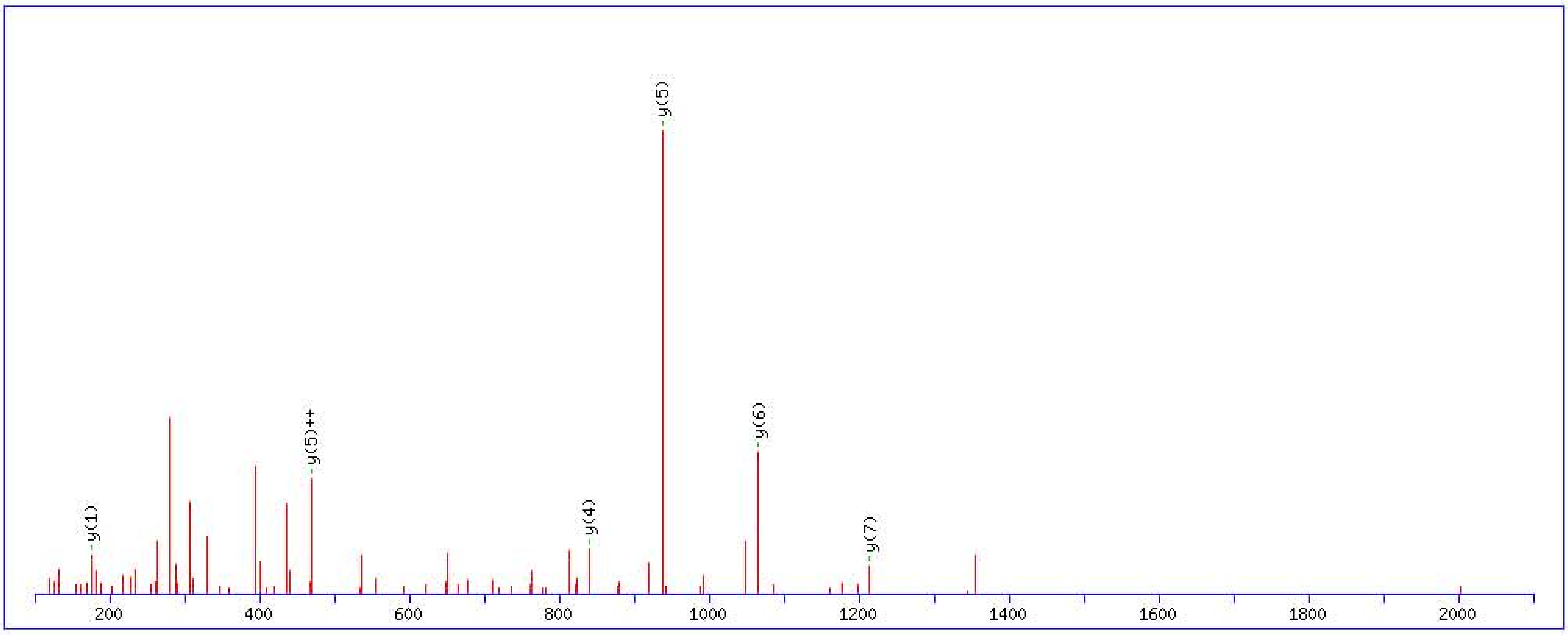
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **CFEPQLLR**
Found in **FA12_HUMAN**, Coagulation factor XII OS=Homo sapiens GN=F12 PE=1 SV=3

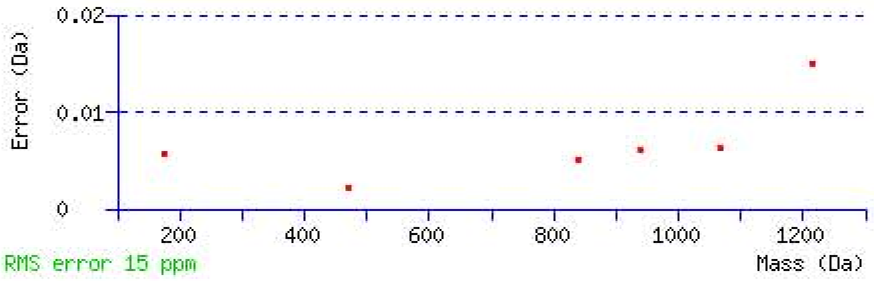
Match to Query 29275: 1372.699228 from(687.356890,2+) rtinseconds(2199) index(69965)
Title: Locus:1.1.1.1703.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

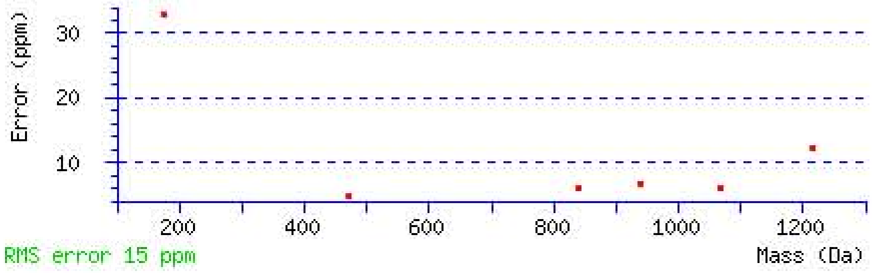
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1372.699539
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.0079
Matches : 6/62 fragment ions using 12 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 8 |
| 2 | 308.106339 | 154.556807 | | | | | F | *1213.676177* | 607.341726 | 1196.649628 | 598.828452 | 1195.665612 | 598.336444 | 7 |
| 3 | 437.148932 | 219.078104 | | | 419.138367 | 210.072822 | E | *1066.607763* | 533.807519 | 1049.581214 | 525.294245 | 1048.597198 | 524.802237 | 6 |
| 4 | 534.201696 | 267.604486 | | | 516.191131 | 258.599204 | P | *937.565170* | 469.286223 | 920.538621 | 460.772948 | | | 5 |
| 5 | 973.427022 | 487.217149 | 956.400473 | 478.703875 | 955.416457 | 478.211867 | Q | *840.512406* | 420.759841 | 823.485857 | 412.246566 | | | 4 |
| 6 | 1086.511086 | 543.759181 | 1069.484537 | 535.245907 | 1068.500521 | 534.753898 | L | 401.287080 | 201.147178 | 384.260531 | 192.633903 | | | 3 |
| 7 | 1199.595150 | 600.301213 | 1182.568601 | 591.787939 | 1181.584585 | 591.295930 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 8 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CFEPQLLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.4 | 1372.699539 | -0.000311 | CFEPQLLR |
| 6.6 | 1372.710770 | -0.011542 | QPRMLDFR |
| 0.8 | 1372.717331 | -0.018103 | QGLPVVMPVFDR |
| 0.1 | 1372.703369 | -0.004141 | NPPKQEGHR |

**Mascot:** http://www.matrixscience.com/

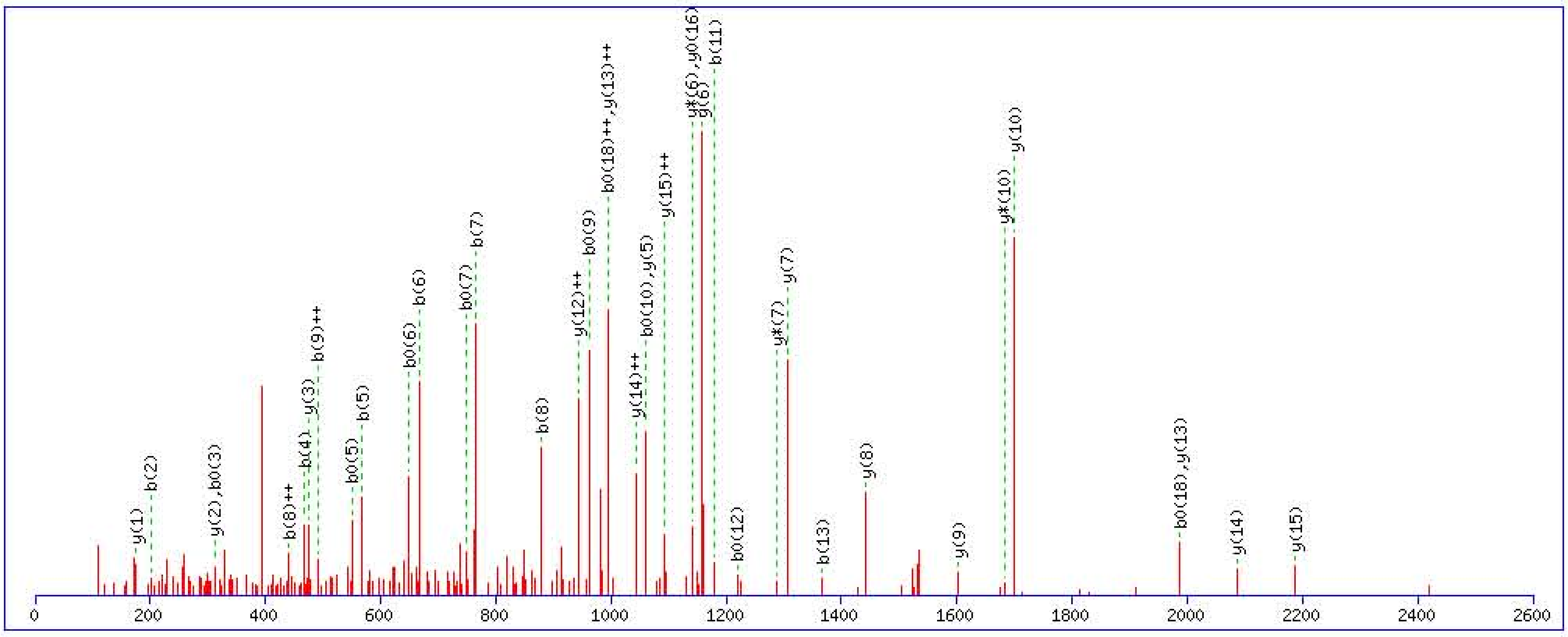
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AEEHTVVLTVTGEPCHFPFQYHR**
Found in **FA12_HUMAN**, Coagulation factor XII OS=Homo sapiens GN=F12 PE=1 SV=3

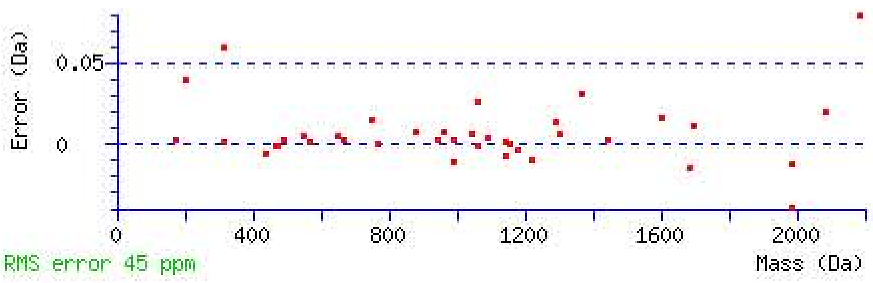
Match to Query 62135: 3064.482096 from(767.127800,4+) rtinseconds(2143) index(69615)
Title: Locus:1.1.1.1683.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

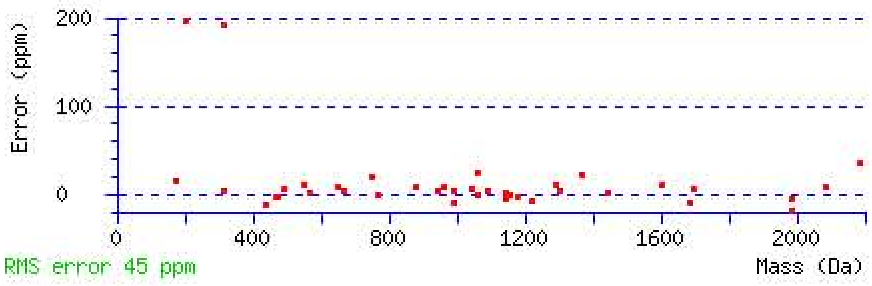
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3064.468796
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q20** : Biotin:Thermo-21345 (Q)
**Ions Score:** 66 **Expect:** 6.7e-006
**Matches :** 39/204 fragment ions using 70 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 23 |
| 2 | ***201.086983*** | 101.047130 | | | 183.076418 | 92.041847 | E | 2994.438934 | 1497.723105 | 2977.412385 | 1489.209830 | 2976.428369 | 1488.717822 | 22 |
| 3 | 330.129576 | 165.568426 | | | 312.119011 | 156.563144 | E | 2865.396341 | 1433.201808 | 2848.369792 | 1424.688534 | 2847.385776 | 1424.196526 | 21 |
| 4 | ***467.188488*** | 234.097882 | | | 449.177923 | 225.092599 | H | 2736.353748 | 1368.680512 | 2719.327199 | 1360.167237 | 2718.343183 | 1359.675229 | 20 |
| 5 | ***568.236167*** | 284.621722 | | | 550.225602 | 275.616439 | T | 2599.294836 | 1300.151056 | 2582.268287 | 1291.637781 | 2581.284271 | 1291.145773 | 19 |
| 6 | ***667.304581*** | 334.155929 | | | 649.294016 | 325.150646 | V | 2498.247157 | 1249.627216 | 2481.220608 | 1241.113942 | 2480.236592 | 1240.621934 | 18 |
| 7 | ***766.372995*** | 383.690136 | | | 748.362430 | 374.684853 | V | 2399.178743 | 1200.093009 | 2382.152194 | 1191.579735 | 2381.168178 | 1191.087727 | 17 |
| 8 | ***879.457059*** | **440.232168** | | | 861.446494 | 431.226885 | L | 2300.110329 | 1150.558802 | 2283.083780 | 1142.045528 | 2282.099764 | 1141.553520 | 16 |
| 9 | 980.504738 | **490.756007** | | | 962.494173 | 481.750724 | T | ***2187.026265*** | 1094.016770 | 2169.999716 | 1085.503496 | 2169.015700 | 1085.011488 | 15 |
| 10 | 1079.573152 | 540.290214 | | | 1061.562587 | 531.284931 | V | ***2085.978586*** | 1043.492931 | 2068.952037 | 1034.979656 | 2067.968021 | 1034.487648 | 14 |
| 11 | ***1180.620831*** | 590.814054 | | | 1162.610266 | 581.808771 | T | ***1986.910172*** | 993.958724 | 1969.883623 | 985.445450 | 1968.899607 | 984.953442 | 13 |
| 12 | 1237.642295 | 619.324785 | | | 1219.631730 | 610.319503 | G | 1885.862493 | 943.434885 | 1868.835944 | 934.921610 | 1867.851928 | 934.429602 | 12 |
| 13 | ***1366.684888*** | 683.846082 | | | 1348.674323 | 674.840800 | E | 1828.841029 | 914.924153 | 1811.814480 | 906.410878 | 1810.830464 | 905.918870 | 11 |
| 14 | 1463.737652 | 732.372464 | | | 1445.727087 | 723.367182 | P | ***1699.798436*** | 850.402856 | 1682.771887 | 841.889582 | | | 10 |
| 15 | 1623.768301 | 812.387789 | | | 1605.757736 | 803.382506 | C | ***1602.745672*** | 801.876474 | 1585.719123 | 793.363200 | | | 9 |
| 16 | 1760.827213 | 880.917245 | | | 1742.816648 | 871.911962 | H | ***1442.715023*** | 721.861150 | 1425.688474 | 713.347875 | | | 8 |
| 17 | 1907.895627 | 954.451452 | | | 1889.885062 | 945.446169 | F | ***1305.656111*** | 653.331694 | 1288.629562 | 644.818419 | | | 7 |
| 18 | 2004.948391 | 1002.977834 | | | 1986.937826 | 993.972551 | P | ***1158.587697*** | 579.797487 | 1141.561148 | 571.284212 | | | 6 |
| 19 | 2152.016805 | 1076.512040 | | | 2134.006240 | 1067.506758 | F | ***1061.534933*** | 531.271105 | 1044.508384 | 522.757830 | | | 5 |
| 20 | 2591.242131 | 1296.124703 | 2574.215582 | 1287.611429 | 2573.231566 | 1287.119421 | Q | 914.466519 | 457.736898 | 897.439970 | 449.223623 | | | 4 |
| 21 | 2754.305460 | 1377.656368 | 2737.278911 | 1369.143093 | 2736.294895 | 1368.651085 | Y | ***475.241193*** | 238.124234 | 458.214644 | 229.610960 | | | 3 |
| 22 | 2891.364372 | 1446.185824 | 2874.337823 | 1437.672549 | 2873.353807 | 1437.180541 | H | ***312.177864*** | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 23 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AEEHTVVLTVTGEPCHFPFQYHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.6 | 3064.468796 | 0.013300 | AEEHTVVLTVTGEPCHFPFQYHR |

**Mascot:** http://www.matrixscience.com/

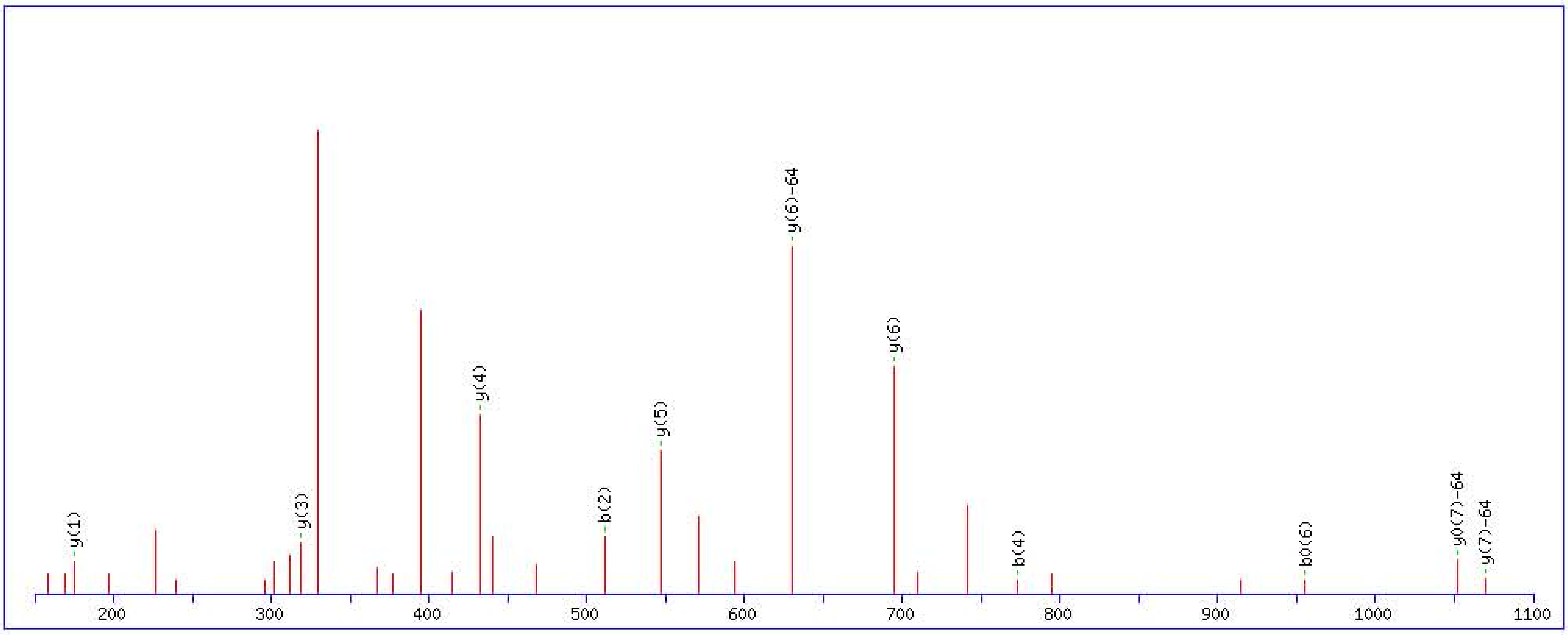
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AQMDLSGR**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

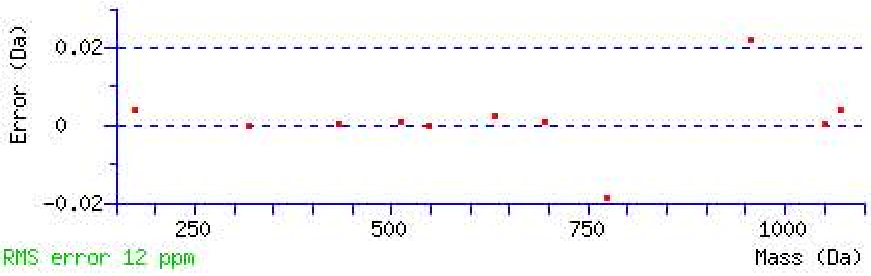
Match to Query 23368: 1203.569848 from(602.792200,2+) rtinseconds(1465) index(65613)
Title: Locus:1.1.1.1447.21 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

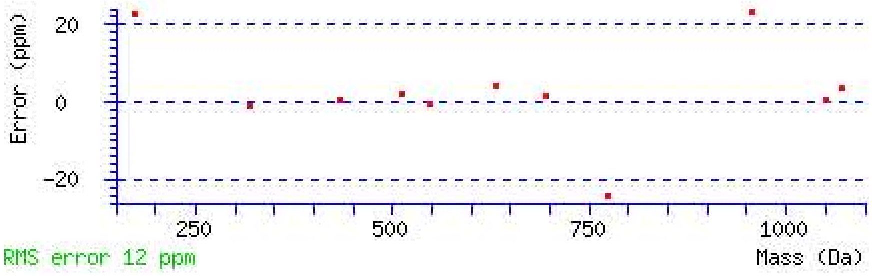
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 150 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1203.574005
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q2 : Biotin:Thermo-21345 (Q)
M3 : Oxidation (M), with neutral losses 63.998285(shown in table), 0.000000
**Ions Score:** 33 **Expect:** 0.0018
**Matches** : 11/112 fragment ions using 18 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 8 |
| 2 | 511.269716 | 256.138496 | 494.243167 | 247.625221 | | | Q | ***1069.545892*** | 535.276584 | 1052.519343 | 526.763310 | 1051.535327 | 526.271302 | 7 |
| 3 | 594.306831 | 297.657054 | 577.280282 | 289.143779 | | | M | ***630.320566*** | 315.663921 | 613.294017 | 307.150646 | 612.310001 | 306.658639 | 6 |
| 4 | 709.333774 | 355.170525 | 692.307225 | 346.657250 | 691.323209 | 346.165242 | D | ***547.283451*** | 274.145364 | 530.256902 | 265.632089 | 529.272886 | 265.140081 | 5 |
| 5 | 822.417838 | 411.712557 | 805.391289 | 403.199282 | 804.407273 | 402.707274 | L | ***432.256508*** | 216.631892 | 415.229959 | 208.118617 | 414.245943 | 207.626609 | 4 |
| 6 | 909.449866 | 455.228571 | 892.423317 | 446.715296 | 891.439301 | 446.223288 | S | ***319.172444*** | 160.089860 | 302.145895 | 151.576585 | 301.161879 | 151.084577 | 3 |
| 7 | 966.471330 | 483.739303 | 949.444781 | 475.226028 | 948.460765 | 474.734020 | G | 232.140416 | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AQMDLSGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.8 | 1203.574005 | -0.004157 | AQMDLSGR |
| 3.5 | 1203.577820 | -0.007972 | EAQQRQAAMR |

**Mascot:** http://www.matrixscience.com/

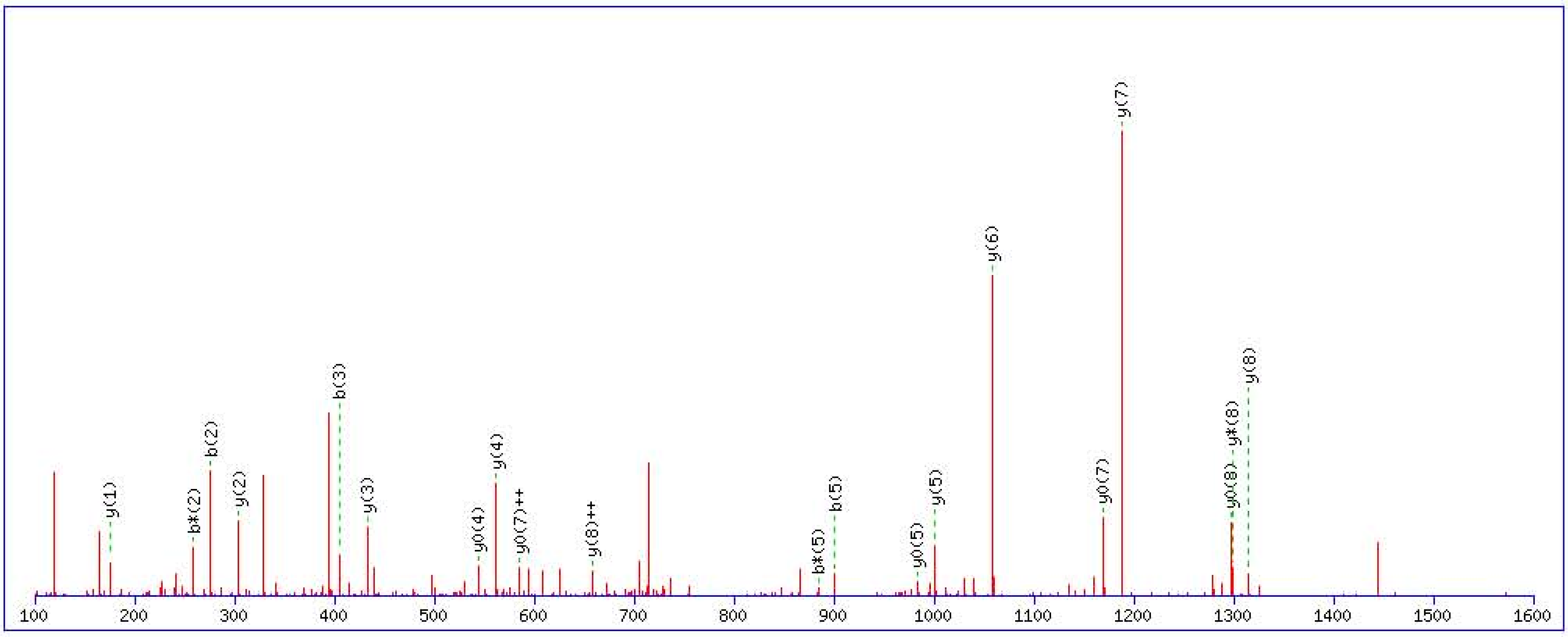
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **FQEGQEEER**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

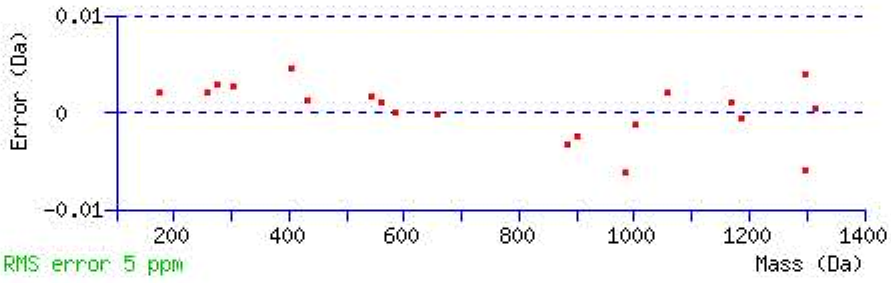
Match to Query 32782: 1461.654748 from(731.834650,2+) rtinseconds(1458) index(2602)
Title: Locus:1.1.1.1316.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

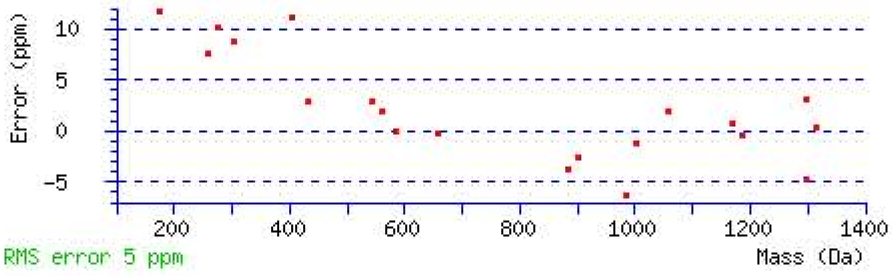
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1461.655807
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 43  Expect: 0.00037
Matches : 20/88 fragment ions using 42 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 9 |
| 2 | **276.134268** | 138.570772 | 259.107719 | 130.057497 | | | Q | ***1315.594692*** | 658.300984 | 1298.568143 | 649.787710 | 1297.584127 | 649.295702 | 8 |
| 3 | **405.176861** | 203.092068 | 388.150312 | 194.578794 | 387.166296 | 194.086786 | E | ***1187.536114*** | 594.271695 | 1170.509565 | 585.758421 | 1169.525549 | 585.266413 | 7 |
| 4 | 462.198325 | 231.602800 | 445.171776 | 223.089526 | 444.187760 | 222.597518 | G | ***1058.493521*** | 529.750399 | 1041.466972 | 521.237124 | 1040.482956 | 520.745116 | 6 |
| 5 | **901.423651** | 451.215464 | 884.397102 | 442.702189 | 883.413086 | 442.210181 | Q | ***1001.472057*** | 501.239667 | 984.445508 | 492.726392 | 983.461492 | 492.234384 | 5 |
| 6 | 1030.466244 | 515.736760 | 1013.439695 | 507.223485 | 1012.455679 | 506.731477 | E | ***562.246731*** | 281.627004 | 545.220182 | 273.113729 | 544.236166 | 272.621721 | 4 |
| 7 | 1159.508837 | 580.258057 | 1142.482288 | 571.744782 | 1141.498272 | 571.252774 | E | ***433.204138*** | 217.105707 | 416.177589 | 208.592433 | 415.193573 | 208.100425 | 3 |
| 8 | 1288.551430 | 644.779353 | 1271.524881 | 636.266079 | 1270.540865 | 635.774071 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FQEGQEEER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 42.8 | 1461.655807 | -0.001059 | FQEGQEEER |
| 11.2 | 1461.640564 | 0.014184 | NSGTQSDGEEK |
| 7.8 | 1461.648392 | 0.006356 | HREELSDYEER |
| 7.2 | 1461.655807 | -0.001059 | FQEGQEEER |
| 6.3 | 1461.640564 | 0.014184 | VMTDVAGNPEEER |
| 2.3 | 1461.637161 | 0.017587 | ESELQWQEEER |

**Mascot:** http://www.matrixscience.com/

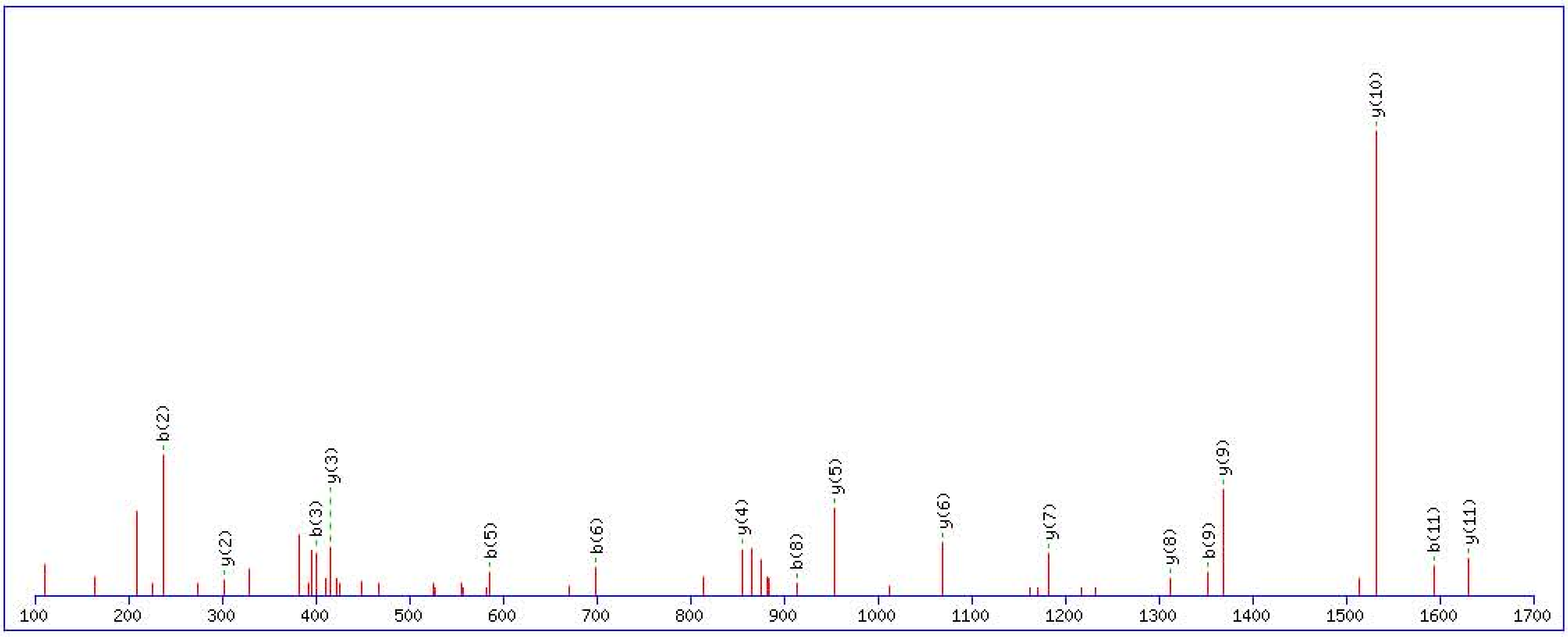
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HVYGELDVQIQR**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

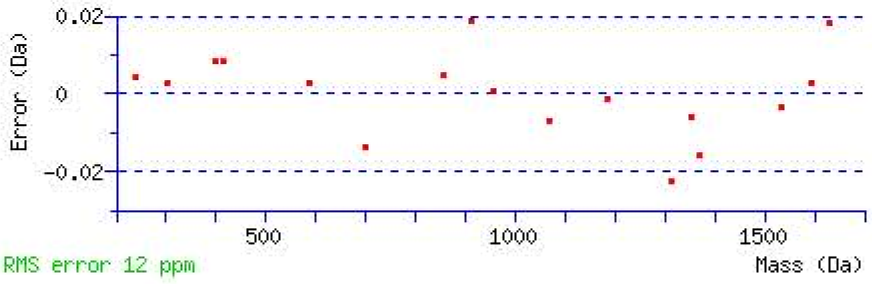
Match to Query 42023: 1766.908528 from(884.461540,2+) rtinseconds(1962) index(68494)
Title: Locus:1.1.1.1620.25 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

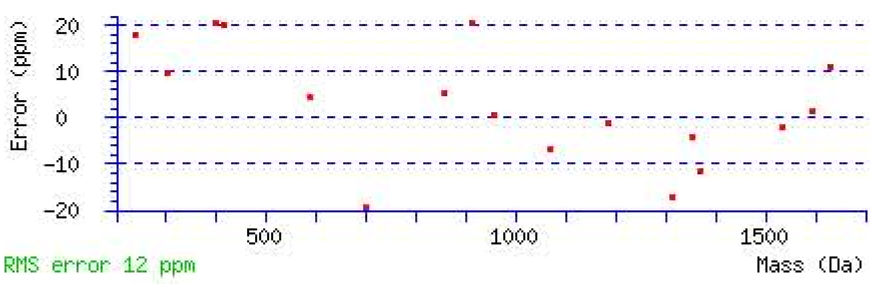
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1766.913773
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 64  Expect: 4.3e-006
Matches : 17/98 fragment ions using 36 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 12 |
| 2 | **237.134602** | 119.070939 | | | | | V | ***1630.862141*** | 815.934708 | 1613.835592 | 807.421434 | 1612.851576 | 806.929426 | 11 |
| 3 | **400.197931** | 200.602603 | | | | | Y | ***1531.793727*** | 766.400501 | 1514.767178 | 757.887227 | 1513.783162 | 757.395219 | 10 |
| 4 | 457.219395 | 229.113335 | | | | | G | ***1368.730398*** | 684.868837 | 1351.703849 | 676.355563 | 1350.719833 | 675.863554 | 9 |
| 5 | **586.261988** | 293.634632 | | | 568.251423 | 284.629349 | E | ***1311.708934*** | 656.358105 | 1294.682385 | 647.844830 | 1293.698369 | 647.352822 | 8 |
| 6 | **699.346052** | 350.176664 | | | 681.335487 | 341.171382 | L | ***1182.666341*** | 591.836808 | 1165.639792 | 583.323534 | 1164.655776 | 582.831526 | 7 |
| 7 | 814.372995 | 407.690136 | | | 796.362430 | 398.684853 | D | ***1069.582277*** | 535.294776 | 1052.555728 | 526.781502 | 1051.571712 | 526.289494 | 6 |
| 8 | **913.441409** | 457.224342 | | | 895.430844 | 448.219060 | V | ***954.555334*** | 477.781305 | 937.528785 | 469.268030 | | | 5 |
| 9 | **1352.666735** | 676.837006 | 1335.640186 | 668.323731 | 1334.656170 | 667.831723 | Q | ***855.486920*** | 428.247098 | 838.460371 | 419.733823 | | | 4 |
| 10 | 1465.750799 | 733.379037 | 1448.724250 | 724.865763 | 1447.740234 | 724.373755 | I | ***416.261594*** | 208.634435 | 399.235045 | 200.121160 | | | 3 |
| 11 | **1593.809377** | 797.408326 | 1576.782828 | 788.895052 | 1575.798812 | 788.403044 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579128 | | | 2 |
| 12 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of HVYGELDVQIQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.6 | 1766.913773 | -0.005245 | HVYGELDVQIQR |
| 42.0 | 1766.913773 | -0.005245 | HVYGELDVQIQR |
| 5.1 | 1766.888596 | 0.019932 | NQDDRELWPRK |
| 4.8 | 1766.888138 | 0.020390 | IMQNGTILYTMR |

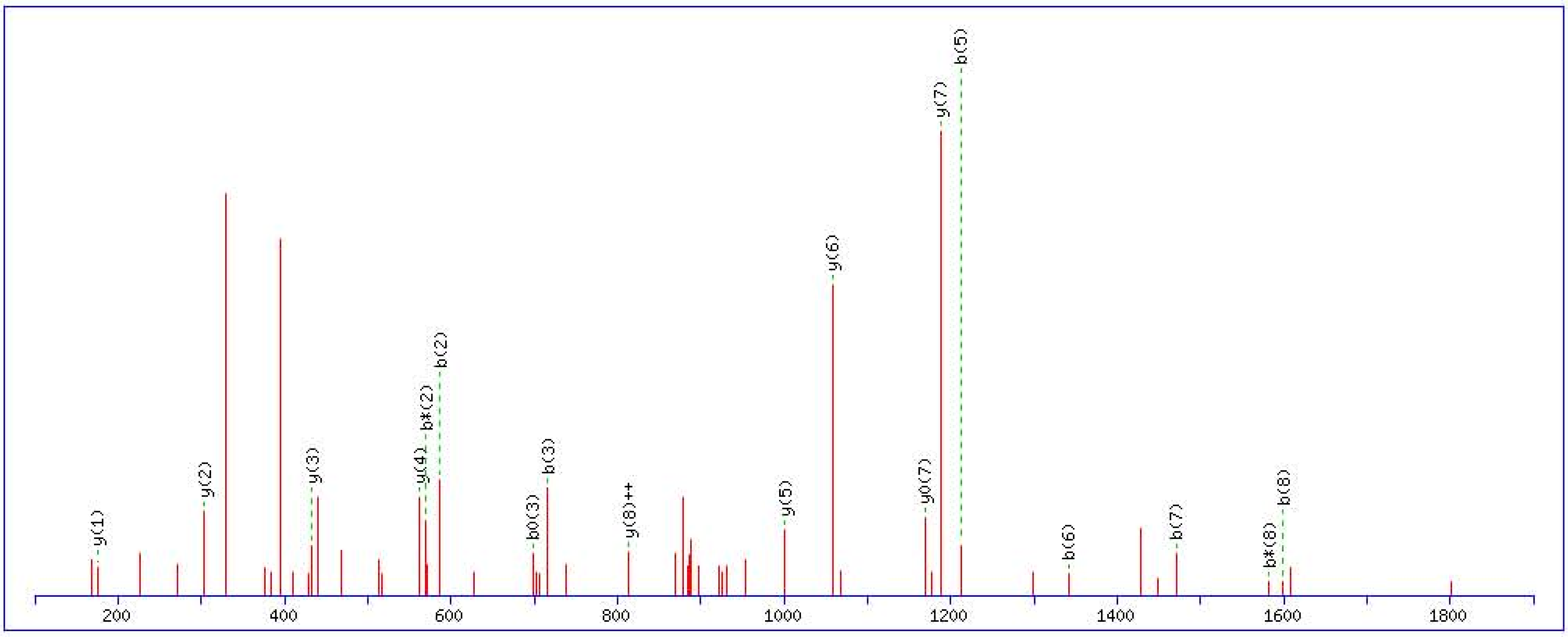
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **FQEGQEEER**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

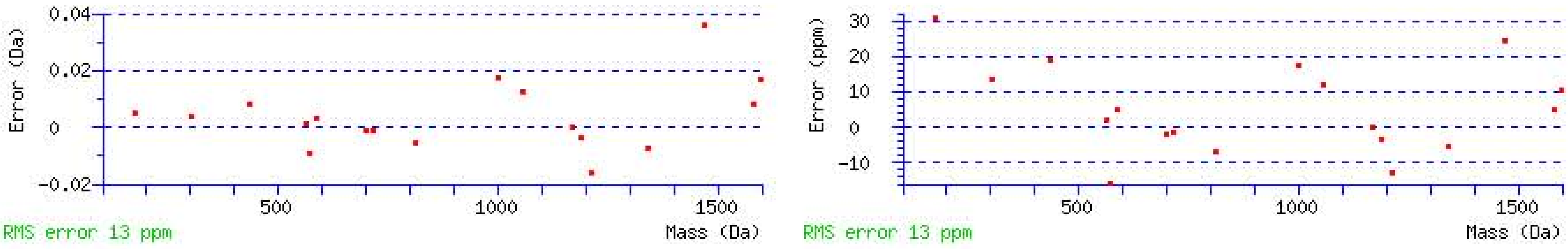
Match to Query 42205: 1772.818908 from(887.416730,2+) rtinseconds(1835) index(20548)
Title: Locus:1.1.1.641.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1772.822556
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.01
Matches : 18/88 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 9 |
| 2 | **587.301016** | 294.154146 | 570.274467 | 285.640872 | | | Q | 1626.761440 | 813.884358 | 1609.734891 | 805.371084 | 1608.750875 | 804.879076 | 8 |
| 3 | **716.343609** | 358.675443 | 699.317060 | 350.162168 | 698.333044 | 349.670160 | E | ***1187.536114*** | 594.271695 | 1170.509565 | 585.758421 | 1169.525549 | 585.266413 | 7 |
| 4 | 773.365073 | 387.186175 | 756.338524 | 378.672900 | 755.354508 | 378.180892 | G | ***1058.493521*** | 529.750399 | 1041.466972 | 521.237124 | 1040.482956 | 520.745116 | 6 |
| 5 | **1212.590399** | 606.798837 | 1195.563850 | 598.285563 | 1194.579834 | 597.793555 | Q | ***1001.472057*** | 501.239667 | 984.445508 | 492.726392 | 983.461492 | 492.234384 | 5 |
| 6 | **1341.632992** | 671.320134 | 1324.606443 | 662.806860 | 1323.622427 | 662.314852 | E | ***562.246731*** | 281.627004 | 545.220182 | 273.113729 | 544.236166 | 272.621721 | 4 |
| 7 | **1470.675585** | 735.841431 | 1453.649036 | 727.328156 | 1452.665020 | 726.836148 | E | ***433.204138*** | 217.105707 | 416.177589 | 208.592433 | 415.193573 | 208.100425 | 3 |
| 8 | **1599.718178** | 800.362727 | 1582.691629 | 791.849453 | 1581.707613 | 791.357445 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of FQEGQEEER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.4 | 1772.803909 | 0.014999 | ESELQWQEEER |
| 33.1 | 1772.822556 | -0.003648 | FQEGQEEER |
| 11.1 | 1772.829727 | -0.010819 | QEEEEAMRRER |
| 9.5 | 1772.803909 | 0.014999 | ESELQWQEEER |
| 5.3 | 1772.798752 | 0.020156 | HISSCMRWPGHYSR |
| 3.7 | 1772.811798 | 0.007110 | YQTPPHQNFEDLER |
| 3.3 | 1772.803909 | 0.014999 | DMASPNWSILPEEER |
| 3.1 | 1772.828873 | -0.009965 | QAEQEATVAREEQER |
| 3.0 | 1772.819901 | -0.000993 | CGKSFSQSCHLVAHR |
| 1.3 | 1772.836288 | -0.017380 | ADGSLTGGGLEAAAMAPER |

**Mascot:** http://www.matrixscience.com/

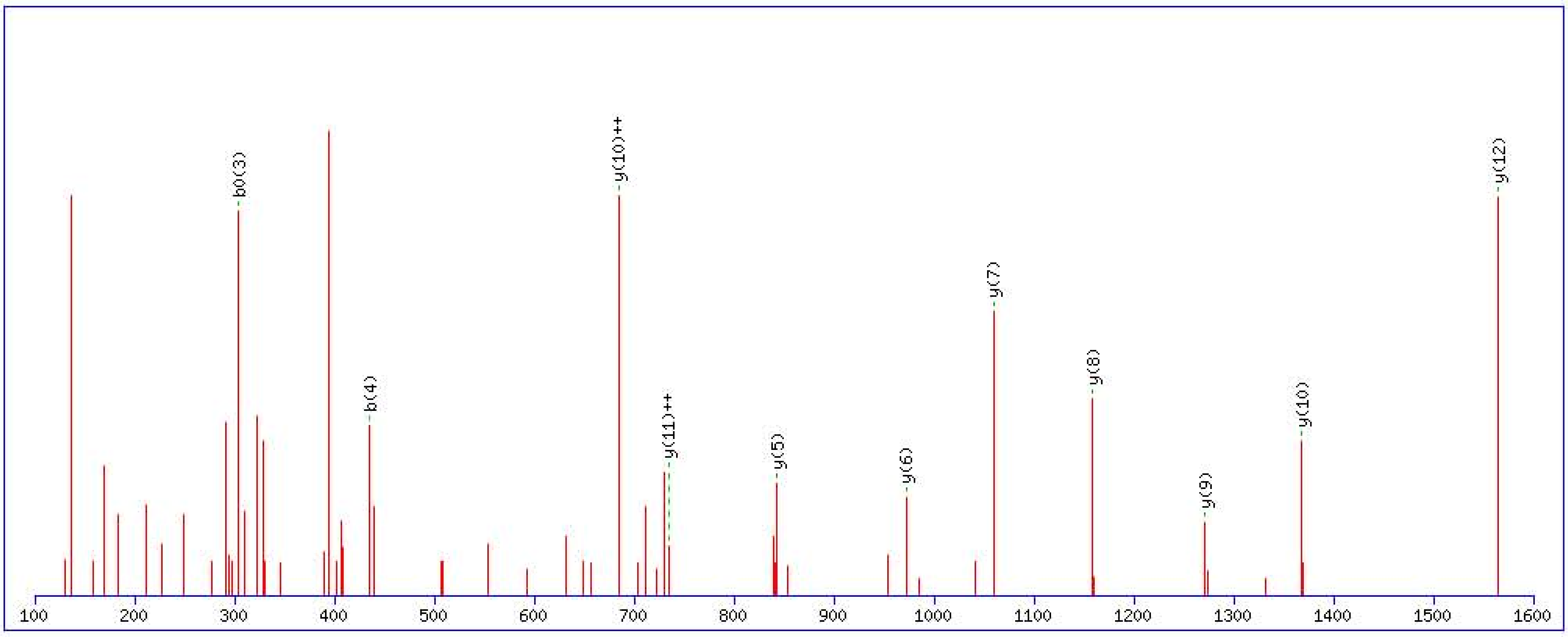
{MATRIX SCIENCE} **Mascot Search Results**

## Peptide View

MS/MS Fragmentation of **GTYIPVPIVSELQSGK**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

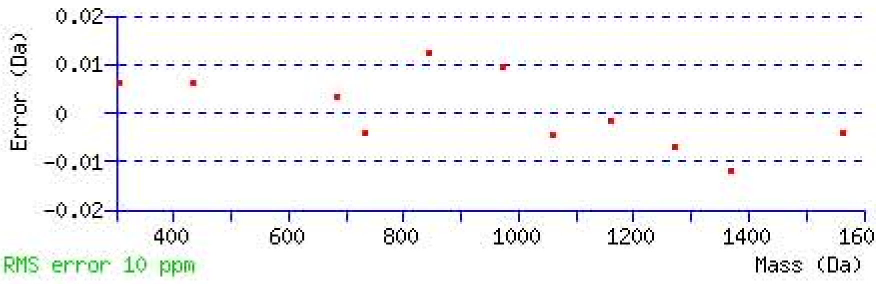
Match to Query 46450: 1998.091152 from(667.037660,3+) rtinseconds(2770) index(73343)
Title: Locus:1.1.1.1901.8 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

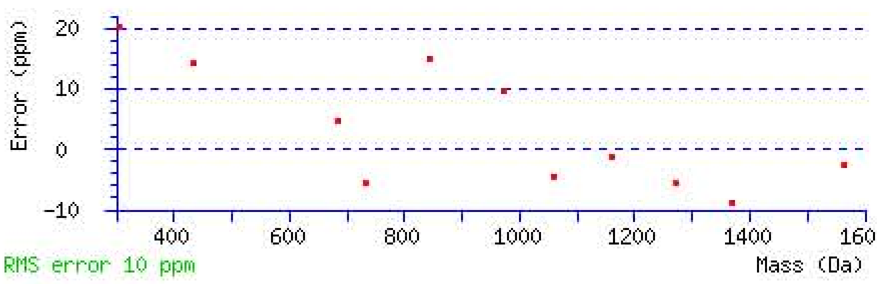
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1998.085983
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q13** : Biotin:Thermo-21345 (Q)
**Ions Score:** 52 **Expect:** 2.1e-005
**Matches** : 11/150 fragment ions using 14 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 16 |
| 2 | 159.076419 | 80.041847 | | | 141.065854 | 71.036565 | T | 1942.071799 | 971.539538 | 1925.045250 | 963.026263 | 1924.061234 | 962.534255 | 15 |
| 3 | 322.139748 | 161.573512 | | | 304.129183 | 152.568230 | Y | 1841.024120 | 921.015698 | 1823.997571 | 912.502424 | 1823.013555 | 912.010416 | 14 |
| 4 | **435.223812** | 218.115544 | | | 417.213247 | 209.110262 | I | 1677.960791 | 839.484034 | 1660.934242 | 830.970759 | 1659.950226 | 830.478751 | 13 |
| 5 | 532.276576 | 266.641926 | | | 514.266011 | 257.636644 | P | ***1564.876727*** | 782.942002 | 1547.850178 | 774.428727 | 1546.866162 | 773.936719 | 12 |
| 6 | 631.344990 | 316.176133 | | | 613.334425 | 307.170851 | V | 1467.823963 | 734.415620 | 1450.797414 | 725.902345 | 1449.813398 | 725.410337 | 11 |
| 7 | 728.397754 | 364.702515 | | | 710.387189 | 355.697233 | P | ***1368.755549*** | 684.881413 | 1351.729000 | 676.368138 | 1350.744984 | 675.876130 | 10 |
| 8 | 841.481818 | 421.244547 | | | 823.471253 | 412.239265 | I | ***1271.702785*** | 636.355031 | 1254.676236 | 627.841756 | 1253.692220 | 627.349748 | 9 |
| 9 | 940.550232 | 470.778754 | | | 922.539667 | 461.773472 | V | ***1158.618721*** | 579.812999 | 1141.592172 | 571.299724 | 1140.608156 | 570.807716 | 8 |
| 10 | 1027.582260 | 514.294768 | | | 1009.571695 | 505.289486 | S | ***1059.550307*** | 530.278792 | 1042.523758 | 521.765517 | 1041.539742 | 521.273509 | 7 |
| 11 | 1156.624853 | 578.816065 | | | 1138.614288 | 569.810782 | E | ***972.518279*** | 486.762777 | 955.491730 | 478.249503 | 954.507714 | 477.757495 | 6 |
| 12 | 1269.708917 | 635.358096 | | | 1251.698352 | 626.352814 | L | ***843.475686*** | 422.241481 | 826.449137 | 413.728207 | 825.465121 | 413.236199 | 5 |
| 13 | 1708.934243 | 854.970759 | 1691.907694 | 846.457485 | 1690.923678 | 845.965477 | Q | 730.391622 | 365.699449 | 713.365073 | 357.186175 | 712.381057 | 356.694167 | 4 |
| 14 | 1795.966271 | 898.486774 | 1778.939722 | 889.973499 | 1777.955706 | 889.481491 | S | 291.166296 | 146.086786 | 274.139747 | 137.573512 | 273.155731 | 137.081504 | 3 |
| 15 | 1852.987735 | 926.997505 | 1835.961186 | 918.484231 | 1834.977170 | 917.992223 | G | 204.134268 | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GTYIPVPIVSELQSGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.6 | 1998.085983 | 0.005169 | GTYIPVPIVSELQSGK |
| 1.7 | 1998.099731 | -0.008579 | GDEVVVELVENGKKVTVGK |
| 0.5 | 1998.076065 | 0.015087 | LQKYSTKPGSYIFR |

**Mascot:** http://www.matrixscience.com/

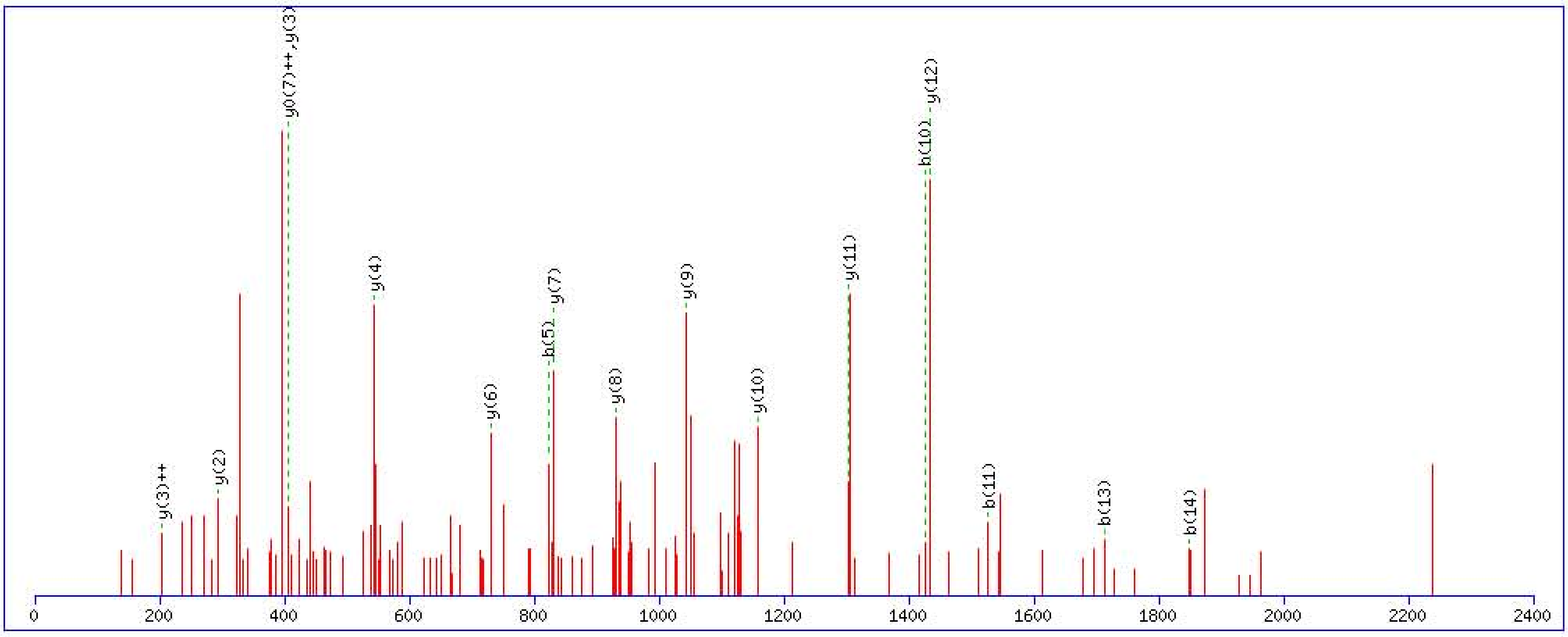
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GVNLQEFLNVTSVHLFK**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

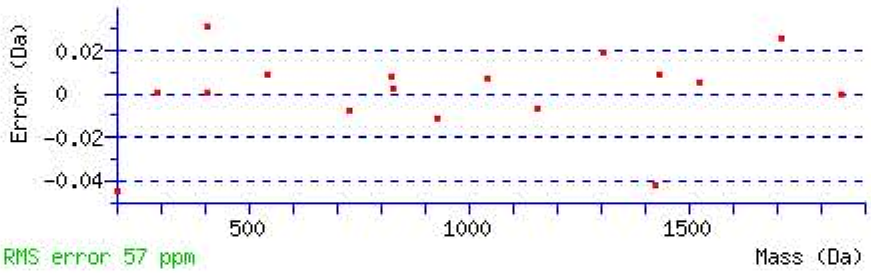
Match to Query 52075: 2255.224988 from(1128.619770,2+) rtinseconds(3004) index(27831)
Title: Locus:1.1.1.1045.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

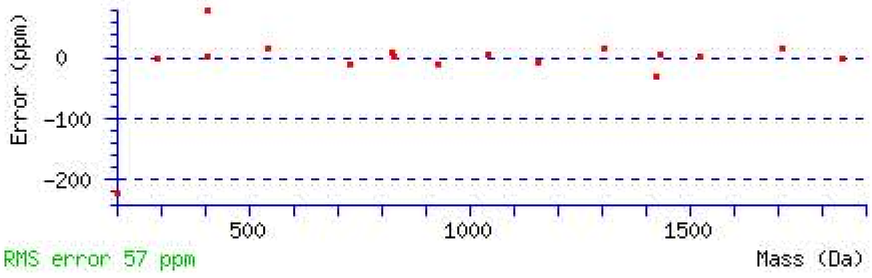
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2255.213654
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q5 : Biotin:Thermo-21345 (Q)
**Ions Score:** 44 **Expect:** 0.00073
**Matches :** 17/168 fragment ions using 38 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 17 |
| 2 | 157.097154 | 79.052215 | | | | | V | 2199.199458 | 1100.103367 | 2182.172909 | 1091.590092 | 2181.188893 | 1091.098084 | 16 |
| 3 | 271.140081 | 136.073679 | 254.113532 | 127.560404 | | | N | 2100.131044 | 1050.569160 | 2083.104495 | 1042.055885 | 2082.120479 | 1041.563877 | 15 |
| 4 | 384.224145 | 192.615711 | 367.197596 | 184.102436 | | | L | 1986.088117 | 993.547697 | 1969.061568 | 985.034422 | 1968.077552 | 984.542414 | 14 |
| 5 | **823.449471** | 412.228374 | 806.422922 | 403.715099 | | | Q | 1873.004053 | 937.005665 | 1855.977504 | 928.492390 | 1854.993488 | 928.000382 | 13 |
| 6 | 952.492064 | 476.749670 | 935.465515 | 468.236396 | 934.481499 | 467.744388 | E | ***1433.778727*** | 717.393002 | 1416.752178 | 708.879727 | 1415.768162 | 708.387719 | 12 |
| 7 | 1099.560478 | 550.283877 | 1082.533929 | 541.770603 | 1081.549913 | 541.278595 | F | ***1304.736134*** | 652.871705 | 1287.709585 | 644.358431 | 1286.725569 | 643.866423 | 11 |
| 8 | 1212.644542 | 606.825909 | 1195.617993 | 598.312635 | 1194.633977 | 597.820627 | L | ***1157.667720*** | 579.337498 | 1140.641171 | 570.824224 | 1139.657155 | 570.332216 | 10 |
| 9 | 1326.687469 | 663.847373 | 1309.660920 | 655.334098 | 1308.676904 | 654.842090 | N | ***1044.583656*** | 522.795466 | 1027.557107 | 514.282192 | 1026.573091 | 513.790184 | 9 |
| 10 | **1425.755883** | 713.381580 | 1408.729334 | 704.868305 | 1407.745318 | 704.376297 | V | ***930.540729*** | 465.774003 | 913.514180 | 457.260728 | 912.530164 | 456.768720 | 8 |
| 11 | **1526.803562** | 763.905419 | 1509.777013 | 755.392145 | 1508.792997 | 754.900137 | T | ***831.472315*** | 416.239796 | 814.445766 | 407.726521 | 813.461750 | 407.234513 | 7 |
| 12 | 1613.835590 | 807.421433 | 1596.809041 | 798.908159 | 1595.825025 | 798.416151 | S | ***730.424636*** | 365.715956 | 713.398087 | 357.202682 | 712.414071 | 356.710674 | 6 |
| 13 | **1712.904004** | 856.955640 | 1695.877455 | 848.442366 | 1694.893439 | 847.950358 | V | 643.392608 | 322.199942 | 626.366059 | 313.686668 | | | 5 |
| 14 | **1849.962916** | 925.485096 | 1832.936367 | 916.971822 | 1831.952351 | 916.479814 | H | ***544.324194*** | 272.665735 | 527.297645 | 264.152461 | | | 4 |
| 15 | 1963.046980 | 982.027128 | 1946.020431 | 973.513854 | 1945.036415 | 973.021846 | L | ***407.265282*** | 204.136279 | 390.238733 | 195.623004 | | | 3 |
| 16 | 2110.115394 | 1055.561335 | 2093.088845 | 1047.048060 | 2092.104829 | 1046.556052 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GVNLQEFLNVTSVHLFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.1 | 2255.213654 | 0.011334 | GVNLQEFLNVTSVHLFK |

**Mascot:** http://www.matrixscience.com/

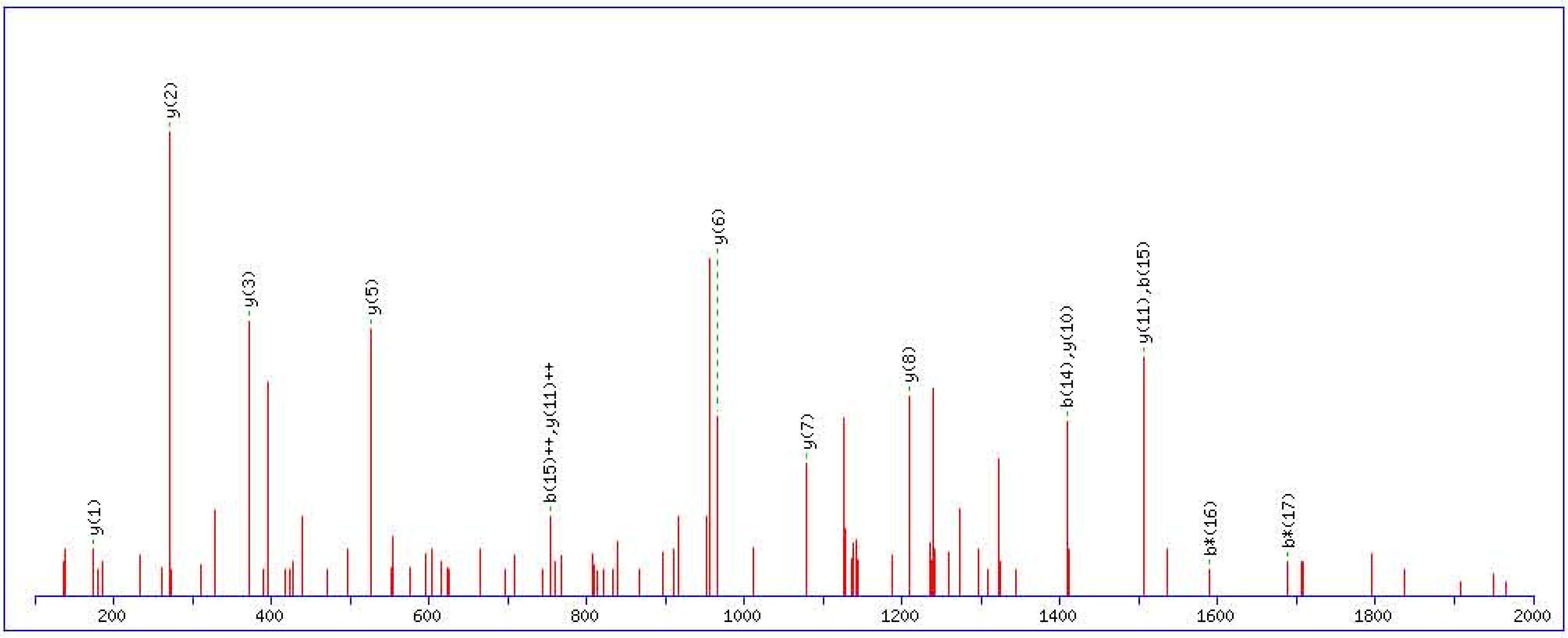
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AVPPNNSNAAEDDLPTVELQGVVPR**
Found in **F13A_HUMAN**, Coagulation factor XIII A chain OS=Homo sapiens GN=F13A1 PE=1 SV=4

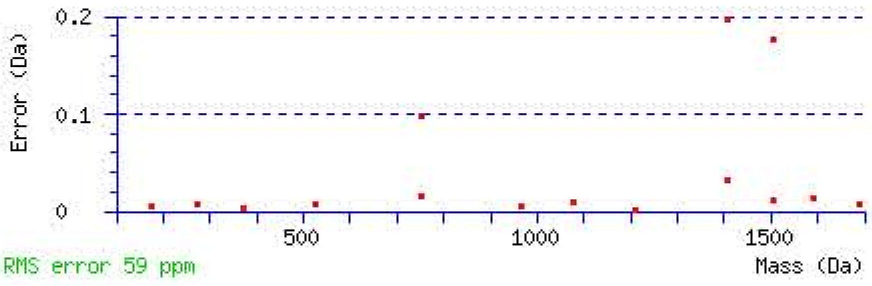
Match to Query 60940: 2912.478912 from(971.833580,3+) rtinseconds(2568) index(24846)
Title: Locus:1.1.1.896.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

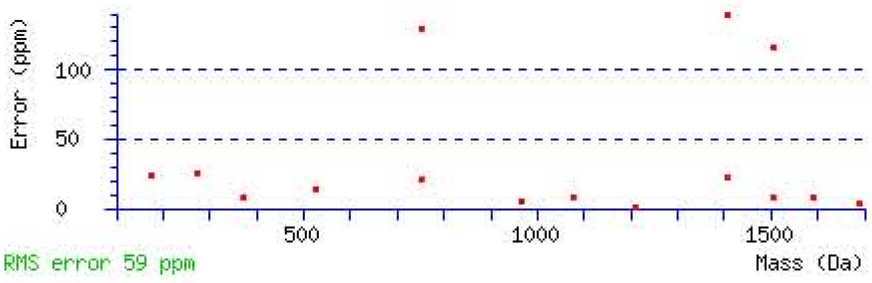
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2912.470200
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q20** : Biotin:Thermo-21345 (Q)
**Ions Score:** 26 **Expect:** 0.081
**Matches** : 15/254 fragment ions using 37 most intense peaks (help)

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 25 |
| 2 | 171.112804 | 86.060040 | | | | | V | 2842.440370 | 1421.723823 | 2825.413821 | 1413.210548 | 2824.429805 | 1412.718540 | 24 |
| 3 | 268.165568 | 134.586422 | | | | | P | 2743.371956 | 1372.189616 | 2726.345407 | 1363.676341 | 2725.361391 | 1363.184333 | 23 |
| 4 | 365.218332 | 183.112804 | | | | | P | 2646.319192 | 1323.663234 | 2629.292643 | 1315.149959 | 2628.308627 | 1314.657951 | 22 |
| 5 | 479.261259 | 240.134267 | 462.234710 | 231.620993 | | | N | 2549.266428 | 1275.136852 | 2532.239879 | 1266.623577 | 2531.255863 | 1266.131569 | 21 |
| 6 | 593.304186 | 297.155731 | 576.277637 | 288.642457 | | | N | 2435.223501 | 1218.115388 | 2418.196952 | 1209.602114 | 2417.212936 | 1209.110106 | 20 |
| 7 | 680.336214 | 340.671745 | 663.309665 | 332.158471 | 662.325649 | 331.666463 | S | 2321.180574 | 1161.093925 | 2304.154025 | 1152.580650 | 2303.170009 | 1152.088642 | 19 |
| 8 | 794.379141 | 397.693209 | 777.352592 | 389.179934 | 776.368576 | 388.687926 | N | 2234.148546 | 1117.577911 | 2217.121997 | 1109.064636 | 2216.137981 | 1108.572628 | 18 |
| 9 | 865.416255 | 433.211766 | 848.389706 | 424.698491 | 847.405690 | 424.206483 | A | 2120.105619 | 1060.556447 | 2103.079070 | 1052.043173 | 2102.095054 | 1051.551165 | 17 |
| 10 | 936.453369 | 468.730323 | 919.426820 | 460.217048 | 918.442804 | 459.725040 | A | 2049.068505 | 1025.037890 | 2032.041956 | 1016.524616 | 2031.057940 | 1016.032608 | 16 |
| 11 | 1065.495962 | 533.251619 | 1048.469413 | 524.738345 | 1047.485397 | 524.246336 | E | 1978.031391 | 989.519333 | 1961.004842 | 981.006059 | 1960.020826 | 980.514051 | 15 |
| 12 | 1180.522905 | 590.765091 | 1163.496356 | 582.251816 | 1162.512340 | 581.759808 | D | 1848.988798 | 924.998037 | 1831.962249 | 916.484762 | 1830.978233 | 915.992754 | 14 |
| 13 | 1295.549848 | 648.278562 | 1278.523299 | 639.765288 | 1277.539283 | 639.273280 | D | 1733.961855 | 867.484565 | 1716.935306 | 858.971291 | 1715.951290 | 858.479283 | 13 |
| 14 | **1408.633912** | 704.820594 | 1391.607363 | 696.307320 | 1390.623347 | 695.815312 | L | 1618.934912 | 809.971094 | 1601.908363 | 801.457819 | 1600.924347 | 800.965811 | 12 |
| 15 | **1505.686676** | 753.346976 | 1488.660127 | 744.833702 | 1487.676111 | 744.341694 | P | ***1505.850848*** | 753.429062 | 1488.824299 | 744.915787 | 1487.840283 | 744.423779 | 11 |
| 16 | 1606.734355 | 803.870816 | 1589.707806 | 795.357541 | 1588.723790 | 794.865533 | T | ***1408.798084*** | 704.902680 | 1391.771535 | 696.389405 | 1390.787519 | 695.897397 | 10 |
| 17 | 1705.802769 | 853.405023 | 1688.776220 | 844.891748 | 1687.792204 | 844.399740 | V | 1307.750405 | 654.378840 | 1290.723856 | 645.865566 | 1289.739840 | 645.373558 | 9 |
| 18 | 1834.845362 | 917.926319 | 1817.818813 | 909.413045 | 1816.834797 | 908.921037 | E | ***1208.681991*** | 604.844633 | 1191.655442 | 596.331359 | 1190.671426 | 595.839351 | 8 |
| 19 | 1947.929426 | 974.468351 | 1930.902877 | 965.955077 | 1929.918861 | 965.463069 | L | ***1079.639398*** | 540.323337 | 1062.612849 | 531.810062 | | | 7 |
| 20 | 2387.154752 | 1194.081014 | 2370.128203 | 1185.567739 | 2369.144187 | 1185.075731 | Q | ***966.555334*** | 483.781305 | 949.528785 | 475.268030 | | | 6 |
| 21 | 2444.176216 | 1222.591746 | 2427.149667 | 1214.078471 | 2426.165651 | 1213.586463 | G | ***527.330008*** | 264.168642 | 510.303459 | 255.655367 | | | 5 |
| 22 | 2543.244630 | 1272.125953 | 2526.218081 | 1263.612678 | 2525.234065 | 1263.120670 | V | 470.308544 | 235.657910 | 453.281995 | 227.144635 | | | 4 |
| 23 | 2642.313044 | 1321.660160 | 2625.286495 | 1313.146885 | 2624.302479 | 1312.654877 | V | ***371.240130*** | 186.123703 | 354.213581 | 177.610428 | | | 3 |
| 24 | 2739.365808 | 1370.186542 | 2722.339259 | 1361.673267 | 2721.355243 | 1361.181259 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 25 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AVPPNNSNAAEDDLPTVELQGVVPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.8 | 2912.470200 | 0.008712 | AVPPNNSNAAEDDLPTVELQGVVPR |

**Mascot:** http://www.matrixscience.com/

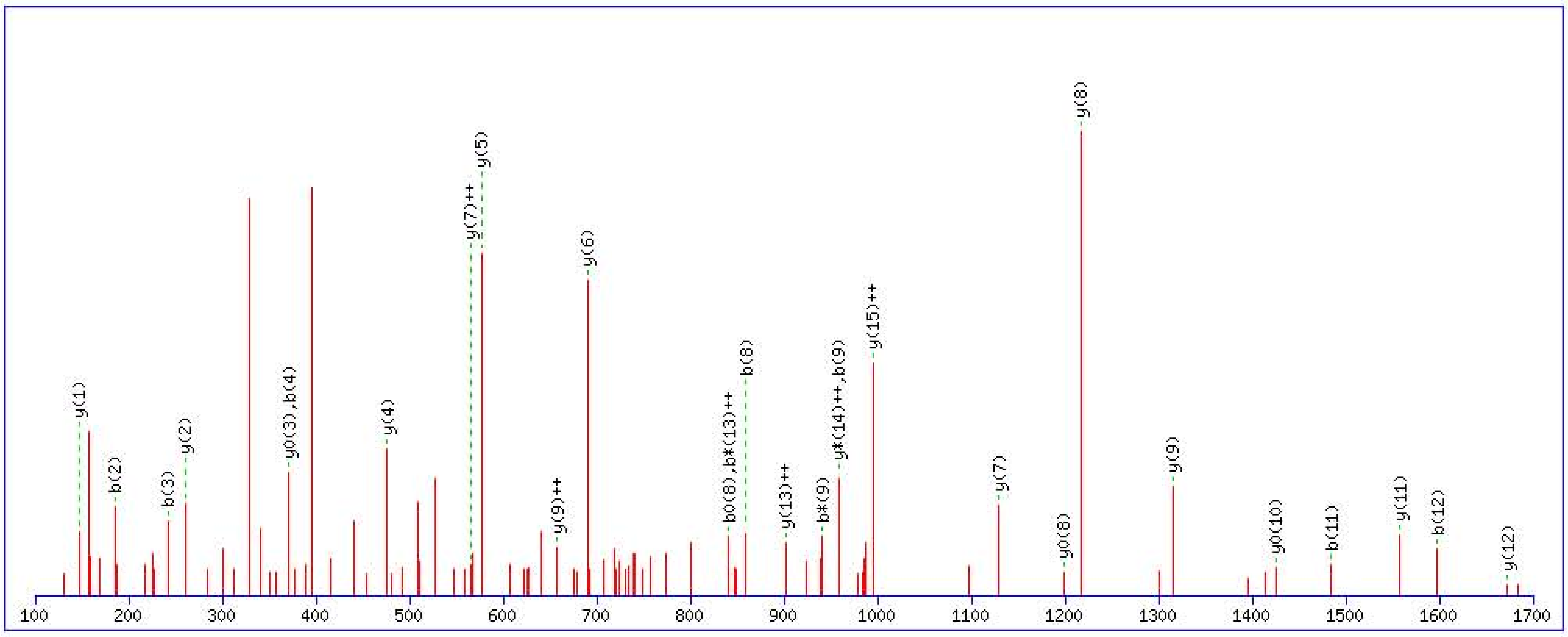
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AIGEMDNQVSQLTSELK**
Found in **COL11_HUMAN**, Collectin-11 OS=Homo sapiens GN=COLEC11 PE=1 SV=1

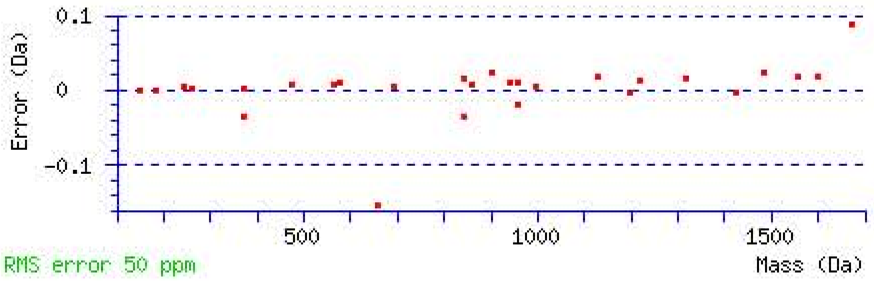
Match to Query 50526: 2173.094622 from(725.372150,3+) rtinseconds(2436) index(55618)
Title: Locus:1.1.1.1463.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

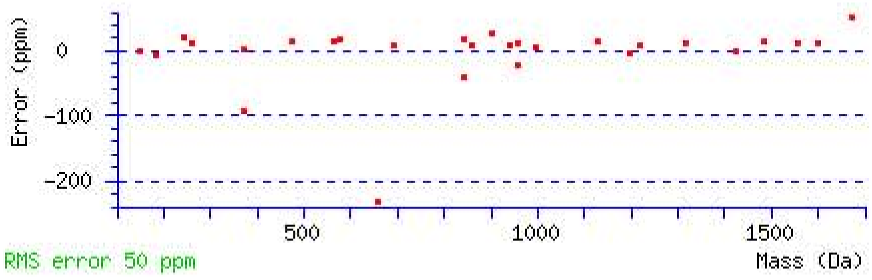
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2173.075867
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q11** : Biotin:Thermo-21345 (Q)
**Ions Score:** 64 **Expect:** 1.2e-005
**Matches :** 28/170 fragment ions using 41 most intense peaks (help)

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 17 |
| 2 | ***185.128454*** | 93.067865 | | | | | I | 2103.046054 | 1052.026665 | 2086.019505 | 1043.513390 | 2085.035489 | 1043.021382 | 16 |
| 3 | ***242.149918*** | 121.578597 | | | | | G | 1989.961990 | 995.484633 | 1972.935441 | 986.971359 | 1971.951425 | 986.479351 | 15 |
| 4 | ***371.192511*** | 186.099894 | | | 353.181946 | 177.094611 | E | 1932.940526 | 966.973901 | 1915.913977 | 958.460627 | 1914.929961 | 957.968619 | 14 |
| 5 | 502.232996 | 251.620136 | | | 484.222431 | 242.614854 | M | 1803.897933 | 902.452605 | 1786.871384 | 893.939330 | 1785.887368 | 893.447322 | 13 |
| 6 | 617.259939 | 309.133608 | | | 599.249374 | 300.128325 | D | ***1672.857448*** | 836.932362 | 1655.830899 | 828.419088 | 1654.846883 | 827.927080 | 12 |
| 7 | 731.302866 | 366.155071 | 714.276317 | 357.641797 | 713.292301 | 357.149789 | N | ***1557.830505*** | 779.418891 | 1540.803956 | 770.905616 | 1539.819940 | 770.413608 | 11 |
| 8 | ***859.361444*** | 430.184360 | 842.334895 | 421.671086 | 841.350879 | 421.179078 | Q | 1443.787578 | 722.397427 | 1426.761029 | 713.884153 | 1425.777013 | 713.392145 | 10 |
| 9 | ***958.429858*** | 479.718567 | 941.403309 | 471.205292 | 940.419293 | 470.713284 | V | ***1315.729000*** | 658.368138 | 1298.702451 | 649.854864 | 1297.718435 | 649.362856 | 9 |
| 10 | 1045.461886 | 523.234581 | 1028.435337 | 514.721307 | 1027.451321 | 514.229299 | S | ***1216.660586*** | 608.833931 | 1199.634037 | 600.320657 | 1198.650021 | 599.828649 | 8 |
| 11 | ***1484.687212*** | 742.847244 | 1467.660663 | 734.333970 | 1466.676647 | 733.841962 | Q | ***1129.628558*** | 565.317917 | 1112.602009 | 556.804643 | 1111.617993 | 556.312635 | 7 |
| 12 | ***1597.771276*** | 799.389276 | 1580.744727 | 790.876002 | 1579.760711 | 790.383993 | L | ***690.403232*** | 345.705254 | 673.376683 | 337.191980 | 672.392667 | 336.699972 | 6 |
| 13 | 1698.818955 | 849.913116 | 1681.792406 | 841.399841 | 1680.808390 | 840.907833 | T | ***577.319168*** | 289.163222 | 560.292619 | 280.649948 | 559.308603 | 280.157940 | 5 |
| 14 | 1785.850983 | 893.429130 | 1768.824434 | 884.915855 | 1767.840418 | 884.423847 | S | ***476.271489*** | 238.639383 | 459.244940 | 230.126108 | 458.260924 | 229.634100 | 4 |
| 15 | 1914.893576 | 957.950426 | 1897.867027 | 949.437152 | 1896.883011 | 948.945144 | E | 389.239461 | 195.123369 | 372.212912 | 186.610094 | 371.228896 | 186.118086 | 3 |
| 16 | 2027.977640 | 1014.492458 | 2010.951091 | 1005.979184 | 2009.967075 | 1005.487176 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 17 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546766 | | | 1 |





NCBI **BLAST** search of AIGEMDNQVSQLTSELK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 64.0 | 2173.075867 | 0.018755 | AIGEMDNQVSQLTSELK |
| 28.5 | 2173.075867 | 0.018755 | AIGEMDNQVSQLTSELK |

**Mascot:** http://www.matrixscience.com/

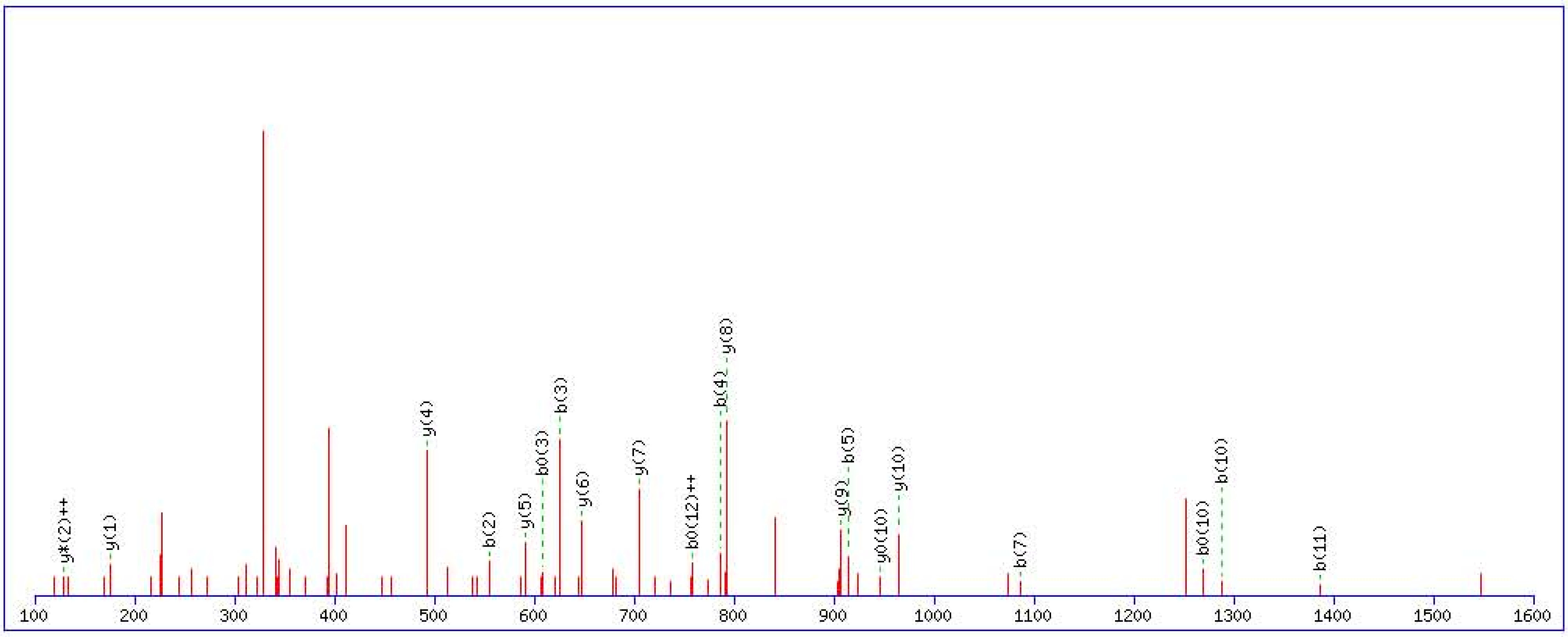
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QDACQGDSGGVFAVR**
Found in **C1R_HUMAN**, Complement C1r subcomponent OS=Homo sapiens GN=C1R PE=1 SV=2

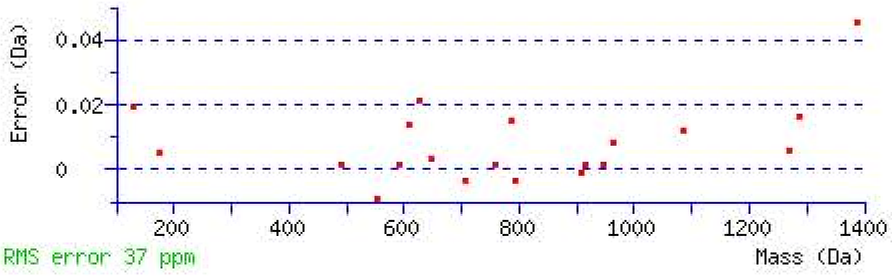
Match to Query 44249: 1876.851852 from(626.624560,3+) rtinseconds(1938) index(35986)
Title: Locus:1.1.1.3094.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

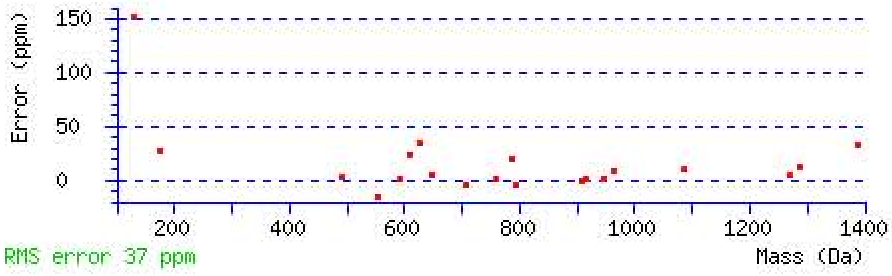
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1876.856033
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 8.7e-006
Matches : 20/152 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 15 |
| 2 | ***555.259545*** | 278.133411 | 538.232996 | 269.620136 | 537.248980 | 269.128128 | D | 1438.637955 | 719.822616 | 1421.611406 | 711.309341 | 1420.627390 | 710.817333 | 14 |
| 3 | ***626.296659*** | 313.651968 | 609.270110 | 305.138693 | 608.286094 | 304.646685 | A | 1323.611012 | 662.309144 | 1306.584463 | 653.795870 | 1305.600447 | 653.303862 | 13 |
| 4 | ***786.327308*** | 393.667292 | 769.300759 | 385.154018 | 768.316743 | 384.662010 | C | 1252.573898 | 626.790587 | 1235.547349 | 618.277313 | 1234.563333 | 617.785305 | 12 |
| 5 | ***914.385886*** | 457.696581 | 897.359337 | 449.183307 | 896.375321 | 448.691299 | Q | 1092.543249 | 546.775263 | 1075.516700 | 538.261988 | 1074.532684 | 537.769980 | 11 |
| 6 | 971.407350 | 486.207313 | 954.380801 | 477.694039 | 953.396785 | 477.202031 | G | ***964.484671*** | 482.745974 | 947.458122 | 474.232699 | 946.474106 | 473.740691 | 10 |
| 7 | ***1086.434293*** | 543.720785 | 1069.407744 | 535.207510 | 1068.423728 | 534.715502 | D | ***907.463207*** | 454.235242 | 890.436658 | 445.721967 | 889.452642 | 445.229959 | 9 |
| 8 | 1173.466321 | 587.236799 | 1156.439772 | 578.723524 | 1155.455756 | 578.231516 | S | ***792.436264*** | 396.721770 | 775.409715 | 388.208496 | 774.425699 | 387.716488 | 8 |
| 9 | 1230.487785 | 615.747531 | 1213.461236 | 607.234256 | 1212.477220 | 606.742248 | G | ***705.404236*** | 353.205756 | 688.377687 | 344.692482 | | | 7 |
| 10 | ***1287.509249*** | 644.258263 | 1270.482700 | 635.744988 | 1269.498684 | 635.252980 | G | ***648.382772*** | 324.695024 | 631.356223 | 316.181750 | | | 6 |
| 11 | ***1386.577663*** | 693.792470 | 1369.551114 | 685.279195 | 1368.567098 | 684.787187 | V | ***591.361308*** | 296.184292 | 574.334759 | 287.671018 | | | 5 |
| 12 | 1533.646077 | 767.326677 | 1516.619528 | 758.813402 | 1515.635512 | 758.321394 | F | ***492.292894*** | 246.650085 | 475.266345 | 238.136811 | | | 4 |
| 13 | 1604.683191 | 802.845234 | 1587.656642 | 794.331959 | 1586.672626 | 793.839951 | A | 345.224480 | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 14 | 1703.751605 | 852.379441 | 1686.725056 | 843.866166 | 1685.741040 | 843.374158 | V | 274.187366 | 137.597321 | 257.160817 | 129.084047 | | | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QDACQGDSGGVFAVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.1 | 1876.856033 | -0.004181 | QDACQGDSGGVFAVR |
| 43.1 | 1876.856033 | -0.004181 | QDACQGDSGGVFAVR |
| 0.1 | 1876.855820 | -0.003968 | QRAGSSGGRGECDISGAGR |

**Mascot:** http://www.matrixscience.com/

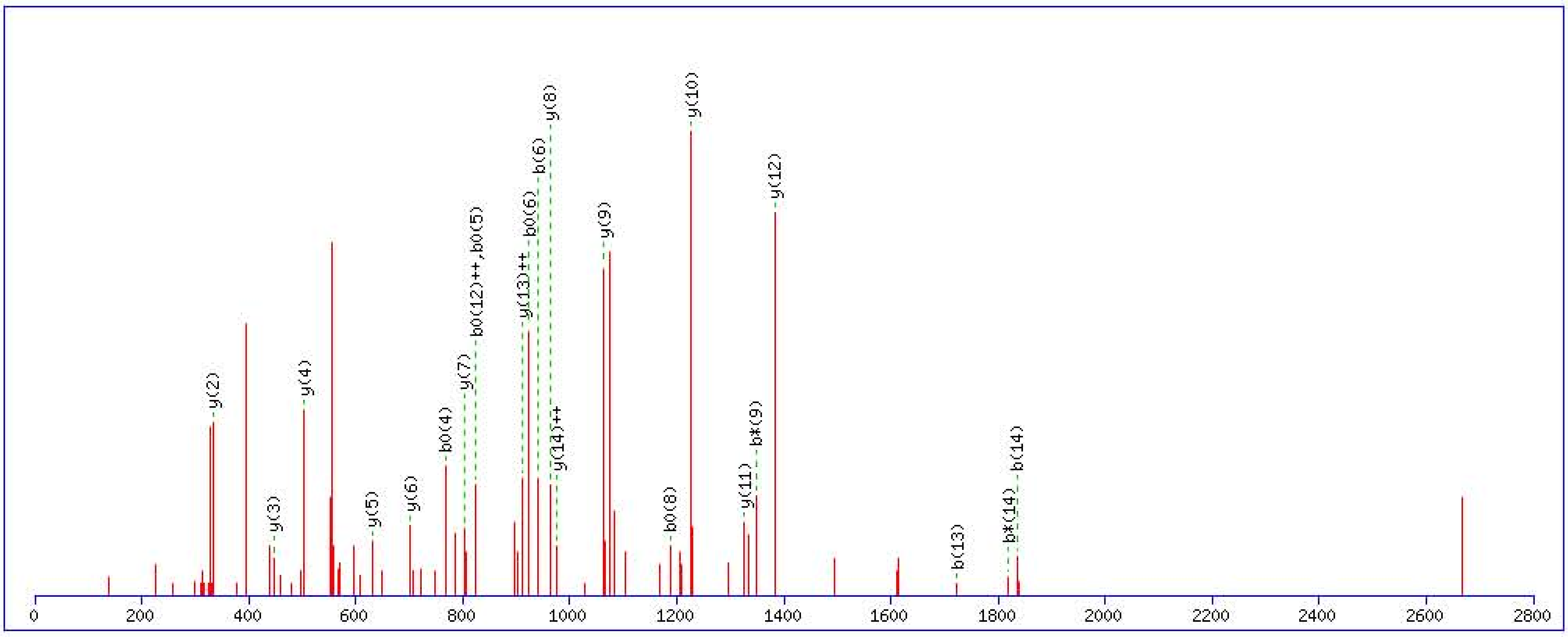
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ESEQGVYTCTAQGIWK**
Found in **C1R_HUMAN**, Complement C1r subcomponent OS=Homo sapiens GN=C1R PE=1 SV=2

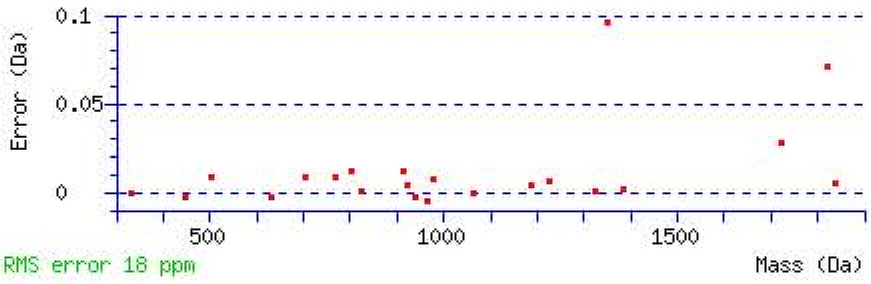
Match to Query 50315: 2167.026388 from(1084.520470,2+) rtinseconds(2163) index(37411)
Title: Locus:1.1.1.3172.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

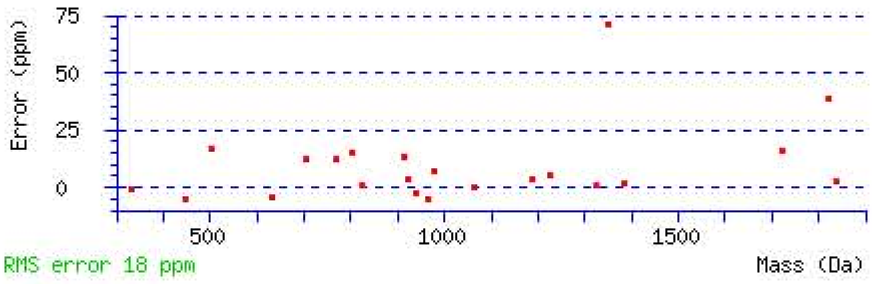


```
Monoisotopic mass of neutral peptide Mr(calc): 2167.007813
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4     : Biotin:Thermo-21345 (Q)
Ions Score: 62  Expect: 1.2e-005
Matches : 23/162 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 16 |
| 2 | 217.081897 | 109.044586 | | | 199.071332 | 100.039304 | S | 2038.972498 | 1019.989887 | 2021.945949 | 1011.476613 | 2020.961933 | 1010.984604 | 15 |
| 3 | 346.124490 | 173.565883 | | | 328.113925 | 164.560600 | E | 1951.940470 | 976.473873 | 1934.913921 | 967.960599 | 1933.929905 | 967.468591 | 14 |
| 4 | 785.349816 | 393.178546 | 768.323267 | 384.665272 | 767.339251 | 384.173264 | Q | 1822.897877 | 911.952577 | 1805.871328 | 903.439302 | 1804.887312 | 902.947294 | 13 |
| 5 | 842.371280 | 421.689278 | 825.344731 | 413.176004 | 824.360715 | 412.683996 | G | ***1383.672551*** | 692.339913 | 1366.646002 | 683.826639 | 1365.661986 | 683.334631 | 12 |
| 6 | **941.439694** | 471.223485 | 924.413145 | 462.710211 | 923.429129 | 462.218203 | V | ***1326.651087*** | 663.829182 | 1309.624538 | 655.315907 | 1308.640522 | 654.823899 | 11 |
| 7 | 1104.503023 | 552.755150 | 1087.476474 | 544.241875 | 1086.492458 | 543.749867 | Y | ***1227.582673*** | 614.294975 | 1210.556124 | 605.781700 | 1209.572108 | 605.289692 | 10 |
| 8 | 1205.550702 | 603.278989 | 1188.524153 | 594.765715 | 1187.540137 | 594.273707 | T | ***1064.519344*** | 532.763310 | 1047.492795 | 524.250036 | 1046.508779 | 523.758028 | 9 |
| 9 | 1365.581351 | 683.294314 | 1348.554802 | 674.781039 | 1347.570786 | 674.289031 | C | ***963.471665*** | 482.239471 | 946.445116 | 473.726196 | 945.461100 | 473.234188 | 8 |
| 10 | 1466.629030 | 733.818153 | 1449.602481 | 725.304879 | 1448.618465 | 724.812871 | T | ***803.441016*** | 402.224146 | 786.414467 | 393.710872 | 785.430451 | 393.218864 | 7 |
| 11 | 1537.666144 | 769.336710 | 1520.639595 | 760.823436 | 1519.655579 | 760.331428 | A | ***702.393337*** | 351.700307 | 685.366788 | 343.187032 | | | 6 |
| 12 | 1665.724722 | 833.365999 | 1648.698173 | 824.852725 | 1647.714157 | 824.360717 | Q | ***631.356223*** | 316.181750 | 614.329674 | 307.668475 | | | 5 |
| 13 | **1722.746186** | 861.876731 | 1705.719637 | 853.363457 | 1704.735621 | 852.871449 | G | ***503.297645*** | 252.152460 | 486.271096 | 243.639186 | | | 4 |
| 14 | **1835.830250** | 918.418763 | 1818.803701 | 909.905489 | 1817.819685 | 909.413480 | I | ***446.276181*** | 223.641728 | 429.249632 | 215.128454 | | | 3 |
| 15 | 2021.909563 | 1011.458420 | 2004.883014 | 1002.945145 | 2003.898998 | 1002.453137 | W | ***333.192117*** | 167.099696 | 316.165568 | 158.586422 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 18 ppm



RMS error 18 ppm

NCBI **BLAST** search of ESEQGVYTCTAQGIWK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 62.0 | 2167.007813 | 0.018576 | ESEQGVYTCTAQGIWK |

**Mascot:** http://www.matrixscience.com/

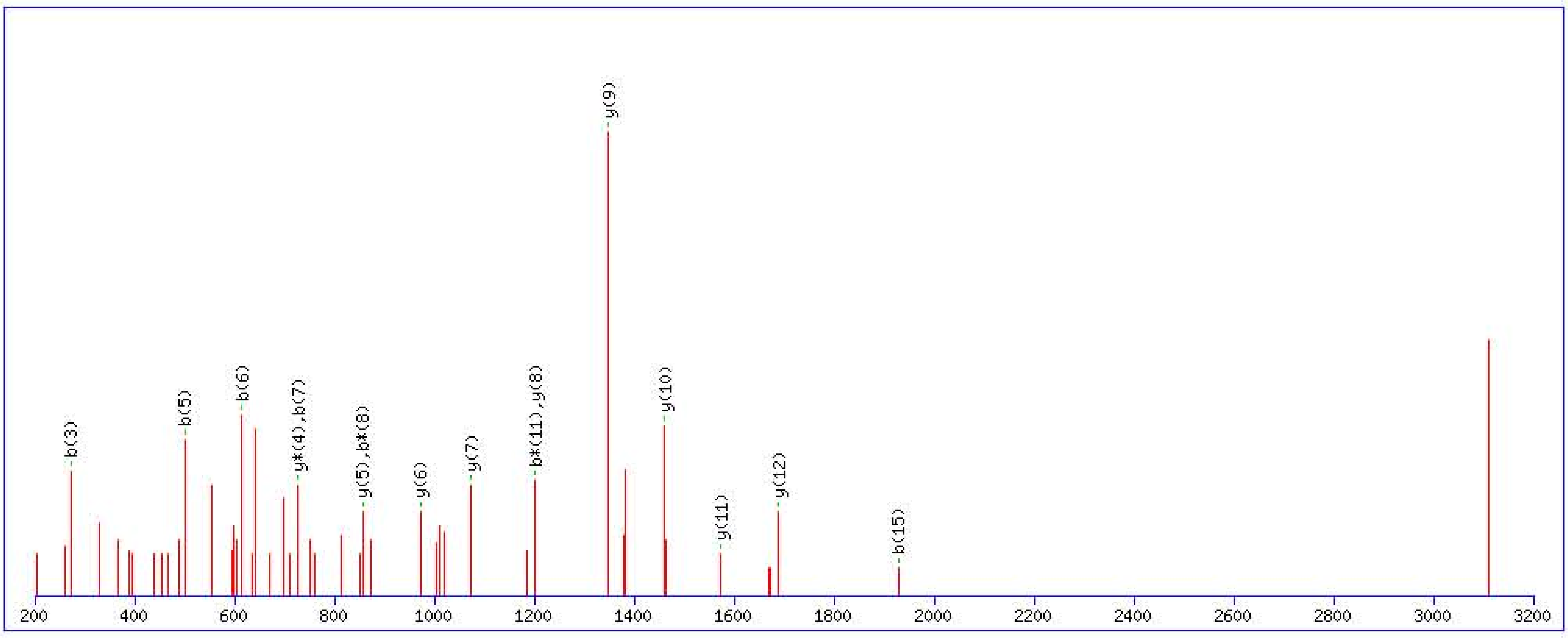
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SNALDIIFQTDLTGQK**
Found in **C1S_HUMAN**, Complement C1s subcomponent OS=Homo sapiens GN=C1S PE=1 SV=1

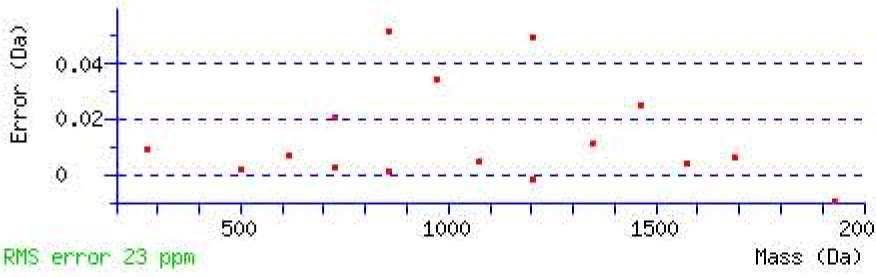
Match to Query 48811: 2074.100688 from(1038.057620,2+) rtinseconds(2891) index(58620)
Title: Locus:1.1.1.1619.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

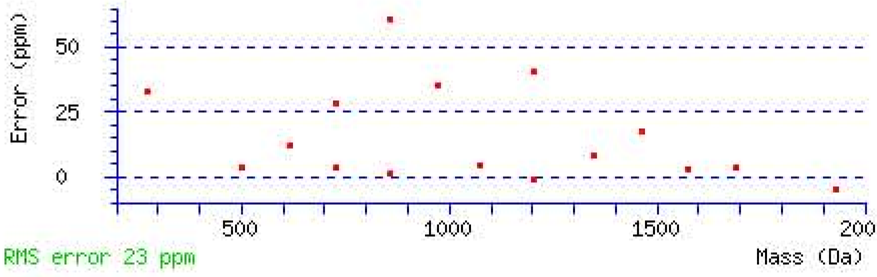
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 200 to 3200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2074.076874
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q15     : Biotin:Thermo-21345 (Q)
Ions Score: 69  Expect: 2.5e-006
Matches : 16/172 fragment ions using 15 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 16 |
| 2 | 202.082231 | 101.544753 | 185.055682 | 93.031479 | 184.071666 | 92.539471 | N | 1988.052127 | 994.529702 | 1971.025578 | 986.016427 | 1970.041562 | 985.524419 | 15 |
| 3 | ***273.119345*** | 137.063311 | 256.092796 | 128.550036 | 255.108780 | 128.058028 | A | 1874.009200 | 937.508238 | 1856.982651 | 928.994964 | 1855.998635 | 928.502956 | 14 |
| 4 | 386.203409 | 193.605343 | 369.176860 | 185.092068 | 368.192844 | 184.600060 | L | 1802.972086 | 901.989681 | 1785.945537 | 893.476407 | 1784.961521 | 892.984399 | 13 |
| 5 | ***501.230352*** | 251.118814 | 484.203803 | 242.605540 | 483.219787 | 242.113532 | D | ***1689.888022*** | 845.447649 | 1672.861473 | 836.934375 | 1671.877457 | 836.442367 | 12 |
| 6 | ***614.314416*** | 307.660846 | 597.287867 | 299.147572 | 596.303851 | 298.655564 | I | ***1574.861079*** | 787.934178 | 1557.834530 | 779.420903 | 1556.850514 | 778.928895 | 11 |
| 7 | ***727.398480*** | 364.202878 | 710.371931 | 355.689604 | 709.387915 | 355.197596 | I | ***1461.777015*** | 731.392146 | 1444.750466 | 722.878871 | 1443.766450 | 722.386863 | 10 |
| 8 | 874.466894 | 437.737085 | 857.440345 | 429.223811 | 856.456329 | 428.731803 | F | ***1348.692951*** | 674.850114 | 1331.666402 | 666.336839 | 1330.682386 | 665.844831 | 9 |
| 9 | 1002.525472 | 501.766374 | 985.498923 | 493.253100 | 984.514907 | 492.761092 | Q | ***1201.624537*** | 601.315907 | 1184.597988 | 592.802632 | 1183.613972 | 592.310624 | 8 |
| 10 | 1103.573151 | 552.290214 | 1086.546602 | 543.776939 | 1085.562586 | 543.284931 | T | ***1073.565959*** | 537.286618 | 1056.539410 | 528.773343 | 1055.555394 | 528.281335 | 7 |
| 11 | 1218.600094 | 609.803685 | 1201.573545 | 601.290411 | 1200.589529 | 600.798403 | D | ***972.518280*** | 486.762778 | 955.491731 | 478.249504 | 954.507715 | 477.757496 | 6 |
| 12 | 1331.684158 | 666.345717 | 1314.657609 | 657.832443 | 1313.673593 | 657.340435 | L | ***857.491337*** | 429.249307 | 840.464788 | 420.736032 | 839.480772 | 420.244024 | 5 |
| 13 | 1432.731837 | 716.869557 | 1415.705288 | 708.356282 | 1414.721272 | 707.864274 | T | 744.407273 | 372.707275 | 727.380724 | 364.194000 | 726.396708 | 363.701992 | 4 |
| 14 | 1489.753301 | 745.380289 | 1472.726752 | 736.867014 | 1471.742736 | 736.375006 | G | 643.359594 | 322.183435 | 626.333045 | 313.670161 | | | 3 |
| 15 | ***1928.978627*** | 964.992952 | 1911.952078 | 956.479677 | 1910.968062 | 955.987669 | Q | 586.338130 | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SNALDIIFQTDLTGQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 68.8 | 2074.076874 | 0.023814 | SNALDIIFQTDLTGQK |
| 38.8 | 2074.076874 | 0.023814 | SNALDIIFQTDLTGQK |
| 8.5 | 2074.088104 | 0.012584 | SKGLVQNIDQLYSGGGK |
| 1.8 | 2074.076813 | 0.023875 | LEEELREKQAYVEK |
| 1.6 | 2074.110535 | -0.009847 | QNPSLPAARGLNELQR |
| 0.5 | 2074.111420 | -0.010732 | VFVGFLFPWALMLLSYR |
| 0.3 | 2074.126923 | -0.026235 | IEALKATAASLSSRIESEAK |
| 0.2 | 2074.100662 | 0.000026 | DYKIQNHGHRVLQR |
| 0.2 | 2074.081589 | 0.019099 | GTMGNHLLTNPVLQPR |
| 0.2 | 2074.118423 | -0.017735 | VRETRHLWVGNLPENVR |

**Mascot:** http://www.matrixscience.com/

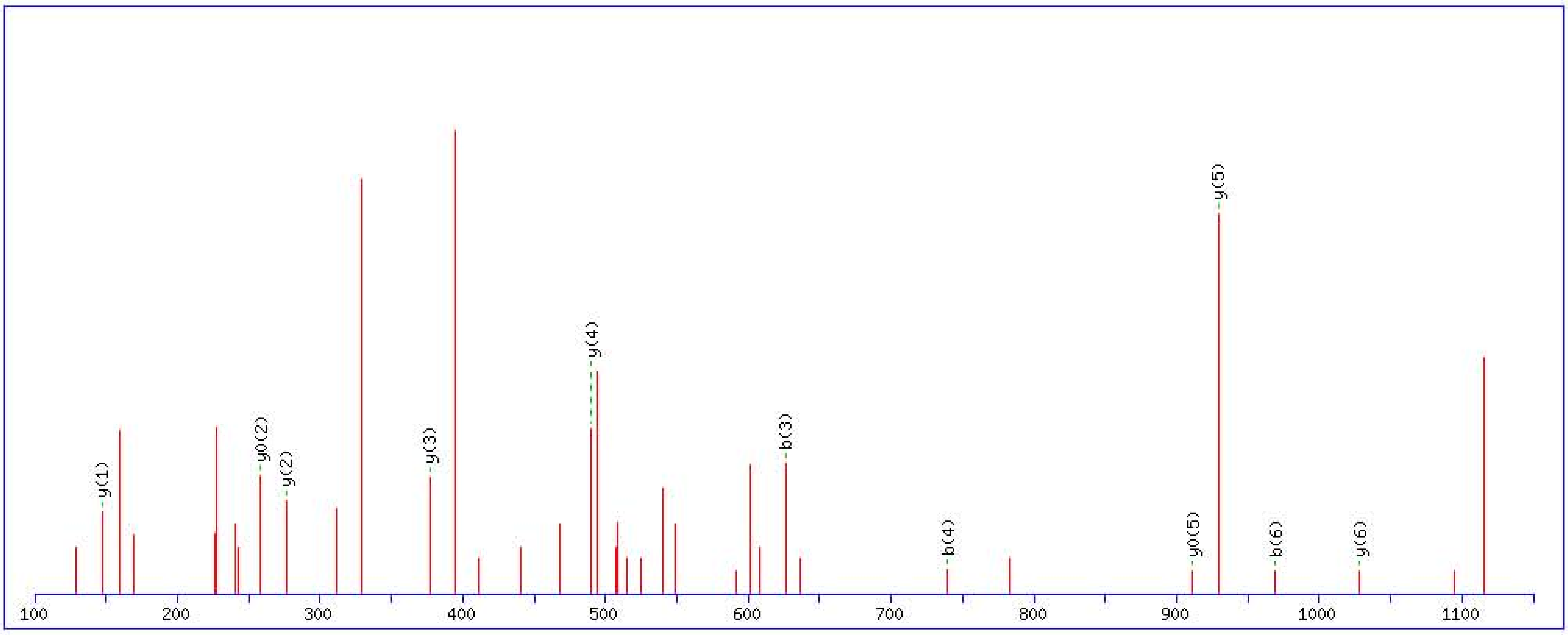
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SVQLTEK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

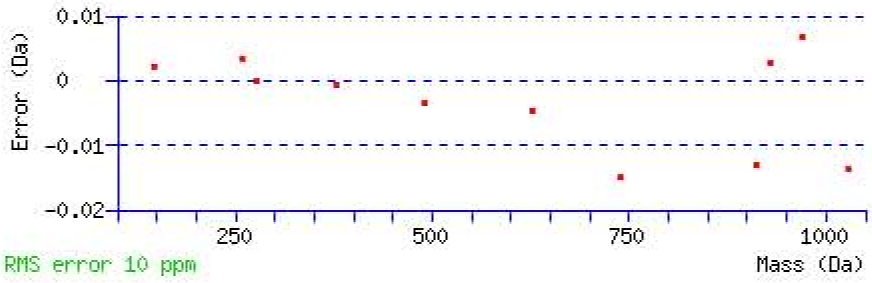
Match to Query 19739: 1114.600588 from(558.307570,2+) rtinseconds(1507) index(33332)
Title: Locus:1.1.1.2944.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

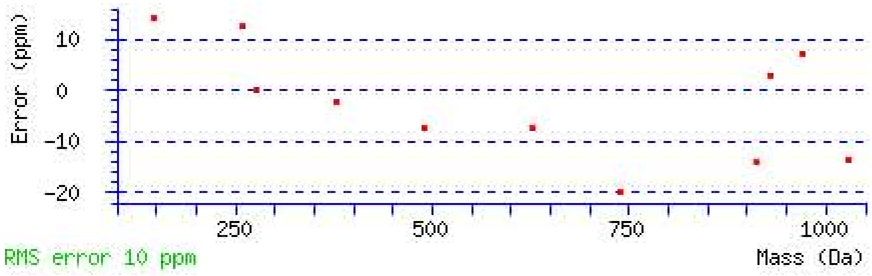
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1150 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1114.605621
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q3** : Biotin:Thermo-21345 (Q)
**Ions Score:** 33 **Expect:** 0.0051
**Matches :** 11/66 fragment ions using 23 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 7 |
| 2 | 187.107718 | 94.057497 | | | 169.097153 | 85.052214 | V | *1028.580880* | 514.794078 | 1011.554331 | 506.280804 | 1010.570315 | 505.788796 | 6 |
| 3 | **626.333044** | 313.670160 | 609.306495 | 305.156885 | 608.322479 | 304.664877 | Q | *929.512466* | 465.259871 | 912.485917 | 456.746597 | 911.501901 | 456.254589 | 5 |
| 4 | **739.417108** | 370.212192 | 722.390559 | 361.698917 | 721.406543 | 361.206909 | L | *490.287140* | 245.647208 | 473.260591 | 237.133934 | 472.276575 | 236.641926 | 4 |
| 5 | 840.464787 | 420.736032 | 823.438238 | 412.222757 | 822.454222 | 411.730749 | T | *377.203076* | 189.105176 | 360.176527 | 180.591902 | 359.192511 | 180.099894 | 3 |
| 6 | **969.507380** | 485.257328 | 952.480831 | 476.744054 | 951.496815 | 476.252046 | E | *276.155397* | 138.581336 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 7 | | | | | | | K | *147.112804* | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SVQLTEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.4 | 1114.605621 | -0.005033 | SVQLTEK |
| 8.5 | 1114.591690 | 0.008898 | ASVHSMISRK |
| 6.9 | 1114.613480 | -0.012892 | SVFAKHGLEK |
| 4.6 | 1114.584503 | 0.016085 | DAQVFPK |
| 3.4 | 1114.598236 | 0.002352 | SAVITSLDPGR |
| 2.7 | 1114.598190 | 0.002398 | QEQEAAKLAK |

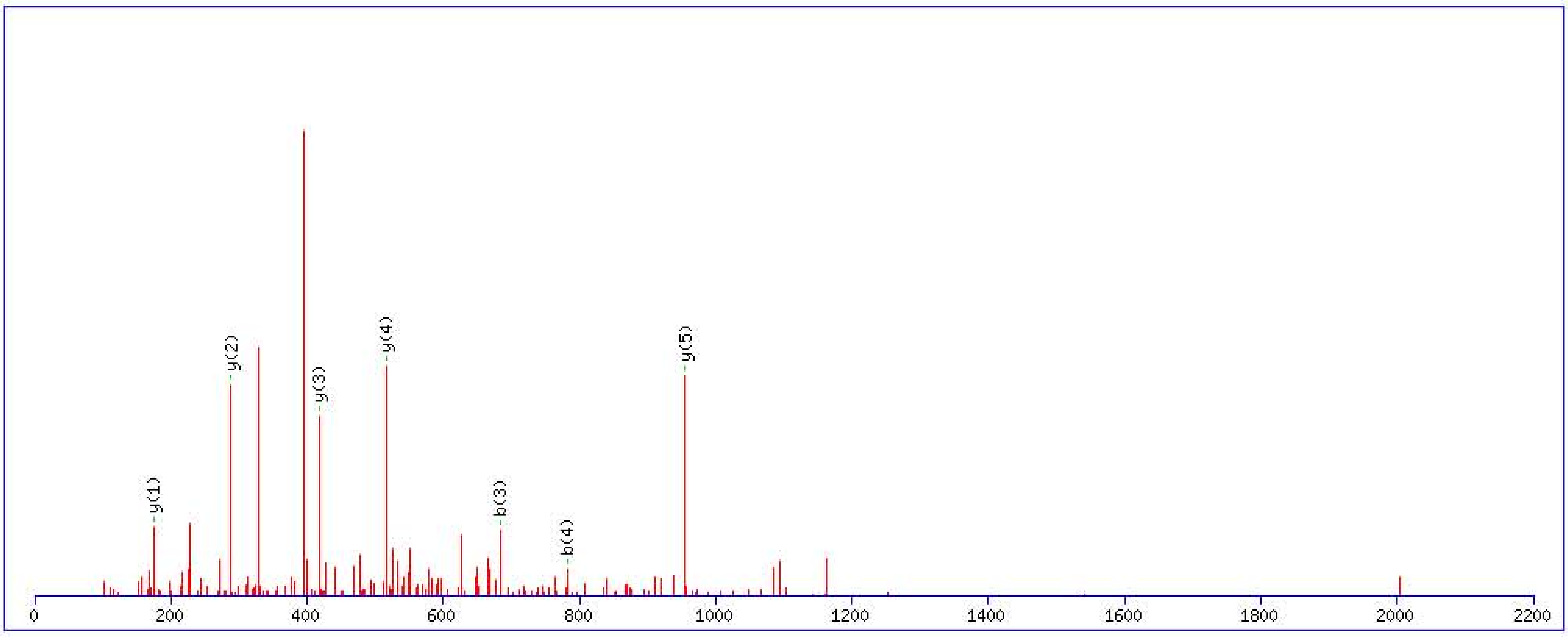
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NEQVEIR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

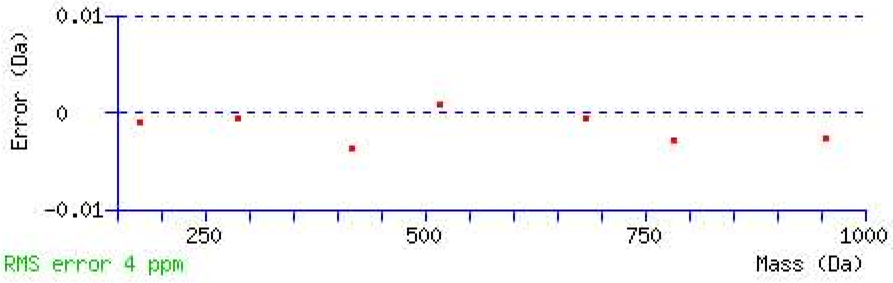
Match to Query 23267: 1197.613508 from(599.814030,2+) rtinseconds(1591) index(33866)
Title: Locus:1.1.1.2973.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

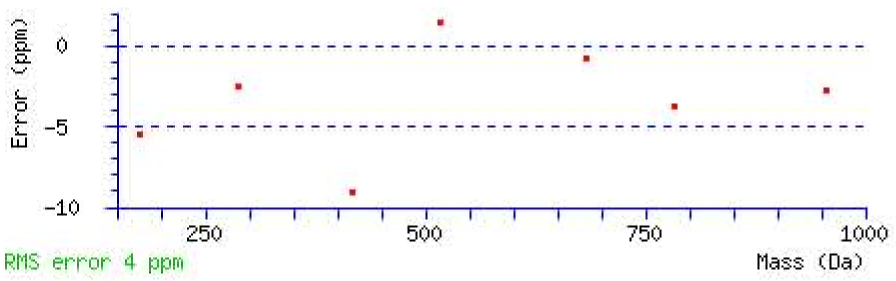
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1197.617569
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 36  Expect: 0.0032
Matches : 7/66 fragment ions using 11 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 7 |
| 2 | 244.092796 | 122.550036 | 227.066247 | 114.036762 | 226.082231 | 113.544754 | E | 1084.581942 | 542.794609 | 1067.555393 | 534.281335 | 1066.571377 | 533.789327 | 6 |
| 3 | **683.318122** | 342.162699 | 666.291573 | 333.649425 | 665.307557 | 333.157417 | Q | ***955.539349*** | 478.273313 | 938.512800 | 469.760038 | 937.528784 | 469.268030 | 5 |
| 4 | **782.386536** | 391.696906 | 765.359987 | 383.183632 | 764.375971 | 382.691624 | V | ***516.314023*** | 258.660650 | 499.287474 | 250.147375 | 498.303458 | 249.655367 | 4 |
| 5 | 911.429129 | 456.218203 | 894.402580 | 447.704928 | 893.418564 | 447.212920 | E | ***417.245609*** | 209.126443 | 400.219060 | 200.613168 | 399.235044 | 200.121160 | 3 |
| 6 | 1024.513193 | 512.760235 | 1007.486644 | 504.246960 | 1006.502628 | 503.754952 | I | ***288.203016*** | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of NEQVEIR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 35.9 | 1197.617569 | -0.004061 | NEQVEIR |
| 8.8 | 1197.617569 | -0.004061 | NQEDLLR |
| 8.8 | 1197.598953 | 0.014555 | QDNLPDIEVR |
| 8.4 | 1197.617569 | -0.004061 | QEVNELR |
| 8.2 | 1197.598938 | 0.014570 | AAQEGDLPELR |
| 8.0 | 1197.617569 | -0.004061 | LQDNELR |
| 7.6 | 1197.598953 | 0.014555 | EISPGSGPGEIR |
| 6.0 | 1197.621399 | -0.007891 | EKHSTQAKNR |
| 3.9 | 1197.628815 | -0.015307 | QLSMQVHALR |
| 2.8 | 1197.598953 | 0.014555 | VDNQPEELVR |

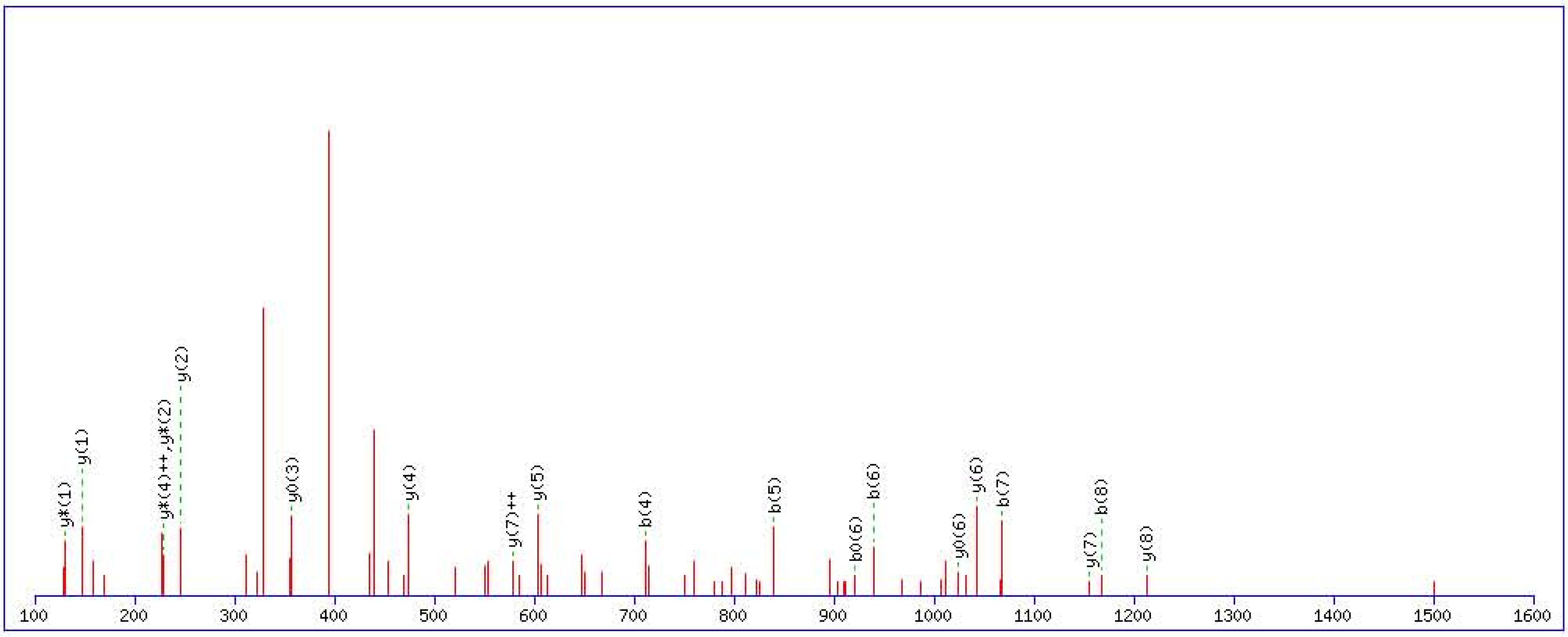
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **TGLQEVEVK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

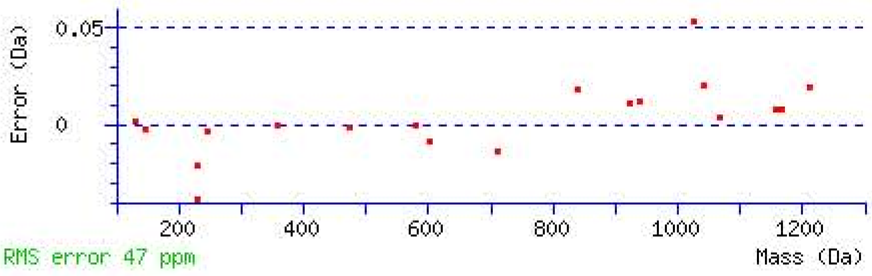
Match to Query 26450: 1312.705908 from(657.360230,2+) rtinseconds(1814) index(35116)
Title: Locus:1.1.1.3051.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

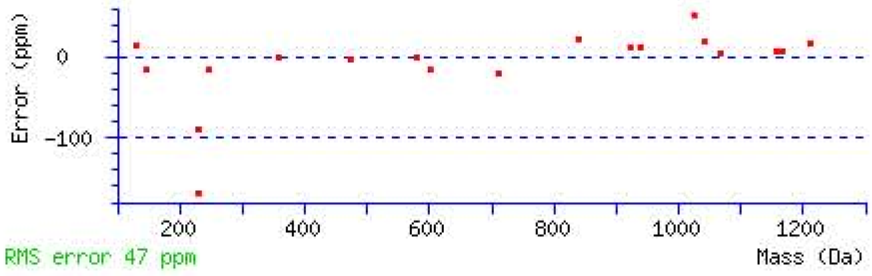
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1312.706070
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 39  Expect: 0.002
Matches : 19/86 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 9 |
| 2 | 159.076419 | 80.041847 | | | 141.065854 | 71.036565 | G | ***1212.665672*** | 606.836474 | 1195.639123 | 598.323200 | 1194.655107 | 597.831192 | 8 |
| 3 | 272.160483 | 136.583879 | | | 254.149918 | 127.578597 | L | ***1155.644208*** | 578.325742 | 1138.617659 | 569.812468 | 1137.633643 | 569.320460 | 7 |
| 4 | **711.385809** | 356.196543 | 694.359260 | 347.683268 | 693.375244 | 347.191260 | Q | ***1042.560144*** | 521.783710 | 1025.533595 | 513.270436 | 1024.549579 | 512.778428 | 6 |
| 5 | **840.428402** | 420.717839 | 823.401853 | 412.204565 | 822.417837 | 411.712557 | E | ***603.334818*** | 302.171047 | 586.308269 | 293.657773 | 585.324253 | 293.165765 | 5 |
| 6 | **939.496816** | 470.252046 | 922.470267 | 461.738772 | 921.486251 | 461.246764 | V | ***474.292225*** | 237.649751 | 457.265676 | 229.136476 | 456.281660 | 228.644468 | 4 |
| 7 | **1068.539409** | 534.773343 | 1051.512860 | 526.260068 | 1050.528844 | 525.768060 | E | 375.223811 | 188.115544 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 8 | **1167.607823** | 584.307550 | 1150.581274 | 575.794275 | 1149.597258 | 575.302267 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TGLQEVEVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.2 | 1312.706070 | -0.000162 | TGLQEVEVK |
| 9.8 | 1312.699524 | 0.006384 | TIMHLMINNVK |
| 5.9 | 1312.692139 | 0.013769 | DRQSQIQK |
| 2.4 | 1312.688766 | 0.017142 | HKVHTGEKSYK |
| 1.3 | 1312.706055 | -0.000147 | QSAEEVIVK |
| 1.1 | 1312.691422 | 0.014486 | YKELYLEEVK |

**Mascot:** http://www.matrixscience.com/

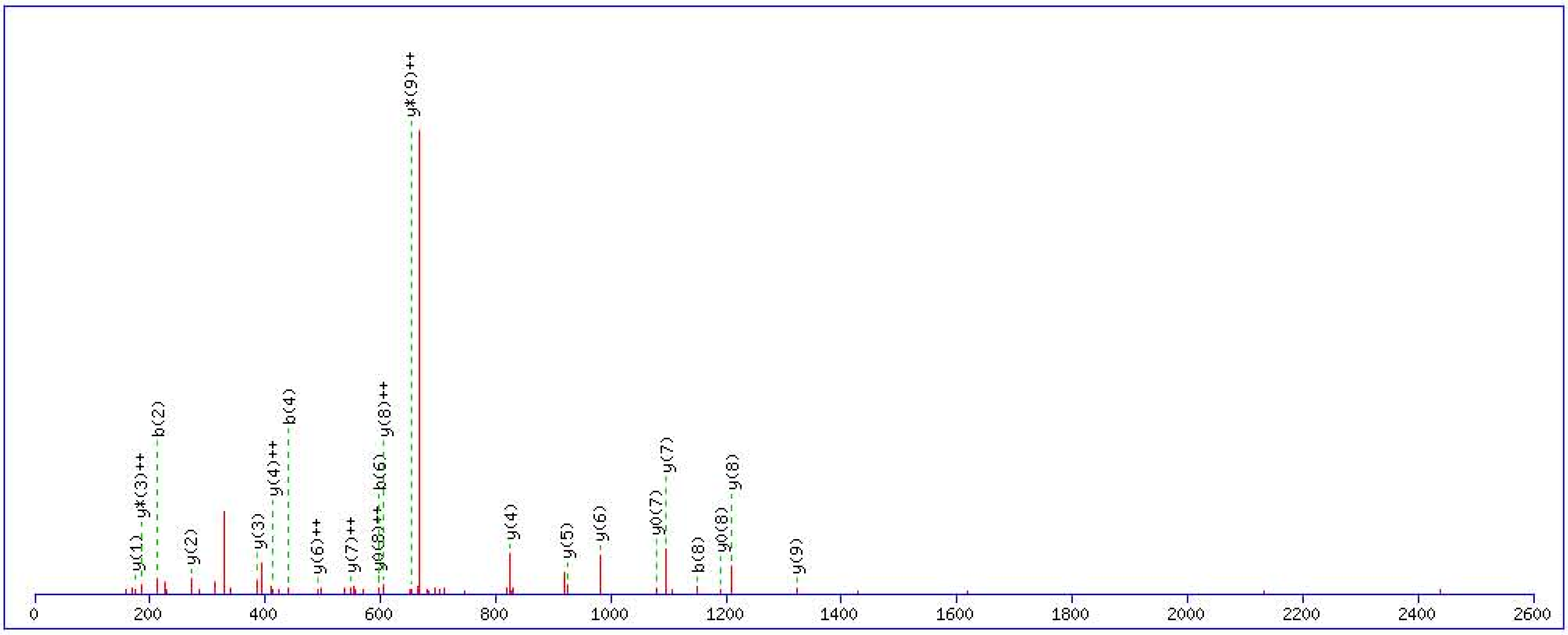
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VLLDGVQNPR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

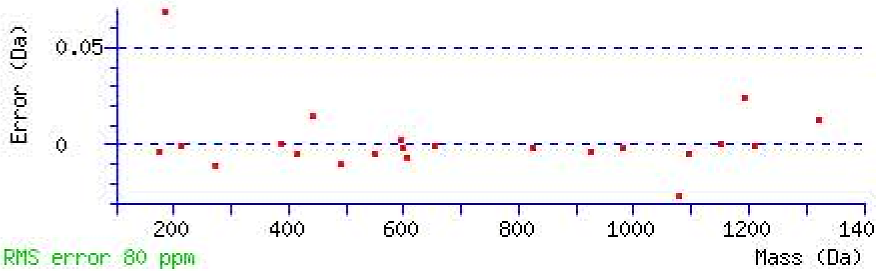
Match to Query 31271: 1420.793088 from(711.403820,2+) rtinseconds(1980) index(36296)
Title: Locus:1.1.1.3109.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

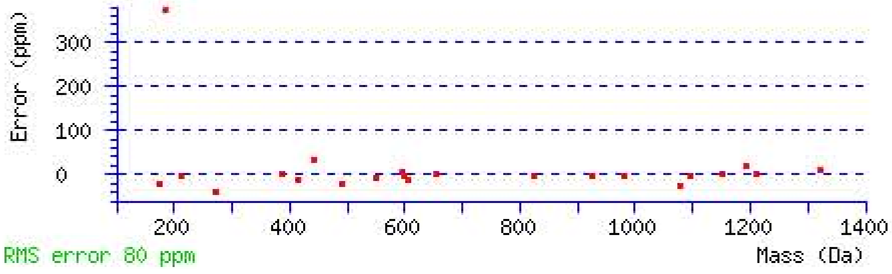
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1420.786057
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q7 : Biotin:Thermo-21345 (Q)
**Ions Score:** 46 **Expect:** 8.7e-005
**Matches :** 22/78 fragment ions using 52 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 10 |
| 2 | **213.159754** | 107.083515 | | | | | L | ***1322.724918*** | 661.866097 | 1305.698369 | 653.352823 | 1304.714353 | 652.860814 | 9 |
| 3 | 326.243818 | 163.625547 | | | | | L | ***1209.640854*** | 605.324065 | 1192.614305 | 596.810791 | 1191.630289 | 596.318783 | 8 |
| 4 | **441.270761** | 221.139018 | | | 423.260196 | 212.133736 | D | ***1096.556790*** | 548.782033 | 1079.530241 | 540.268758 | 1078.546225 | 539.776750 | 7 |
| 5 | 498.292225 | 249.649750 | | | 480.281660 | 240.644468 | G | ***981.529847*** | 491.268562 | 964.503298 | 482.755287 | | | 6 |
| 6 | **597.360639** | 299.183958 | | | 579.350074 | 290.178675 | V | ***924.508383*** | 462.757830 | 907.481834 | 454.244555 | | | 5 |
| 7 | 1036.585965 | 518.796621 | 1019.559416 | 510.283346 | 1018.575400 | 509.791338 | Q | ***825.439969*** | 413.223623 | 808.413420 | 404.710348 | | | 4 |
| 8 | **1150.628892** | 575.818084 | 1133.602343 | 567.304810 | 1132.618327 | 566.812801 | N | ***386.214643*** | 193.610959 | 369.188094 | 185.097685 | | | 3 |
| 9 | 1247.681656 | 624.344466 | 1230.655107 | 615.831192 | 1229.671091 | 615.339183 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VLLDGVQNPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.6 | 1420.786057 | 0.007031 | VLLDGVQNPR |
| 2.3 | 1420.811172 | -0.018084 | KQKQLEILFMK |
| 1.7 | 1420.801315 | -0.008227 | VLQPFLTHR |

**Mascot:** http://www.matrixscience.com/

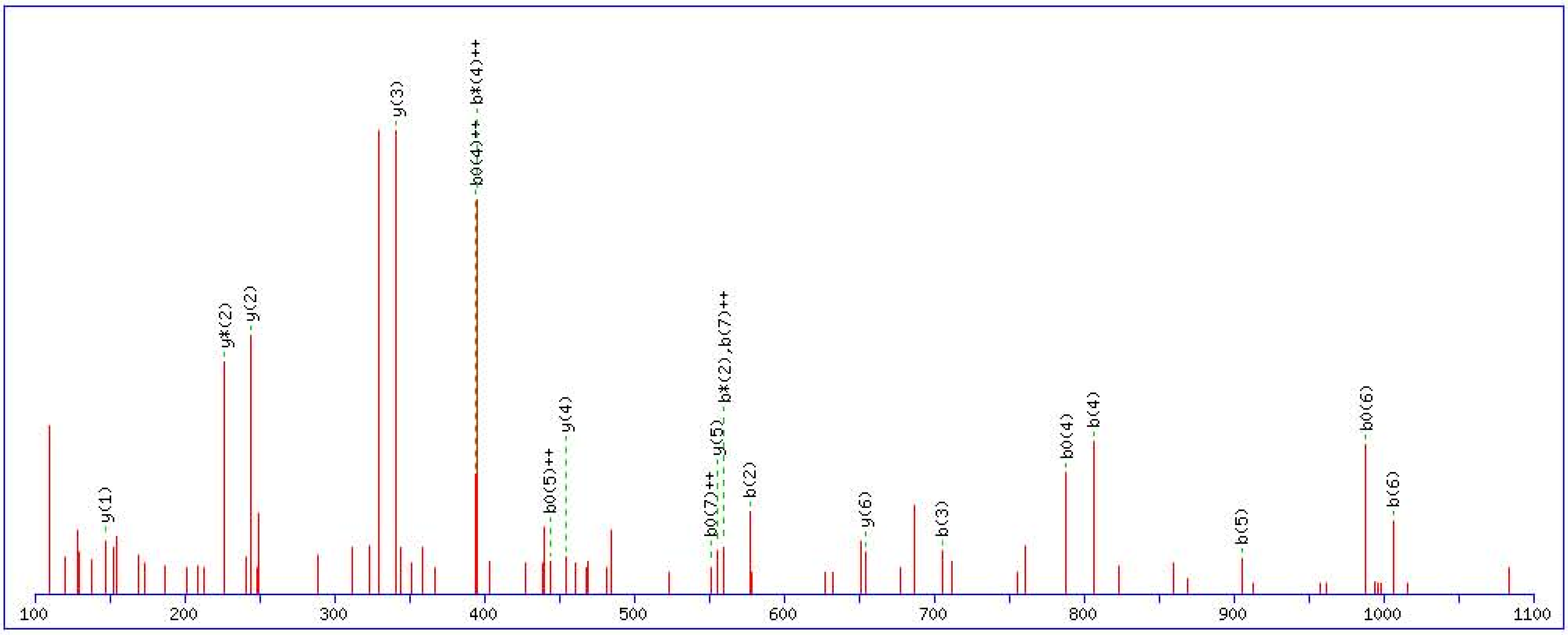
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HQQTVTIPPK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

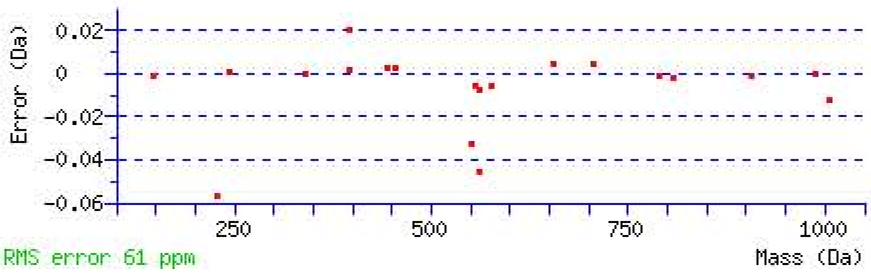
Match to Query 32710: 1458.791502 from(487.271110,3+) rtinseconds(1614) index(33955)
Title: Locus:1.1.1.2981.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

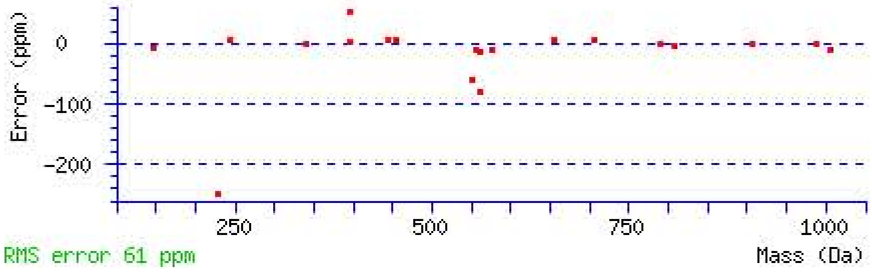
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1458.801712
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 32  Expect: 0.0019
Matches : 20/92 fragment ions using 38 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 10 |
| 2 | ***577.291514*** | 289.149395 | 560.264965 | 280.636121 | | | Q | 1322.750072 | 661.878674 | 1305.723523 | 653.365400 | 1304.739507 | 652.873392 | 9 |
| 3 | ***705.350092*** | 353.178684 | 688.323543 | 344.665410 | | | Q | 883.524746 | 442.266011 | 866.498197 | 433.752737 | 865.514181 | 433.260729 | 8 |
| 4 | ***806.397771*** | 403.702524 | 789.371222 | 395.189249 | 788.387206 | 394.697241 | T | 755.466168 | 378.236722 | 738.439619 | 369.723448 | 737.455603 | 369.231440 | 7 |
| 5 | ***905.466185*** | 453.236731 | 888.439636 | 444.723456 | 887.455620 | 444.231448 | V | ***654.418489*** | 327.712883 | 637.391940 | 319.199608 | 636.407924 | 318.707600 | 6 |
| 6 | ***1006.513864*** | 503.760570 | 989.487315 | 495.247296 | 988.503299 | 494.755288 | T | ***555.350075*** | 278.178676 | 538.323526 | 269.665401 | 537.339510 | 269.173393 | 5 |
| 7 | 1119.597928 | 560.302602 | 1102.571379 | 551.789328 | 1101.587363 | 551.297319 | I | ***454.302396*** | 227.654836 | 437.275847 | 219.141561 | | | 4 |
| 8 | 1216.650692 | 608.828984 | 1199.624143 | 600.315710 | 1198.640127 | 599.823701 | P | ***341.218332*** | 171.112804 | 324.191783 | 162.599530 | | | 3 |
| 9 | 1313.703456 | 657.355366 | 1296.676907 | 648.842092 | 1295.692891 | 648.350083 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of HQQTVTIPPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.7 | 1458.801712 | -0.010210 | HQQTVTIPPK |
| 29.4 | 1458.801712 | -0.010210 | HQQTVTIPPK |
| 2.8 | 1458.776535 | 0.014967 | QHPADKLPSR |

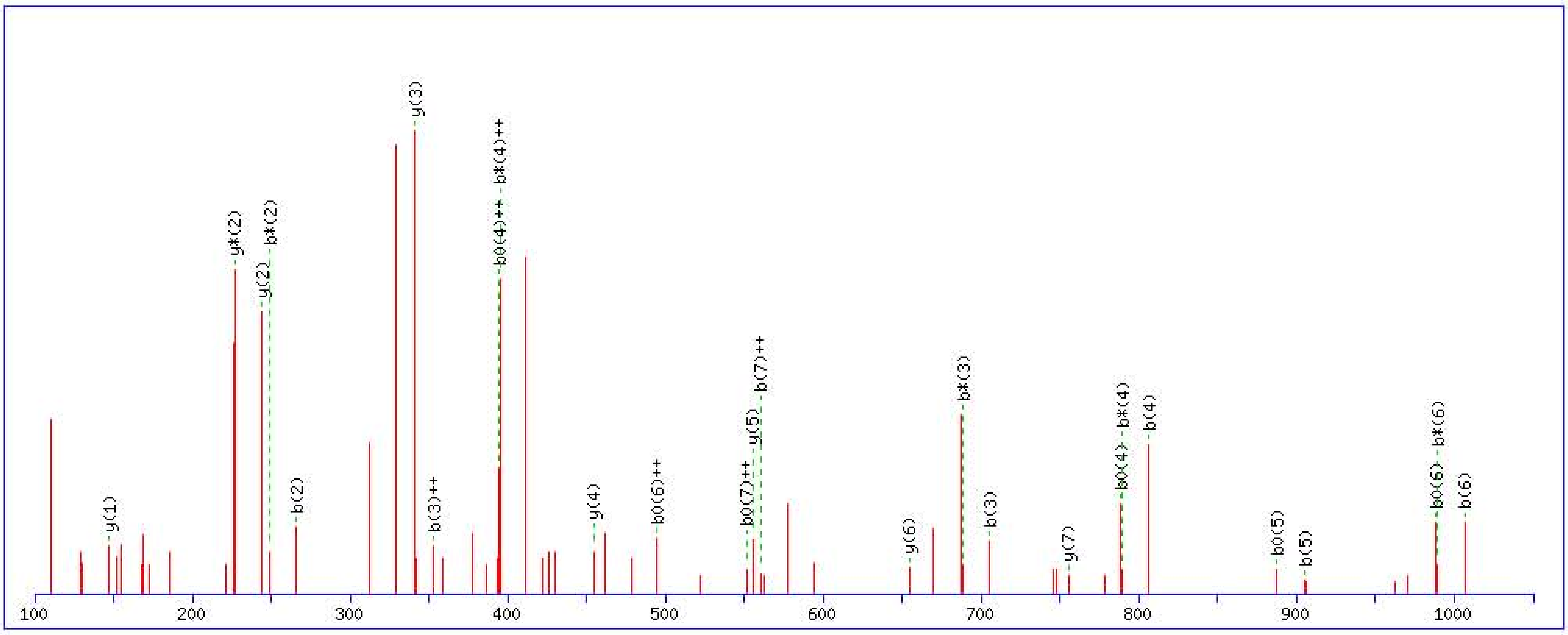
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HQQTVTIPPK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

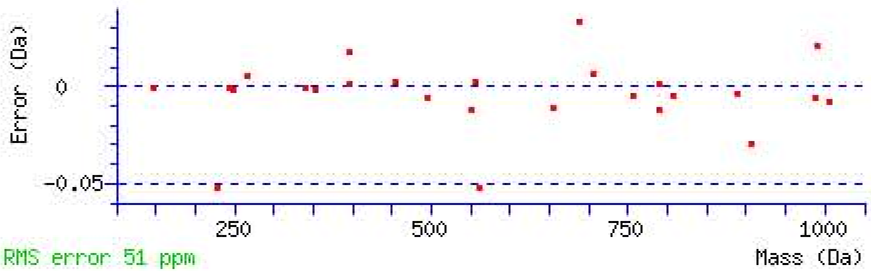
Match to Query 32728: 1458.795732 from(487.272520,3+) rtinseconds(1545) index(33581)
Title: Locus:1.1.1.2957.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

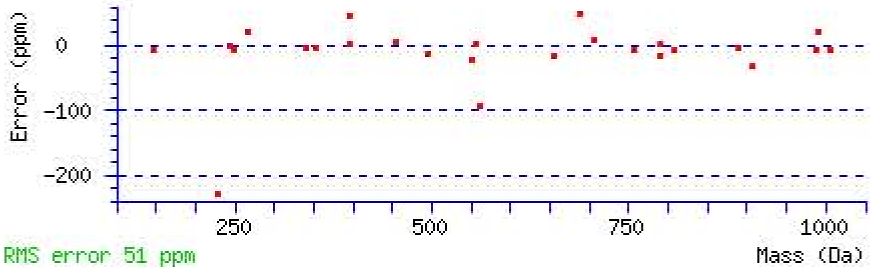
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1458.801712
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 30 **Expect:** 0.023
**Matches :** 26/92 fragment ions using 54 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 10 |
| 2 | **266.124766** | 133.566021 | 249.098217 | 125.052746 | | | Q | 1322.750072 | 661.878674 | 1305.723523 | 653.365400 | 1304.739507 | 652.873392 | 9 |
| 3 | **705.350092** | **353.178684** | 688.323543 | 344.665410 | | | Q | 1194.691494 | 597.849385 | 1177.664945 | 589.336111 | 1176.680929 | 588.844102 | 8 |
| 4 | **806.397771** | 403.702524 | 789.371222 | 395.189249 | 788.387206 | 394.697241 | T | ***755.466168*** | 378.236722 | 738.439619 | 369.723448 | 737.455603 | 369.231440 | 7 |
| 5 | **905.466185** | 453.236731 | 888.439636 | 444.723456 | 887.455620 | 444.231448 | V | ***654.418489*** | 327.712883 | 637.391940 | 319.199608 | 636.407924 | 318.707600 | 6 |
| 6 | **1006.513864** | 503.760570 | 989.487315 | 495.247296 | 988.503299 | 494.755288 | T | ***555.350075*** | 278.178676 | 538.323526 | 269.665401 | 537.339510 | 269.173393 | 5 |
| 7 | 1119.597928 | **560.302602** | 1102.571379 | 551.789328 | 1101.587363 | 551.297319 | I | ***454.302396*** | 227.654836 | 437.275847 | 219.141561 | | | 4 |
| 8 | 1216.650692 | 608.828984 | 1199.624143 | 600.315710 | 1198.640127 | 599.823701 | P | ***341.218332*** | 171.112804 | 324.191783 | 162.599530 | | | 3 |
| 9 | 1313.703456 | 657.355366 | 1296.676907 | 648.842092 | 1295.692891 | 648.350083 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of HQQTVTIPPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.8 | 1458.801712 | -0.005980 | HQQTVTIPPK |
| 28.9 | 1458.801712 | -0.005980 | HQQTVTIPPK |

**Mascot:** http://www.matrixscience.com/

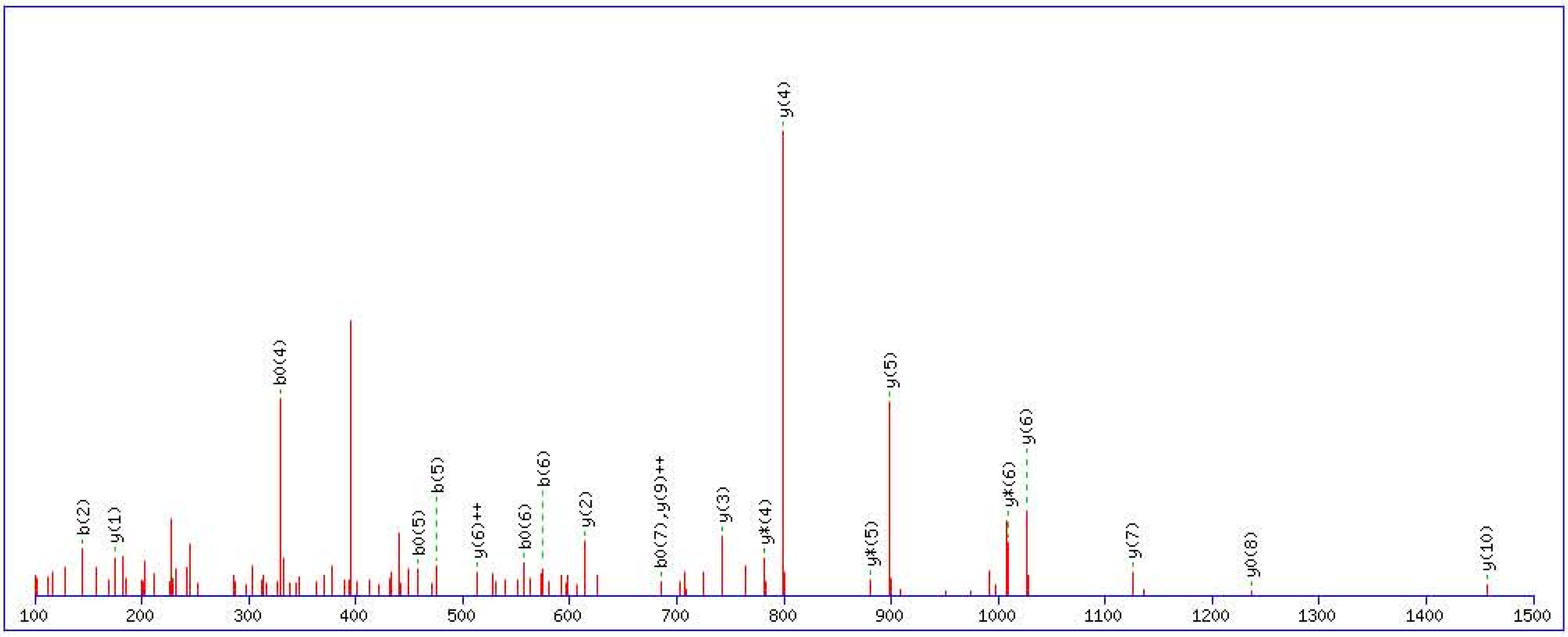
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SGSDEVQVGQQR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

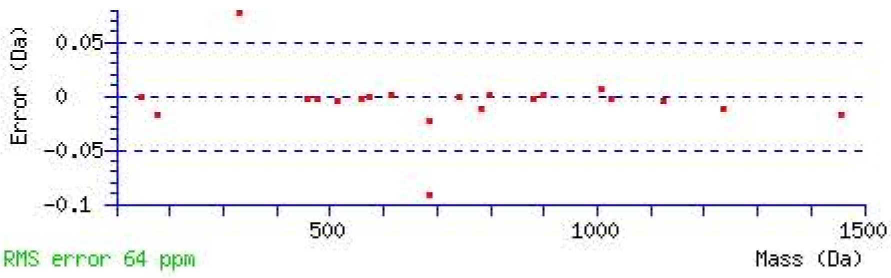
Match to Query 37178: 1599.760392 from(534.260740,3+) rtinseconds(1516) index(33398)
Title: Locus:1.1.1.2947.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

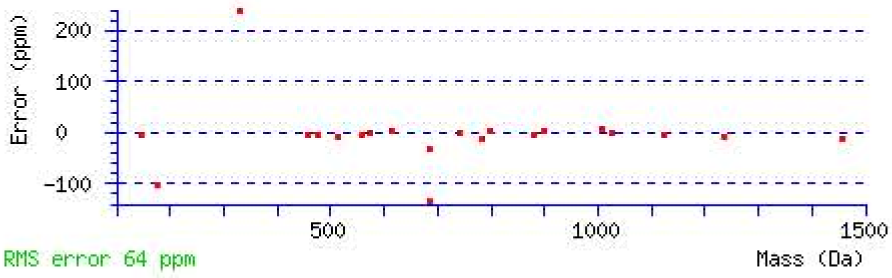
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1599.767517
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 48  Expect: 0.00023
Matches : 21/106 fragment ions using 34 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 12 |
| 2 | **145.060768** | 73.034022 | | | 127.050203 | 64.028740 | G | 1513.742754 | 757.375015 | 1496.716205 | 748.861741 | 1495.732189 | 748.369733 | 11 |
| 3 | 232.092796 | 116.550036 | | | 214.082231 | 107.544753 | S | ***1456.721290*** | 728.864283 | 1439.694741 | 720.351009 | 1438.710725 | 719.859001 | 10 |
| 4 | 347.119739 | 174.063507 | | | 329.109174 | 165.058225 | D | 1369.689262 | 685.348269 | 1352.662713 | 676.834995 | 1351.678697 | 676.342987 | 9 |
| 5 | **476.162332** | 238.584804 | | | 458.151767 | 229.579522 | E | 1254.662319 | 627.834798 | 1237.635770 | 619.321523 | 1236.651754 | 618.829515 | 8 |
| 6 | **575.230746** | 288.119011 | | | 557.220181 | 279.113729 | V | ***1125.619726*** | 563.313501 | 1108.593177 | 554.800227 | | | 7 |
| 7 | 703.289324 | 352.148300 | 686.262775 | 343.635026 | 685.278759 | 343.143018 | Q | ***1026.551312*** | 513.779294 | 1009.524763 | 505.266020 | | | 6 |
| 8 | 802.357738 | 401.682507 | 785.331189 | 393.169233 | 784.347173 | 392.677225 | V | ***898.492734*** | 449.750005 | 881.466185 | 441.236731 | | | 5 |
| 9 | 859.379202 | 430.193239 | 842.352653 | 421.679965 | 841.368637 | 421.187957 | G | ***799.424320*** | 400.215798 | 782.397771 | 391.702524 | | | 4 |
| 10 | 987.437780 | 494.222528 | 970.411231 | 485.709254 | 969.427215 | 485.217246 | Q | ***742.402856*** | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 11 | 1426.663106 | 713.835191 | 1409.636557 | 705.321917 | 1408.652541 | 704.829909 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SGSDEVQVGQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.9 | 1599.767517 | -0.007125 | SGSDEVQVGQQR |
| 36.8 | 1599.767517 | -0.007125 | SGSDEVQVGQQR |
| 12.5 | 1599.767517 | -0.007125 | SGSDEVQVGQQR |

**Mascot:** http://www.matrixscience.com/

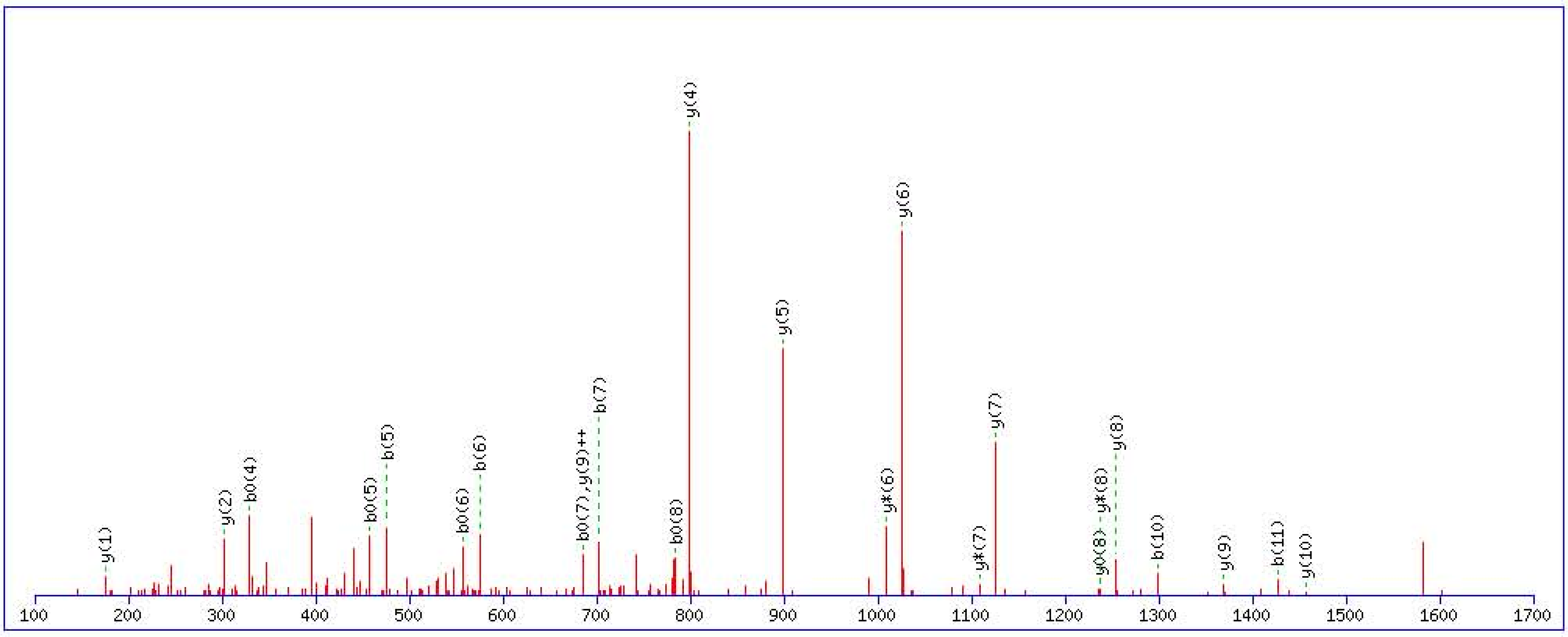
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SGSDEVQVGQQR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

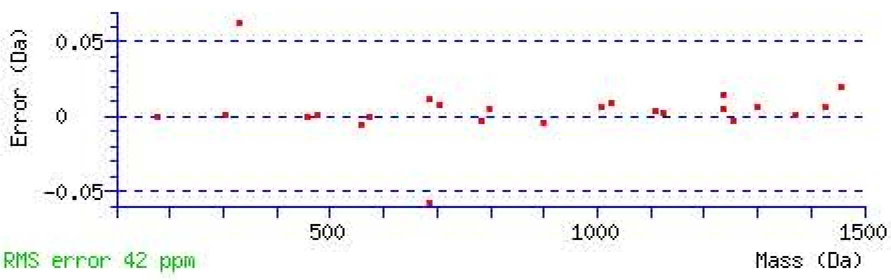
Match to Query 37179: 1599.767148 from(800.890850,2+) rtinseconds(1500) index(33277)
Title: Locus:1.1.1.2941.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

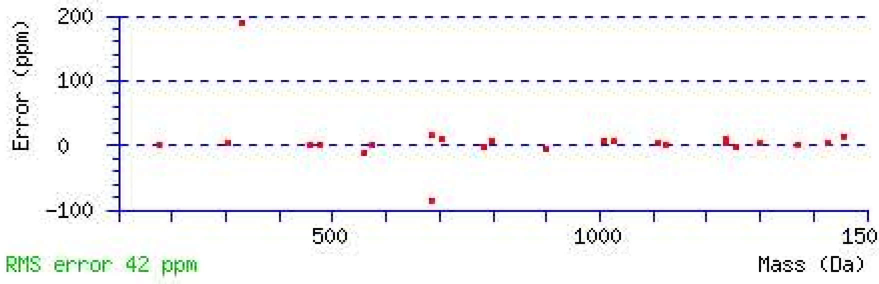
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1599.767517
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 81  Expect: 1.3e-007
Matches : 24/106 fragment ions using 28 most intense peaks   (help)
```

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 12 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | G | 1513.742754 | 757.375015 | 1496.716205 | 748.861741 | 1495.732189 | 748.369733 | 11 |
| 3 | 232.092796 | 116.550036 | | | 214.082231 | 107.544753 | S | ***1456.721290*** | 728.864283 | 1439.694741 | 720.351009 | 1438.710725 | 719.859001 | 10 |
| 4 | 347.119739 | 174.063507 | | | 329.109174 | 165.058225 | D | ***1369.689262*** | 685.348269 | 1352.662713 | 676.834995 | 1351.678697 | 676.342987 | 9 |
| 5 | **476.162332** | 238.584804 | | | 458.151767 | 229.579522 | E | ***1254.662319*** | 627.834798 | 1237.635770 | 619.321523 | 1236.651754 | 618.829515 | 8 |
| 6 | **575.230746** | 288.119011 | | | 557.220181 | 279.113729 | V | ***1125.619726*** | 563.313501 | 1108.593177 | 554.800227 | | | 7 |
| 7 | **703.289324** | 352.148300 | 686.262775 | 343.635026 | 685.278759 | 343.143018 | Q | ***1026.551312*** | 513.779294 | 1009.524763 | 505.266020 | | | 6 |
| 8 | 802.357738 | 401.682507 | 785.331189 | 393.169233 | 784.347173 | 392.677225 | V | ***898.492734*** | 449.750005 | 881.466185 | 441.236731 | | | 5 |
| 9 | 859.379202 | 430.193239 | 842.352653 | 421.679965 | 841.368637 | 421.187957 | G | ***799.424320*** | 400.215798 | 782.397771 | 391.702524 | | | 4 |
| 10 | **1298.604528** | 649.805902 | 1281.577979 | 641.292628 | 1280.593963 | 640.800620 | Q | 742.402856 | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 11 | **1426.663106** | 713.835191 | 1409.636557 | 705.321917 | 1408.652541 | 704.829909 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SGSDEVQVGQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 80.7 | 1599.767517 | -0.000369 | SGSDEVQVGQQR |
| 64.9 | 1599.767517 | -0.000369 | SGSDEVQVGQQR |
| 44.1 | 1599.767517 | -0.000369 | SGSDEVQVGQQR |
| 8.1 | 1599.767471 | -0.000323 | AMNAANLNIPPSDTR |
| 7.8 | 1599.767502 | -0.000354 | LHMLSSVDLNGQDR |
| 5.5 | 1599.779388 | -0.012240 | RFPDFSYITQNGR |
| 4.4 | 1599.774872 | -0.007724 | MAKEAIFQDTMRK |
| 3.3 | 1599.789291 | -0.022143 | DPVFEITGAPGNVER |
| 1.6 | 1599.753769 | 0.013379 | ASTFSCIMQKWGGK |
| 1.1 | 1599.771515 | -0.004367 | YVTSAPMPEPQAPGR |

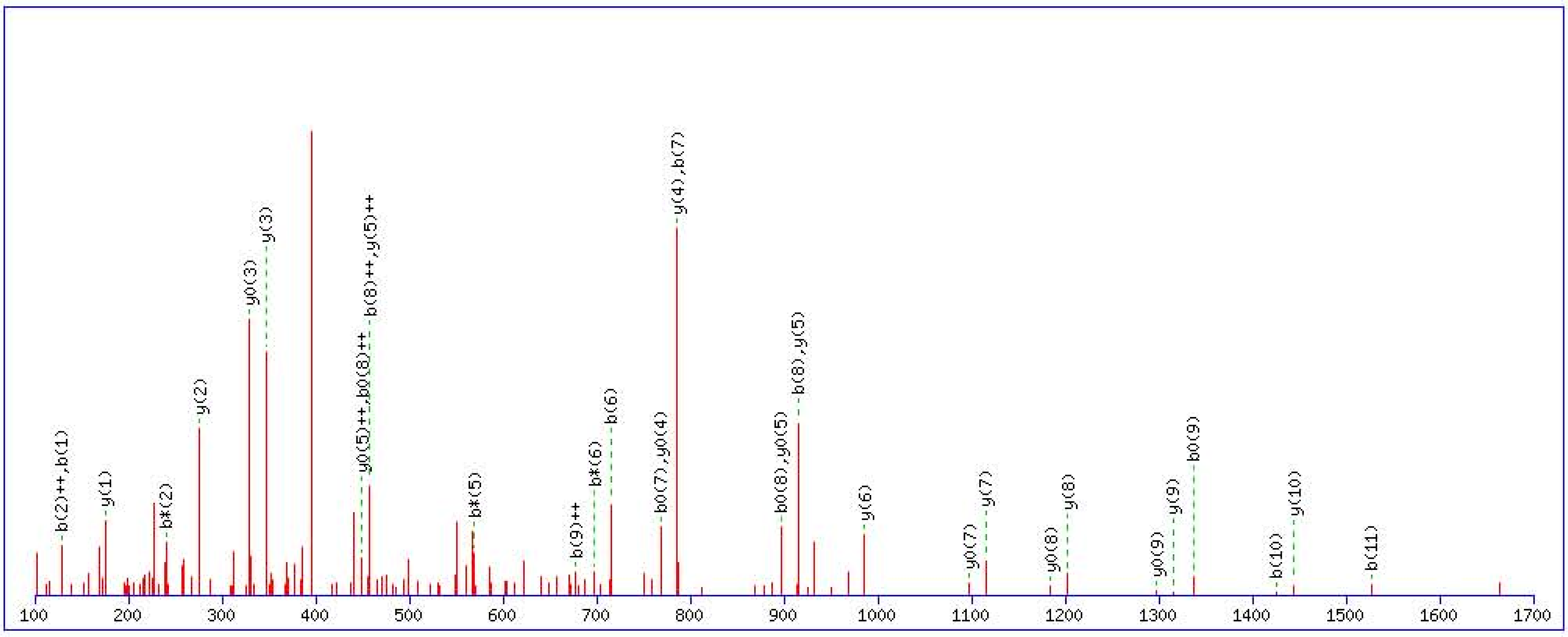
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KQELSEAEQATR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

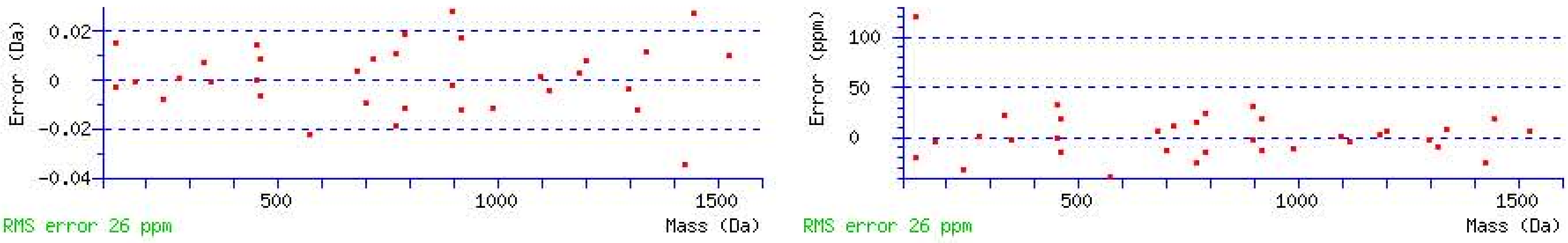
Match to Query 40430: 1699.850652 from(567.624160,3+) rtinseconds(1373) index(32379)
Title: Locus:1.1.1.2897.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1699.856277
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 75  Expect: 9.2e-007
Matches : 34/126 fragment ions using 39 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 12 |
| 2 | 257.160817 | **129.084047** | 240.134268 | 120.570772 | | | Q | 1572.768634 | 786.887955 | 1555.742085 | 778.374681 | 1554.758069 | 777.882673 | 11 |
| 3 | 386.203410 | 193.605343 | 369.176861 | 185.092069 | 368.192845 | 184.600061 | E | ***1444.710056*** | 722.858666 | 1427.683507 | 714.345392 | 1426.699491 | 713.853384 | 10 |
| 4 | 499.287474 | 250.147375 | 482.260925 | 241.634101 | 481.276909 | 241.142093 | L | ***1315.667463*** | 658.337370 | 1298.640914 | 649.824095 | 1297.656898 | 649.332087 | 9 |
| 5 | 586.319502 | 293.663389 | 569.292953 | 285.150115 | 568.308937 | 284.658107 | S | ***1202.583399*** | 601.795338 | 1185.556850 | 593.282063 | 1184.572834 | 592.790055 | 8 |
| 6 | **715.362095** | 358.184686 | 698.335546 | 349.671411 | 697.351530 | 349.179403 | E | ***1115.551371*** | 558.279324 | 1098.524822 | 549.766049 | 1097.540806 | 549.274041 | 7 |
| 7 | **786.399209** | 393.703243 | 769.372660 | 385.189968 | 768.388644 | 384.697960 | A | ***986.508778*** | 493.758027 | 969.482229 | 485.244753 | 968.498213 | 484.752745 | 6 |
| 8 | **915.441802** | **458.224539** | 898.415253 | 449.711265 | 897.431237 | 449.219257 | E | ***915.471664*** | 458.239470 | 898.445115 | 449.726196 | 897.461099 | 449.234188 | 5 |
| 9 | 1354.667128 | **677.837202** | 1337.640579 | 669.323928 | 1336.656563 | 668.831920 | Q | ***786.429071*** | 393.718174 | 769.402522 | 385.204899 | 768.418506 | 384.712891 | 4 |
| 10 | **1425.704242** | 713.355759 | 1408.677693 | 704.842485 | 1407.693677 | 704.350477 | A | ***347.203745*** | 174.105510 | 330.177196 | 165.592236 | 329.193180 | 165.100228 | 3 |
| 11 | **1526.751921** | 763.879599 | 1509.725372 | 755.366324 | 1508.741356 | 754.874316 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of KQELSEAEQATR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 74.7 | 1699.856277 | -0.005625 | KQELSEAEQATR |
| 20.0 | 1699.856277 | -0.005625 | KQELSEAEQATR |
| 11.2 | 1699.849792 | 0.000860 | QEMRTTQLGPGR |
| 10.6 | 1699.843735 | 0.006917 | QFNRQRGVSHAMGGR |
| 10.3 | 1699.874039 | -0.023387 | KEISVNDLNESSIPR |
| 7.3 | 1699.843063 | 0.007589 | GKVSEGIDFVHHYGR |
| 7.2 | 1699.874924 | -0.024272 | SQGMLALSISPNR |
| 6.1 | 1699.845932 | 0.004720 | QAMQEQLSK |
| 5.3 | 1699.848907 | 0.001745 | TQATERVNSQPVNEK |
| 4.7 | 1699.845932 | 0.004720 | QAMQEQLSK |

**Mascot:** http://www.matrixscience.com/

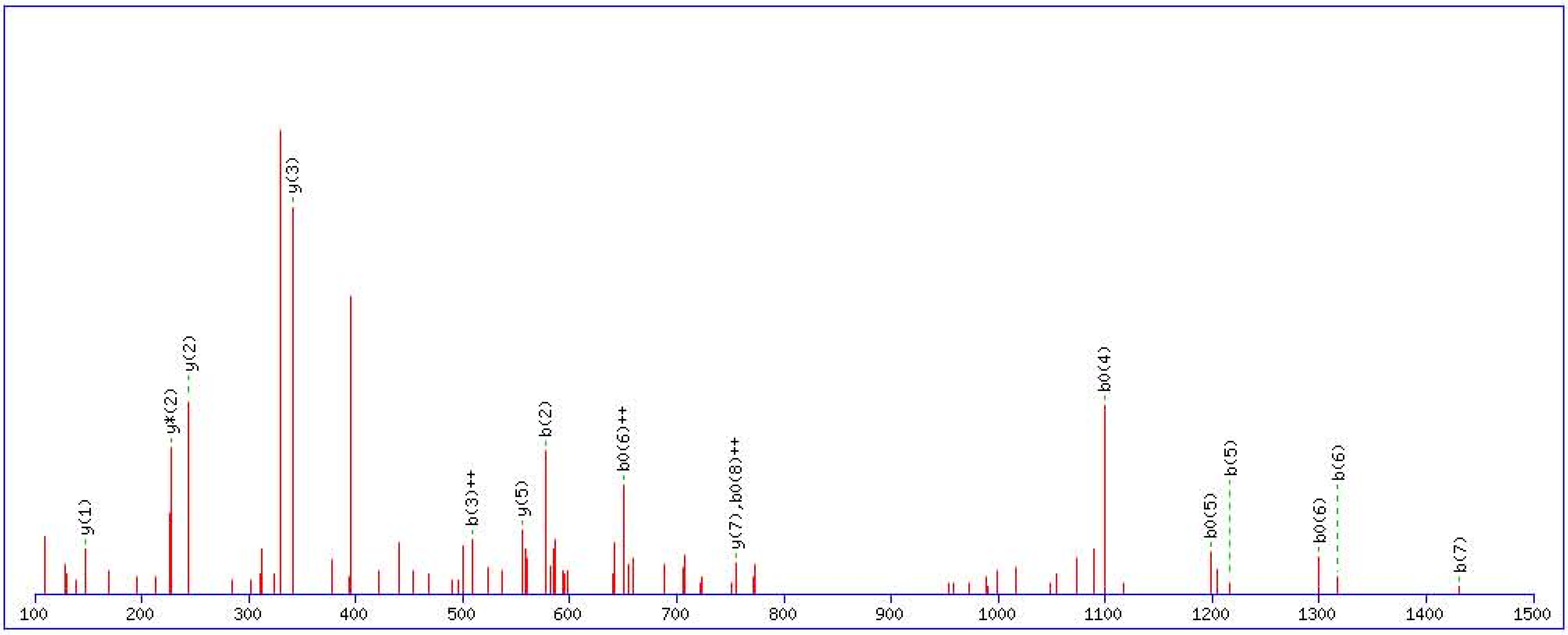
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HQQTVTIPPK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

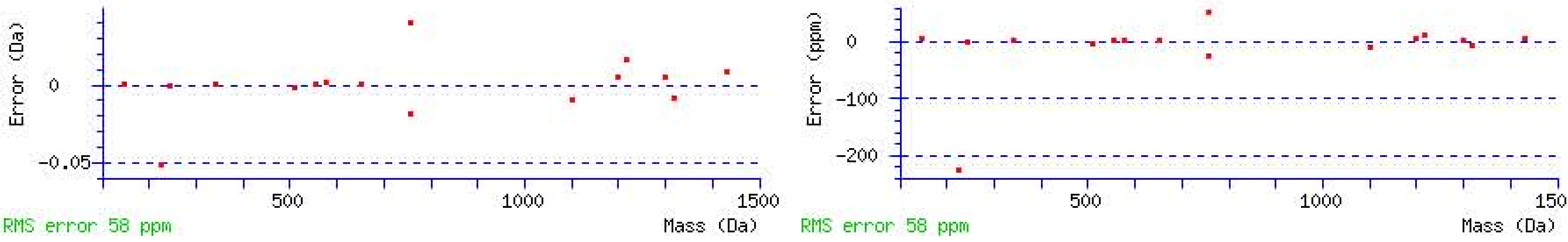
Match to Query 42140: 1769.958912 from(590.993580,3+) rtinseconds(1927) index(35891)
Title: Locus:1.1.1.3090.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1500] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1769.968460
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.018
Matches : 16/92 fragment ions using 24 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 10 |
| 2 | ***577.291514*** | 289.149395 | 560.264965 | 280.636121 | | | Q | 1633.916820 | 817.462048 | 1616.890271 | 808.948774 | 1615.906255 | 808.456766 | 9 |
| 3 | 1016.516840 | 508.762058 | 999.490291 | 500.248784 | | | Q | 1194.691494 | 597.849385 | 1177.664945 | 589.336111 | 1176.680929 | 588.844103 | 8 |
| 4 | 1117.564519 | 559.285898 | 1100.537970 | 550.772623 | 1099.553954 | 550.280615 | T | ***755.466168*** | 378.236722 | 738.439619 | 369.723448 | 737.455603 | 369.231440 | 7 |
| 5 | ***1216.632933*** | 608.820105 | 1199.606384 | 600.306830 | 1198.622368 | 599.814822 | V | 654.418489 | 327.712883 | 637.391940 | 319.199608 | 636.407924 | 318.707600 | 6 |
| 6 | ***1317.680612*** | 659.343944 | 1300.654063 | 650.830670 | 1299.670047 | 650.338662 | T | ***555.350075*** | 278.178676 | 538.323526 | 269.665401 | 537.339510 | 269.173393 | 5 |
| 7 | ***1430.764676*** | 715.885976 | 1413.738127 | 707.372702 | 1412.754111 | 706.880694 | I | 454.302396 | 227.654836 | 437.275847 | 219.141561 | | | 4 |
| 8 | 1527.817440 | 764.412358 | 1510.790891 | 755.899084 | 1509.806875 | 755.407076 | P | ***341.218332*** | 171.112804 | 324.191783 | 162.599530 | | | 3 |
| 9 | 1624.870204 | 812.938740 | 1607.843655 | 804.425466 | 1606.859639 | 803.933458 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of HQQTVTIPPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.3 | 1769.968460 | -0.009548 | HQQTVTIPPK |
| 8.4 | 1769.961029 | -0.002117 | WMLSRDRASTLPLPK |
| 1.8 | 1769.976303 | -0.017391 | VIQVWFQNARAK |
| 1.8 | 1769.976303 | -0.017391 | VLQVWFQNARAK |

**Mascot:** http://www.matrixscience.com/

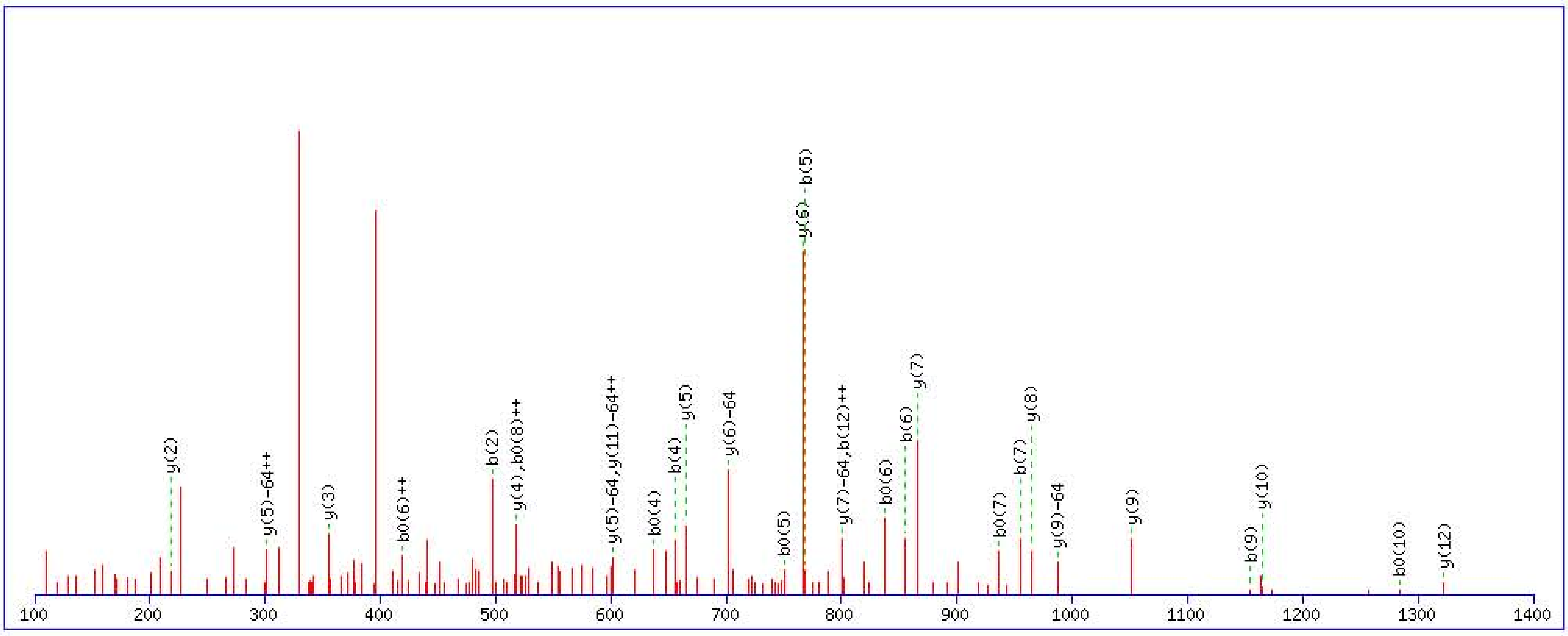
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GQGTLSVVTMYHAK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

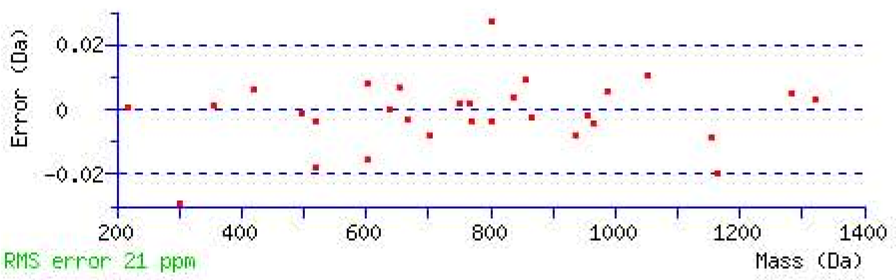
Match to Query 43143: 1817.912832 from(606.978220,3+) rtinseconds(1823) index(35167)
Title: Locus:1.1.1.3054.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

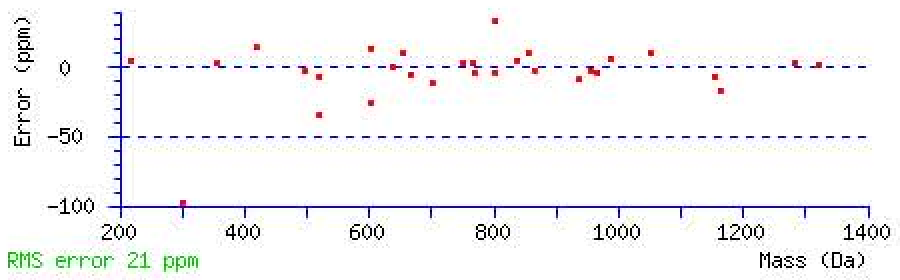
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1817.916824
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
M10     : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
Ions Score: 63  Expect: 1.5e-005
Matches : 30/214 fragment ions using 44 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 14 |
| 2 | **497.254066** | 249.130671 | 480.227517 | 240.617397 | | | Q | 1761.902627 | 881.454952 | 1744.876078 | 872.941677 | 1743.892062 | 872.449669 | 13 |
| 3 | 554.275530 | 277.641403 | 537.248981 | 269.128129 | | | G | ***1322.677301*** | 661.842289 | 1305.650752 | 653.329014 | 1304.666736 | 652.837006 | 12 |
| 4 | **655.323209** | 328.165243 | 638.296660 | 319.651968 | 637.312644 | 319.159960 | T | 1265.655837 | 633.331557 | 1248.629288 | 624.818282 | 1247.645272 | 624.326274 | 11 |
| 5 | **768.407273** | 384.707275 | 751.380724 | 376.194000 | 750.396708 | 375.701992 | L | ***1164.608158*** | 582.807717 | 1147.581609 | 574.294443 | 1146.597593 | 573.802435 | 10 |
| 6 | **855.439301** | 428.223289 | 838.412752 | 419.710014 | 837.428736 | 419.218006 | S | ***1051.524094*** | 526.265685 | 1034.497545 | 517.752411 | 1033.513529 | 517.260403 | 9 |
| 7 | **954.507715** | 477.757496 | 937.481166 | 469.244221 | 936.497150 | 468.752213 | V | ***964.492066*** | 482.749671 | 947.465517 | 474.236397 | 946.481501 | 473.744389 | 8 |
| 8 | 1053.576129 | 527.291703 | 1036.549580 | 518.778428 | 1035.565564 | 518.286420 | V | ***865.423652*** | 433.215464 | 848.397103 | 424.702190 | 847.413087 | 424.210182 | 7 |
| 9 | **1154.623808** | 577.815542 | 1137.597259 | 569.302268 | 1136.613243 | 568.810260 | T | ***766.355238*** | 383.681257 | 749.328689 | 375.167983 | 748.344673 | 374.675975 | 6 |
| 10 | 1301.659208 | 651.333242 | 1284.632659 | 642.819968 | 1283.648643 | 642.327960 | M | ***665.307559*** | 333.157418 | 648.281010 | 324.644143 | | | 5 |
| 11 | 1464.722537 | 732.864907 | 1447.695988 | 724.351632 | 1446.711972 | 723.859624 | Y | ***518.272159*** | 259.639718 | 501.245610 | 251.126443 | | | 4 |
| 12 | 1601.781449 | 801.394363 | 1584.754900 | 792.881088 | 1583.770884 | 792.389080 | H | ***355.208830*** | 178.108053 | 338.182281 | 169.594778 | | | 3 |
| 13 | 1672.818563 | 836.912920 | 1655.792014 | 828.399645 | 1654.807998 | 827.907637 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 14 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GQGTLSVVTMYHAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 62.7 | 1817.916824 | -0.003992 | GQGTLSVVTMYHAK |

**Mascot:** http://www.matrixscience.com/

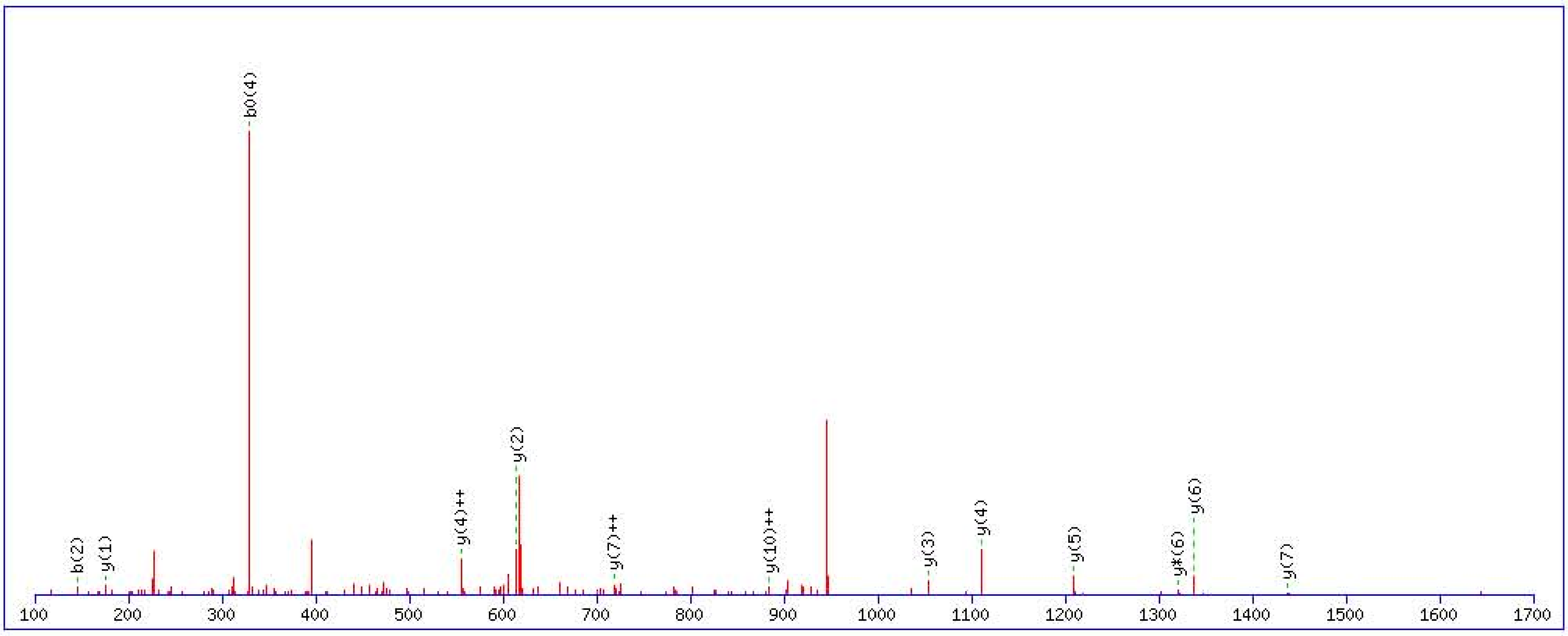
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SGSDEVQVGQQR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

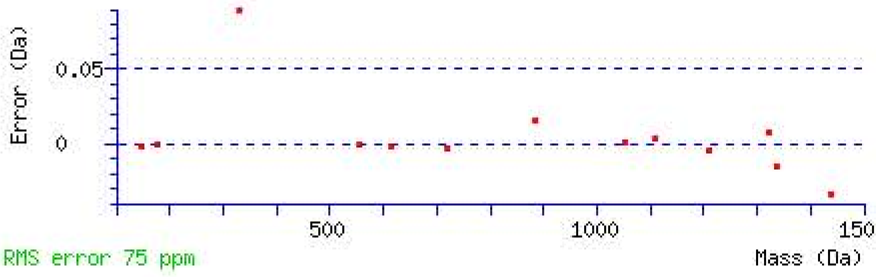
Match to Query 44786: 1910.934492 from(637.985440,3+) rtinseconds(1903) index(35690)
Title: Locus:1.1.1.3082.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

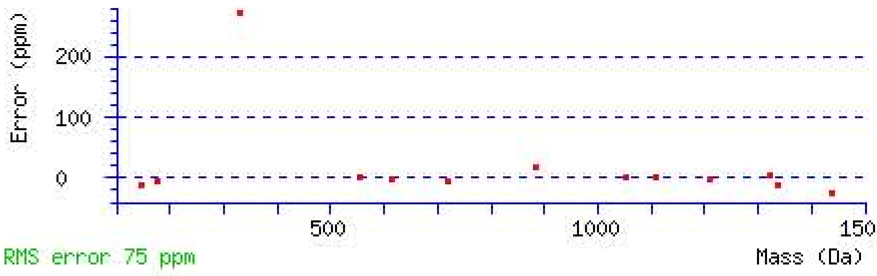
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1910.934265
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Q11** : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.0054
**Matches :** 13/106 fragment ions using 29 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 |  |  | 70.028739 | 35.518008 | S |  |  |  |  |  |  | 12 |
| 2 | 145.060768 | 73.034022 |  |  | 127.050203 | 64.028740 | G | 1824.909502 | 912.958389 | 1807.882953 | 904.445115 | 1806.898937 | 903.953107 | 11 |
| 3 | 232.092796 | 116.550036 |  |  | 214.082231 | 107.544753 | S | 1767.888038 | 884.447657 | 1750.861489 | 875.934383 | 1749.877473 | 875.442375 | 10 |
| 4 | 347.119739 | 174.063507 |  |  | 329.109174 | 165.058225 | D | 1680.856010 | 840.931643 | 1663.829461 | 832.418369 | 1662.845445 | 831.926361 | 9 |
| 5 | 476.162332 | 238.584804 |  |  | 458.151767 | 229.579522 | E | 1565.829067 | 783.418172 | 1548.802518 | 774.904897 | 1547.818502 | 774.412889 | 8 |
| 6 | 575.230746 | 288.119011 |  |  | 557.220181 | 279.113729 | V | ***1436.786474*** | 718.896875 | 1419.759925 | 710.383601 |  |  | 7 |
| 7 | 703.289324 | 352.148300 | 686.262775 | 343.635026 | 685.278759 | 343.143018 | Q | ***1337.718060*** | 669.362668 | 1320.691511 | 660.849394 |  |  | 6 |
| 8 | 802.357738 | 401.682507 | 785.331189 | 393.169233 | 784.347173 | 392.677225 | V | ***1209.659482*** | 605.333379 | 1192.632933 | 596.820105 |  |  | 5 |
| 9 | 859.379202 | 430.193239 | 842.352653 | 421.679965 | 841.368637 | 421.187957 | G | ***1110.591068*** | 555.799172 | 1093.564519 | 547.285898 |  |  | 4 |
| 10 | 1298.604528 | 649.805902 | 1281.577979 | 641.292628 | 1280.593963 | 640.800620 | Q | ***1053.569604*** | 527.288440 | 1036.543055 | 518.775166 |  |  | 3 |
| 11 | 1737.829854 | 869.418565 | 1720.803305 | 860.905291 | 1719.819289 | 860.413283 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 |  |  | 2 |
| 12 |  |  |  |  |  |  | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 |  |  | 1 |





NCBI **BLAST** search of SGSDEVQVGQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.8 | 1910.934265 | 0.000227 | SGSDEVQVGQQR |
| 11.3 | 1910.934265 | 0.000227 | SGSDEVQVGQQR |
| 4.2 | 1910.934265 | 0.000227 | SGSDEVQVGQQR |
| 2.5 | 1910.960709 | -0.026217 | VGAPAWREAAQAMAR |
| 0.5 | 1910.958542 | -0.024050 | TDDYGRDLSSVQTLLTK |

**Mascot:** http://www.matrixscience.com/

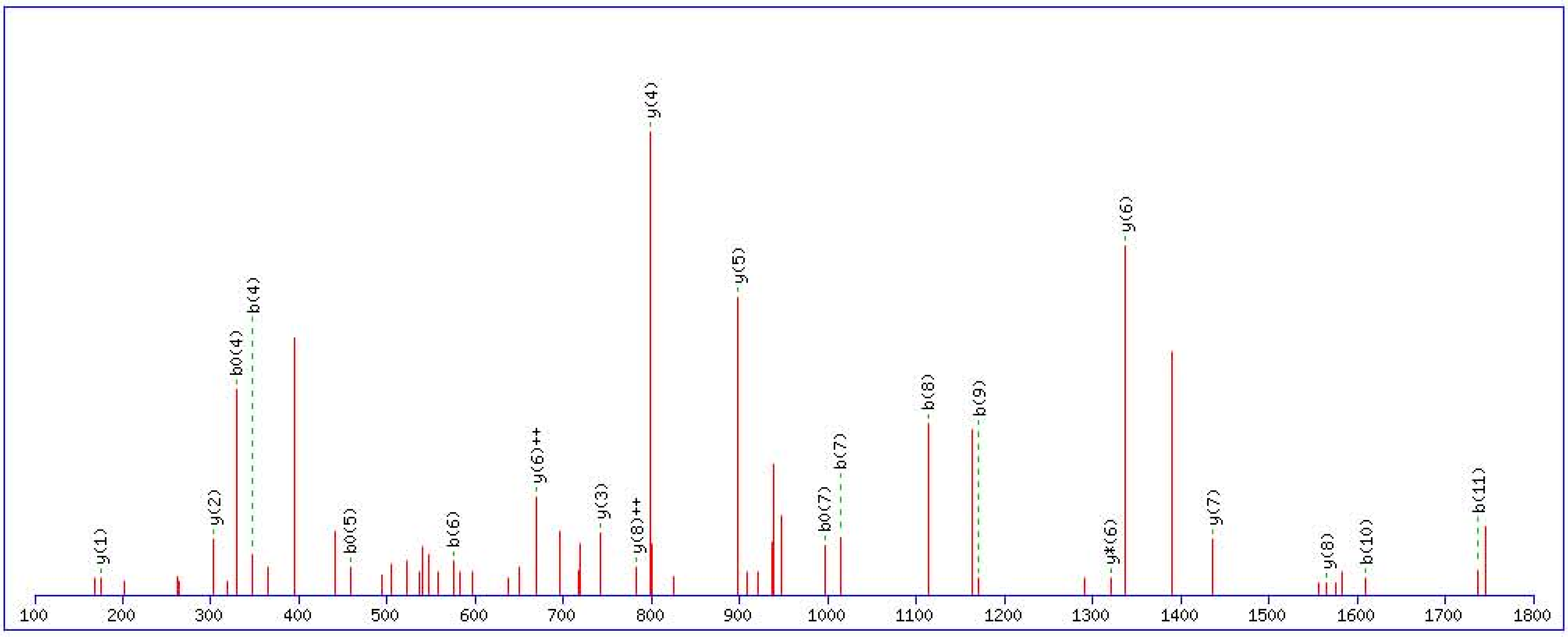
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SGSDEVQVGQQR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

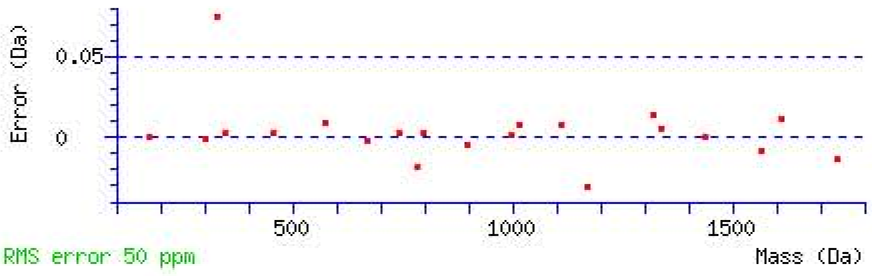
Match to Query 44788: 1910.954128 from(956.484340,2+) rtinseconds(1867) index(35386)
Title: Locus:1.1.1.3069.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

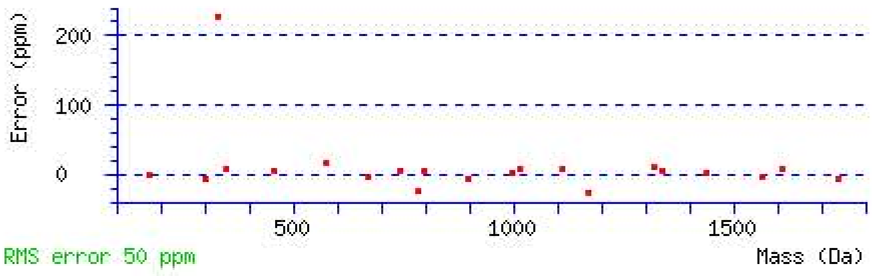
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1910.934265
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7     : Biotin:Thermo-21345 (Q)
Q10    : Biotin:Thermo-21345 (Q)
Ions Score: 42  Expect: 0.0029
Matches : 21/106 fragment ions using 41 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 12 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | G | 1824.909502 | 912.958389 | 1807.882953 | 904.445115 | 1806.898937 | 903.953107 | 11 |
| 3 | 232.092796 | 116.550036 | | | 214.082231 | 107.544753 | S | 1767.888038 | 884.447657 | 1750.861489 | 875.934383 | 1749.877473 | 875.442375 | 10 |
| 4 | **347.119739** | 174.063507 | | | 329.109174 | 165.058225 | D | 1680.856010 | 840.931643 | 1663.829461 | 832.418369 | 1662.845445 | 831.926361 | 9 |
| 5 | 476.162332 | 238.584804 | | | 458.151767 | 229.579522 | E | ***1565.829067*** | 783.418172 | 1548.802518 | 774.904897 | 1547.818502 | 774.412889 | 8 |
| 6 | **575.230746** | 288.119011 | | | 557.220181 | 279.113729 | V | ***1436.786474*** | 718.896875 | 1419.759925 | 710.383601 | | | 7 |
| 7 | **1014.456072** | 507.731674 | 997.429523 | 499.218400 | 996.445507 | 498.726392 | Q | ***1337.718060*** | 669.362668 | 1320.691511 | 660.849394 | | | 6 |
| 8 | **1113.524486** | 557.265881 | 1096.497937 | 548.752607 | 1095.513921 | 548.260599 | V | ***898.492734*** | 449.750005 | 881.466185 | 441.236731 | | | 5 |
| 9 | **1170.545950** | 585.776613 | 1153.519401 | 577.263339 | 1152.535385 | 576.771330 | G | ***799.424320*** | 400.215798 | 782.397771 | 391.702524 | | | 4 |
| 10 | **1609.771276** | 805.389276 | 1592.744727 | 796.876002 | 1591.760711 | 796.383994 | Q | ***742.402856*** | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 11 | **1737.829854** | 869.418565 | 1720.803305 | 860.905291 | 1719.819289 | 860.413283 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SGSDEVQVGQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.5 | 1910.934265 | 0.019863 | SGSDEVQVGQQR |
| 30.8 | 1910.934265 | 0.019863 | SGSDEVQVGQQR |
| 13.5 | 1910.938263 | 0.015865 | YVTSAPMPEPQAPGR |
| 5.7 | 1910.934265 | 0.019863 | SGSDEVQVGQQR |
| 5.5 | 1910.938721 | 0.015407 | QEAEGLALDSPWHRFR |
| 1.5 | 1910.930725 | 0.023403 | AGSGGLGGGAGGGQGAGAGQGAALR |
| 0.1 | 1910.956024 | -0.001896 | DFQPVREQIPEDK |
| 0.0 | 1910.971970 | -0.017842 | KAPMGTARFGHHMAVLR |

**Mascot:** http://www.matrixscience.com/

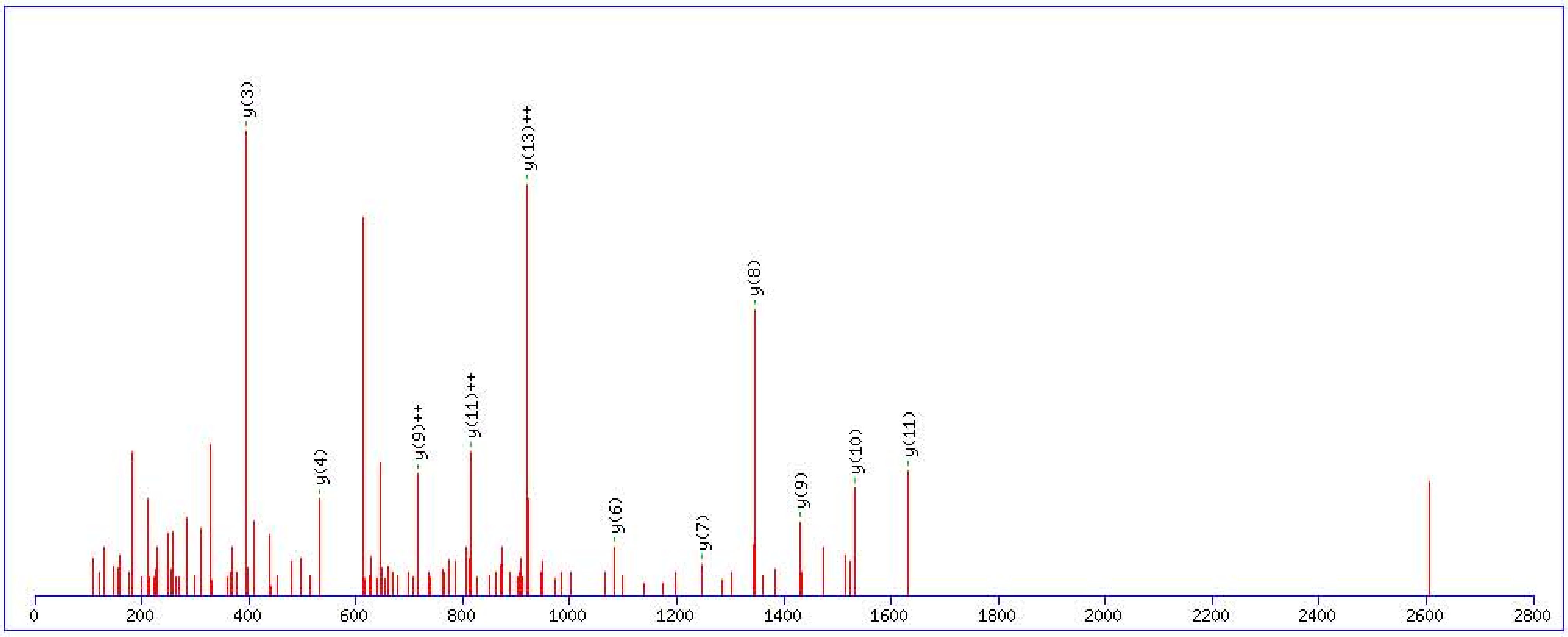
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SGIPIVTSPYQIHFTK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

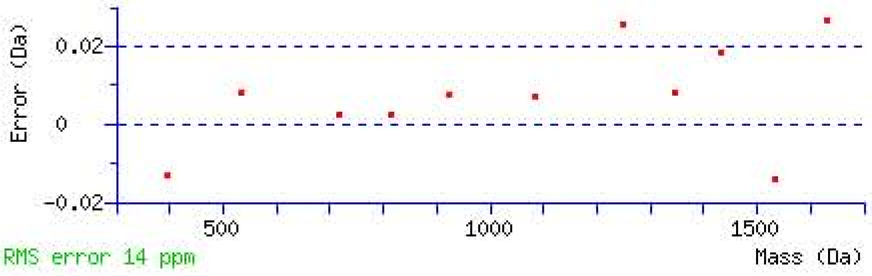
Match to Query 49190: 2098.140102 from(700.387310,3+) rtinseconds(2328) index(38382)
Title: Locus:1.1.1.3230.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

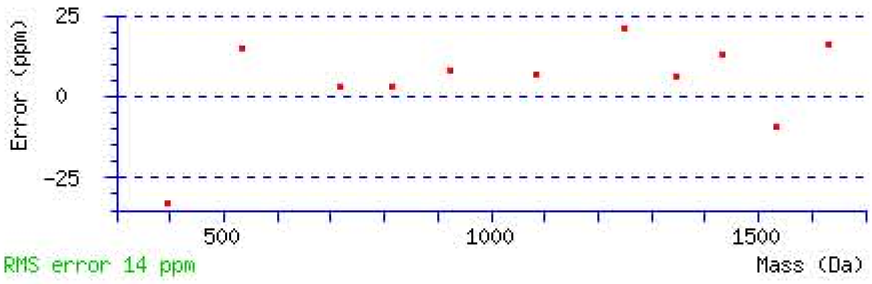
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2098.128525
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 55  Expect: 5.5e-005
Matches : 11/158 fragment ions using 16 most intense peaks    (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 16 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | G | 2012.103769 | 1006.555523 | 1995.077220 | 998.042248 | 1994.093204 | 997.550240 | 15 |
| 3 | 258.144832 | 129.576054 | | | 240.134267 | 120.570772 | I | 1955.082305 | 978.044791 | 1938.055756 | 969.531516 | 1937.071740 | 969.039508 | 14 |
| 4 | 355.197596 | 178.102436 | | | 337.187031 | 169.097154 | P | 1841.998241 | 921.502759 | 1824.971692 | 912.989484 | 1823.987676 | 912.497476 | 13 |
| 5 | 468.281660 | 234.644468 | | | 450.271095 | 225.639186 | I | 1744.945477 | 872.976377 | 1727.918928 | 864.463102 | 1726.934912 | 863.971094 | 12 |
| 6 | 567.350074 | 284.178675 | | | 549.339509 | 275.173393 | V | ***1631.861413*** | 816.434345 | 1614.834864 | 807.921070 | 1613.850848 | 807.429062 | 11 |
| 7 | 668.397753 | 334.702515 | | | 650.387188 | 325.697232 | T | ***1532.792999*** | 766.900138 | 1515.766450 | 758.386863 | 1514.782434 | 757.894855 | 10 |
| 8 | 755.429781 | 378.218529 | | | 737.419216 | 369.213246 | S | ***1431.745320*** | 716.376298 | 1414.718771 | 707.863024 | 1413.734755 | 707.371016 | 9 |
| 9 | 852.482545 | 426.744911 | | | 834.471980 | 417.739628 | P | ***1344.713292*** | 672.860284 | 1327.686743 | 664.347010 | 1326.702727 | 663.855002 | 8 |
| 10 | 1015.545874 | 508.276575 | | | 997.535309 | 499.271293 | Y | ***1247.660528*** | 624.333902 | 1230.633979 | 615.820628 | 1229.649963 | 615.328620 | 7 |
| 11 | 1454.771200 | 727.889238 | 1437.744651 | 719.375964 | 1436.760635 | 718.883956 | Q | ***1084.597199*** | 542.802238 | 1067.570650 | 534.288963 | 1066.586634 | 533.796955 | 6 |
| 12 | 1567.855264 | 784.431270 | 1550.828715 | 775.917996 | 1549.844699 | 775.425988 | I | 645.371873 | 323.189574 | 628.345324 | 314.676300 | 627.361308 | 314.184292 | 5 |
| 13 | 1704.914176 | 852.960726 | 1687.887627 | 844.447452 | 1686.903611 | 843.955444 | H | ***532.287809*** | 266.647542 | 515.261260 | 258.134268 | 514.277244 | 257.642260 | 4 |
| 14 | 1851.982590 | 926.494933 | 1834.956041 | 917.981659 | 1833.972025 | 917.489651 | F | ***395.228897*** | 198.118086 | 378.202348 | 189.604812 | 377.218332 | 189.112804 | 3 |
| 15 | 1953.030269 | 977.018773 | 1936.003720 | 968.505498 | 1935.019704 | 968.013490 | T | 248.160483 | 124.583879 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SGIPIVTSPYQIHFTK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.3 | 2098.128525 | 0.011577 | SGIPIVTSPYQIHFTK |

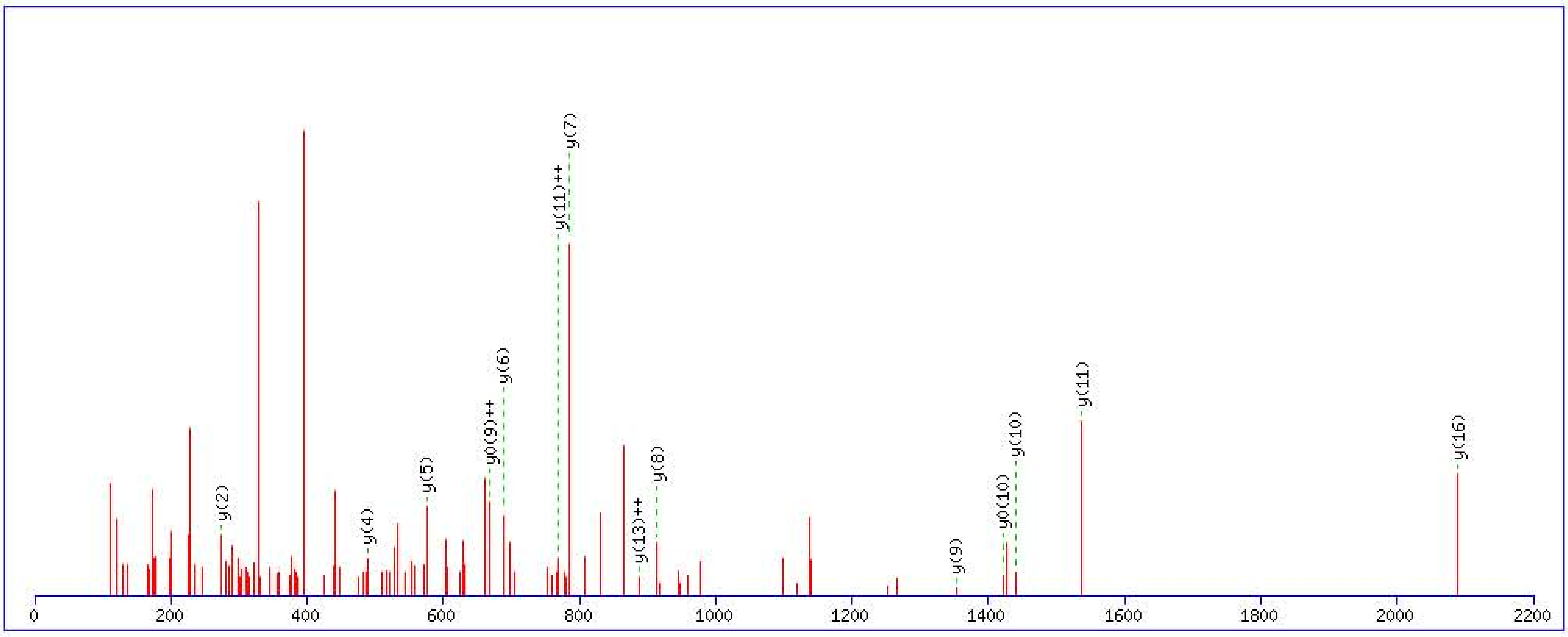
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LSINTHPSQKPLSITVR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

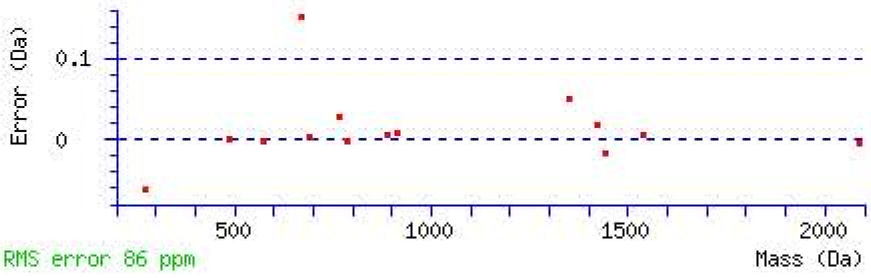
Match to Query 51086: 2201.231736 from(551.315210,4+) rtinseconds(1880) index(35492)
Title: Locus:1.1.1.3074.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

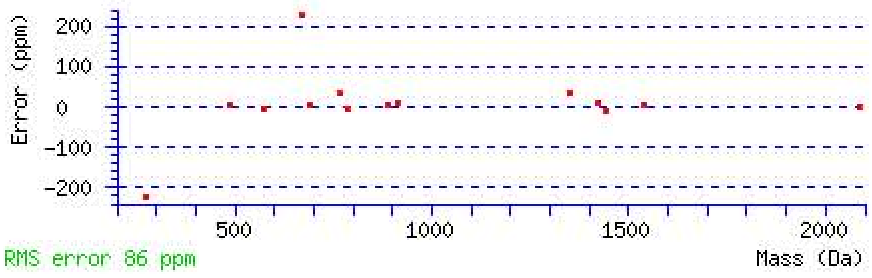
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2201.235428
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9     : Biotin:Thermo-21345 (Q)
Ions Score: 39  Expect: 0.0012
Matches : 14/180 fragment ions using 40 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 17 |
| 2 | 201.123368 | 101.065322 | | | 183.112803 | 92.060039 | S | ***2089.158656*** | 1045.082966 | 2072.132107 | 1036.569691 | 2071.148091 | 1036.077683 | 16 |
| 3 | 314.207432 | 157.607354 | | | 296.196867 | 148.602071 | I | 2002.126628 | 1001.566952 | 1985.100079 | 993.053678 | 1984.116063 | 992.561669 | 15 |
| 4 | 428.250359 | 214.628818 | 411.223810 | 206.115543 | 410.239794 | 205.623535 | N | 1889.042564 | 945.024920 | 1872.016015 | 936.511646 | 1871.031999 | 936.019638 | 14 |
| 5 | 529.298038 | 265.152657 | 512.271489 | 256.639383 | 511.287473 | 256.147375 | T | 1774.999637 | 888.003456 | 1757.973088 | 879.490182 | 1756.989072 | 878.998174 | 13 |
| 6 | 666.356950 | 333.682113 | 649.330401 | 325.168838 | 648.346385 | 324.676830 | H | 1673.951958 | 837.479617 | 1656.925409 | 828.966343 | 1655.941393 | 828.474334 | 12 |
| 7 | 763.409714 | 382.208495 | 746.383165 | 373.695221 | 745.399149 | 373.203213 | P | ***1536.893046*** | 768.950161 | 1519.866497 | 760.436887 | 1518.882481 | 759.944878 | 11 |
| 8 | 850.441742 | 425.724509 | 833.415193 | 417.211234 | 832.431177 | 416.719226 | S | ***1439.840282*** | 720.423779 | 1422.813733 | 711.910505 | 1421.829717 | 711.418496 | 10 |
| 9 | 1289.667068 | 645.337172 | 1272.640519 | 636.823898 | 1271.656503 | 636.331889 | Q | ***1352.808254*** | 676.907765 | 1335.781705 | 668.394491 | 1334.797689 | 667.902483 | 9 |
| 10 | 1417.762031 | 709.384654 | 1400.735482 | 700.871379 | 1399.751466 | 700.379371 | K | ***913.582928*** | 457.295102 | 896.556379 | 448.781828 | 895.572363 | 448.289820 | 8 |
| 11 | 1514.814795 | 757.911036 | 1497.788246 | 749.397761 | 1496.804230 | 748.905753 | P | ***785.487965*** | 393.247621 | 768.461416 | 384.734346 | 767.477400 | 384.242338 | 7 |
| 12 | 1627.898859 | 814.453067 | 1610.872310 | 805.939793 | 1609.888294 | 805.447785 | L | ***688.435201*** | 344.721239 | 671.408652 | 336.207964 | 670.424636 | 335.715956 | 6 |
| 13 | 1714.930887 | 857.969082 | 1697.904338 | 849.455807 | 1696.920322 | 848.963799 | S | ***575.351137*** | 288.179207 | 558.324588 | 279.665932 | 557.340572 | 279.173924 | 5 |
| 14 | 1828.014951 | 914.511113 | 1810.988402 | 905.997839 | 1810.004386 | 905.505831 | I | ***488.319109*** | 244.663192 | 471.292560 | 236.149918 | 470.308544 | 235.657910 | 4 |
| 15 | 1929.062630 | 965.034953 | 1912.036081 | 956.521679 | 1911.052065 | 956.029670 | T | 375.235045 | 188.121161 | 358.208496 | 179.607886 | 357.224480 | 179.115878 | 3 |
| 16 | 2028.131044 | 1014.569160 | 2011.104495 | 1006.055886 | 2010.120479 | 1005.563878 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084047 | | | 2 |
| 17 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LSINTHPSQKPLSITVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.7 | 2201.235428 | -0.003692 | LSINTHPSQKPLSITVR |

**Mascot:** http://www.matrixscience.com/

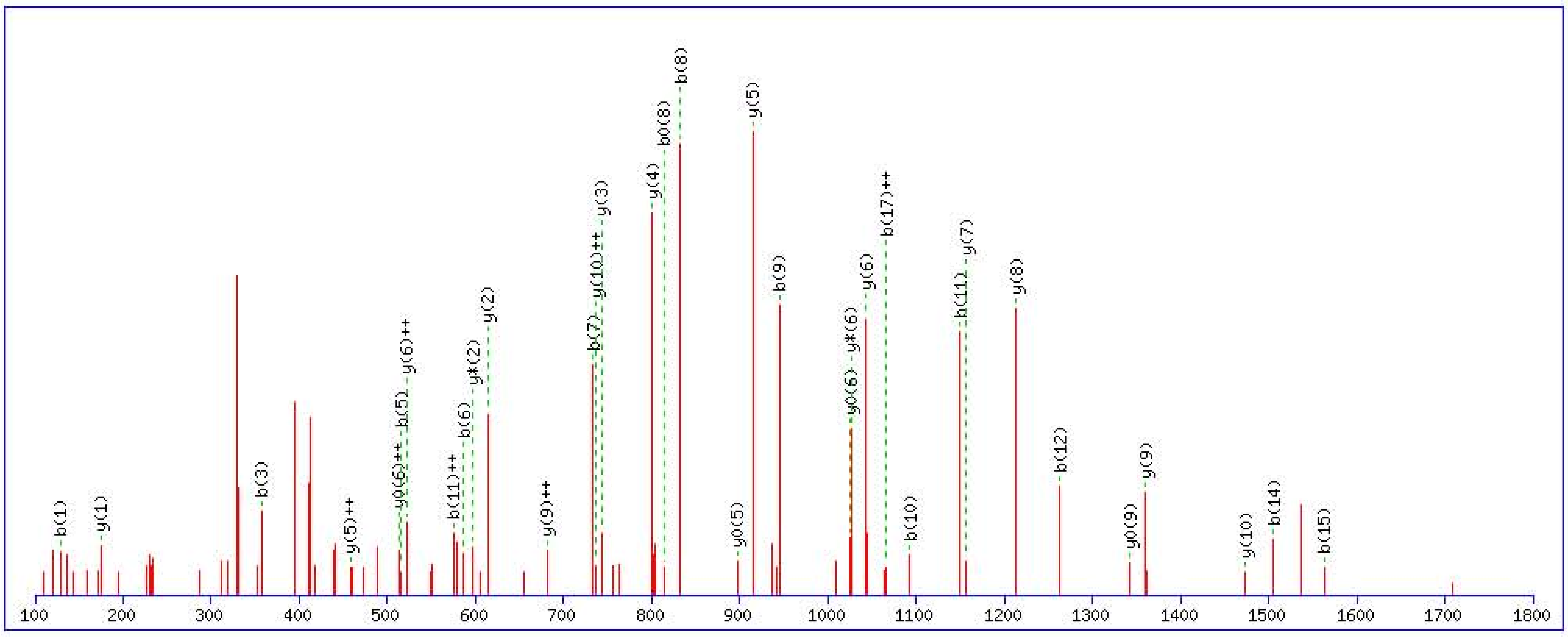
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KVEGTAFVIFGIQDGEQR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

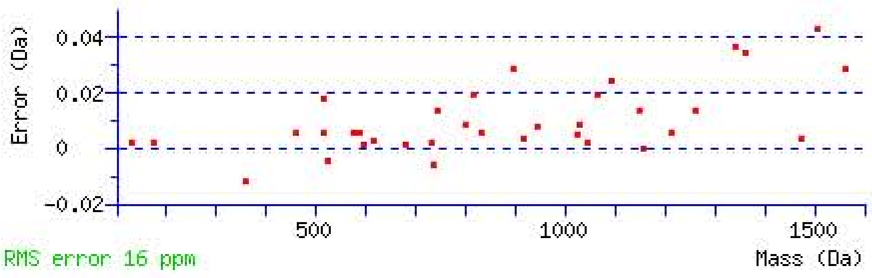
Match to Query 53078: 2304.216672 from(769.079500,3+) rtinseconds(2464) index(39183)
Title: Locus:1.1.1.3277.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

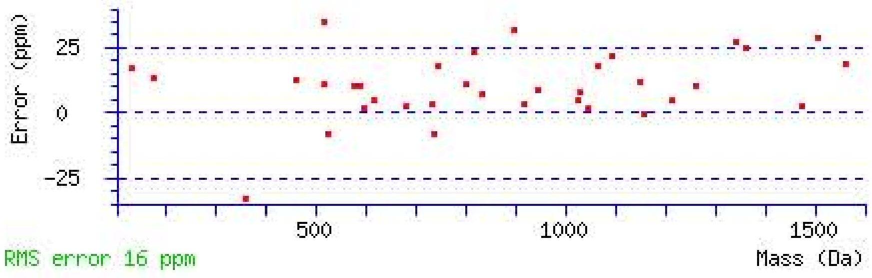
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1800] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2304.193649
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q17     : Biotin:Thermo-21345 (Q)
Ions Score: 61  Expect: 1.9e-005
Matches : 35/196 fragment ions using 76 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 18 |
| 2 | 228.170653 | 114.588965 | 211.144104 | 106.075690 | | | V | 2177.105954 | 1089.056615 | 2160.079405 | 1080.543340 | 2159.095389 | 1080.051332 | 17 |
| 3 | ***357.213246*** | 179.110261 | 340.186697 | 170.596987 | 339.202681 | 170.104979 | E | 2078.037540 | 1039.522408 | 2061.010991 | 1031.009133 | 2060.026975 | 1030.517125 | 16 |
| 4 | 414.234710 | 207.620993 | 397.208161 | 199.107719 | 396.224145 | 198.615711 | G | 1948.994947 | 975.001111 | 1931.968398 | 966.487837 | 1930.984382 | 965.995829 | 15 |
| 5 | ***515.282389*** | 258.144833 | 498.255840 | 249.631558 | 497.271824 | 249.139550 | T | 1891.973483 | 946.490380 | 1874.946934 | 937.977105 | 1873.962918 | 937.485097 | 14 |
| 6 | ***586.319503*** | 293.663390 | 569.292954 | 285.150115 | 568.308938 | 284.658107 | A | 1790.925804 | 895.966540 | 1773.899255 | 887.453265 | 1772.915239 | 886.961257 | 13 |
| 7 | ***733.387917*** | 367.197597 | 716.361368 | 358.684322 | 715.377352 | 358.192314 | F | 1719.888690 | 860.447983 | 1702.862141 | 851.934709 | 1701.878125 | 851.442701 | 12 |
| 8 | ***832.456331*** | 416.731804 | 815.429782 | 408.218529 | 814.445766 | 407.726521 | V | 1572.820276 | 786.913776 | 1555.793727 | 778.400502 | 1554.809711 | 777.908493 | 11 |
| 9 | ***945.540395*** | 473.273836 | 928.513846 | 464.760561 | 927.529830 | 464.268553 | I | ***1473.751862*** | 737.379569 | 1456.725313 | 728.866294 | 1455.741297 | 728.374286 | 10 |
| 10 | ***1092.608809*** | 546.808043 | 1075.582260 | 538.294768 | 1074.598244 | 537.802760 | F | ***1360.667798*** | 680.837537 | 1343.641249 | 672.324263 | 1342.657233 | 671.832254 | 9 |
| 11 | ***1149.630273*** | **575.318775** | 1132.603724 | 566.805500 | 1131.619708 | 566.313492 | G | ***1213.599384*** | 607.303330 | 1196.572835 | 598.790055 | 1195.588819 | 598.298047 | 8 |
| 12 | ***1262.714337*** | 631.860806 | 1245.687788 | 623.347532 | 1244.703772 | 622.855524 | I | ***1156.577920*** | 578.792598 | 1139.551371 | 570.279324 | 1138.567355 | 569.787315 | 7 |
| 13 | 1390.772915 | 695.890095 | 1373.746366 | 687.376821 | 1372.762350 | 686.884813 | Q | ***1043.493856*** | 522.250566 | 1026.467307 | 513.737292 | 1025.483291 | 513.245284 | 6 |
| 14 | ***1505.799858*** | 753.403567 | 1488.773309 | 744.890292 | 1487.789293 | 744.398284 | D | ***915.435278*** | 458.221277 | 898.408729 | 449.708003 | 897.424713 | 449.215995 | 5 |
| 15 | ***1562.821322*** | 781.914299 | 1545.794773 | 773.401024 | 1544.810757 | 772.909016 | G | ***800.408335*** | 400.707806 | 783.381786 | 392.194531 | 782.397770 | 391.702523 | 4 |
| 16 | 1691.863915 | 846.435595 | 1674.837366 | 837.922321 | 1673.853350 | 837.430313 | E | ***743.386871*** | 372.197074 | 726.360322 | 363.683799 | 725.376306 | 363.191791 | 3 |
| 17 | 2131.089241 | **1066.048258** | 2114.062692 | 1057.534984 | 2113.078676 | 1057.042976 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KVEGTAFVIFGIQDGEQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 61.1 | 2304.193649 | 0.023023 | KVEGTAFVIFGIQDGEQR |
| 31.4 | 2304.193649 | 0.023023 | KVEGTAFVIFGIQDGEQR |

**Mascot:** http://www.matrixscience.com/

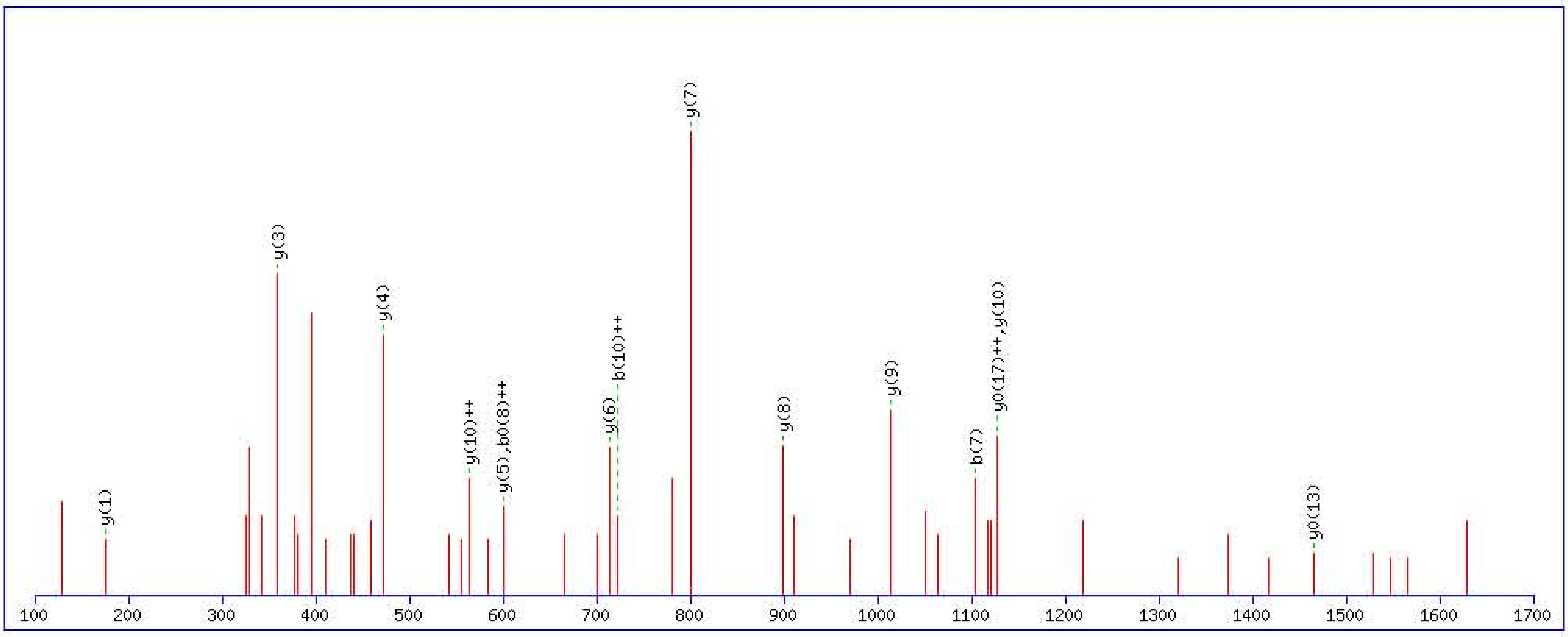
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DAPDHQELNLDVSLQLPSR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

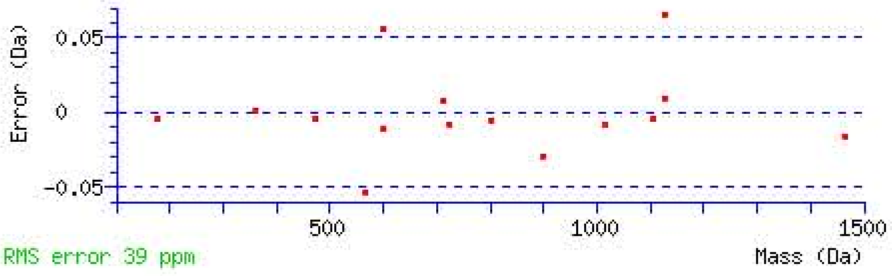
Match to Query 55503: 2457.243072 from(820.088300,3+) rtinseconds(2571) index(39898)
Title: Locus:1.1.1.3314.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

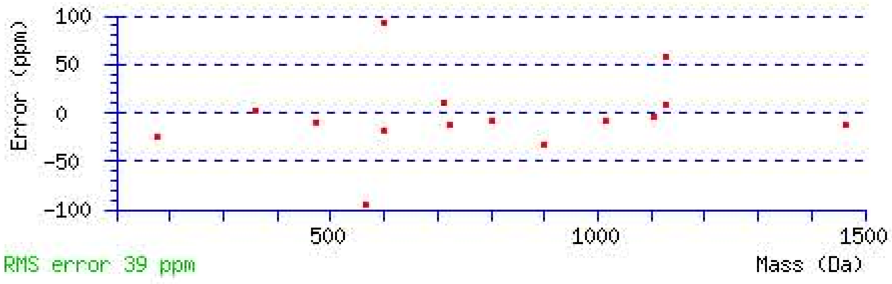
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1700] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2457.232193
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.0013
Matches : 15/204 fragment ions using 27 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 19 |
| 2 | 187.071333 | 94.039304 | | | 169.060768 | 85.034022 | A | 2343.212542 | 1172.109909 | 2326.185993 | 1163.596634 | 2325.201977 | 1163.104626 | 18 |
| 3 | 284.124097 | 142.565686 | | | 266.113532 | 133.560404 | P | 2272.175428 | 1136.591352 | 2255.148879 | 1128.078077 | 2254.164863 | 1127.586069 | 17 |
| 4 | 399.151040 | 200.079158 | | | 381.140475 | 191.073875 | D | 2175.122664 | 1088.064970 | 2158.096115 | 1079.551695 | 2157.112099 | 1079.059687 | 16 |
| 5 | 536.209952 | 268.608614 | | | 518.199387 | 259.603332 | H | 2060.095721 | 1030.551498 | 2043.069172 | 1022.038224 | 2042.085156 | 1021.546216 | 15 |
| 6 | 975.435278 | 488.221277 | 958.408729 | 479.708003 | 957.424713 | 479.215995 | Q | 1923.036809 | 962.022043 | 1906.010260 | 953.508768 | 1905.026244 | 953.016760 | 14 |
| 7 | 1104.477871 | 552.742574 | 1087.451322 | 544.229299 | 1086.467306 | 543.737291 | E | 1483.811483 | 742.409380 | 1466.784934 | 733.896105 | 1465.800918 | 733.404097 | 13 |
| 8 | 1217.561935 | 609.284606 | 1200.535386 | 600.771331 | 1199.551370 | 600.279323 | L | 1354.768890 | 677.888083 | 1337.742341 | 669.374809 | 1336.758325 | 668.882801 | 12 |
| 9 | 1331.604862 | 666.306069 | 1314.578313 | 657.792795 | 1313.594297 | 657.300786 | N | 1241.684826 | 621.346051 | 1224.658277 | 612.832777 | 1223.674261 | 612.340769 | 11 |
| 10 | 1444.688926 | 722.848101 | 1427.662377 | 714.334826 | 1426.678361 | 713.842818 | L | ***1127.641899*** | 564.324588 | 1110.615350 | 555.811313 | 1109.631334 | 555.319305 | 10 |
| 11 | 1559.715869 | 780.361572 | 1542.689320 | 771.848298 | 1541.705304 | 771.356290 | D | ***1014.557835*** | 507.782556 | 997.531286 | 499.269281 | 996.547270 | 498.777273 | 9 |
| 12 | 1658.784283 | 829.895780 | 1641.757734 | 821.382505 | 1640.773718 | 820.890497 | V | ***899.530892*** | 450.269084 | 882.504343 | 441.755810 | 881.520327 | 441.263802 | 8 |
| 13 | 1745.816311 | 873.411794 | 1728.789762 | 864.898519 | 1727.805746 | 864.406511 | S | ***800.462478*** | 400.734877 | 783.435929 | 392.221603 | 782.451913 | 391.729595 | 7 |
| 14 | 1858.900375 | 929.953825 | 1841.873826 | 921.440551 | 1840.889810 | 920.948543 | L | ***713.430450*** | 357.218863 | 696.403901 | 348.705589 | 695.419885 | 348.213581 | 6 |
| 15 | 1986.958953 | 993.983115 | 1969.932404 | 985.469840 | 1968.948388 | 984.977832 | Q | ***600.346386*** | 300.676831 | 583.319837 | 292.163557 | 582.335821 | 291.671549 | 5 |
| 16 | 2100.043017 | 1050.525146 | 2083.016468 | 1042.011872 | 2082.032452 | 1041.519864 | L | ***472.287808*** | 236.647542 | 455.261259 | 228.134268 | 454.277243 | 227.642260 | 4 |
| 17 | 2197.095781 | 1099.051528 | 2180.069232 | 1090.538254 | 2179.085216 | 1090.046246 | P | ***359.203744*** | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 18 | 2284.127809 | 1142.567542 | 2267.101260 | 1134.054268 | 2266.117244 | 1133.562260 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DAPDHQELNLDVSLQLPSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.5 | 2457.232193 | 0.010879 | DAPDHQELNLDVSLQLPSR |
| 7.1 | 2457.278442 | -0.035370 | EPVSNSVTAEGMEALTKILAELR |
| 1.5 | 2457.243423 | -0.000351 | TGLSDAFMILNPSPDVPESRRR |
| 0.4 | 2457.232193 | 0.010879 | DAPDHQELNLDVSLQLPSR |

**Mascot:** http://www.matrixscience.com/

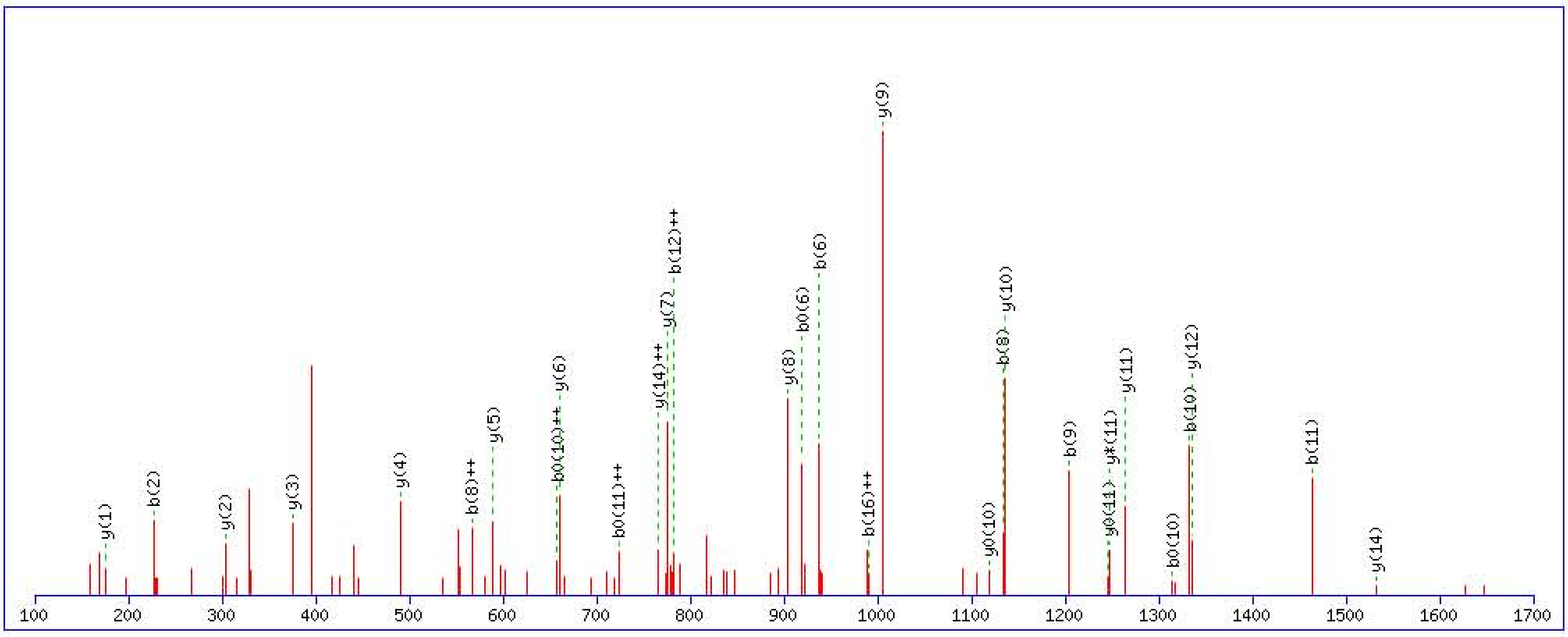
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ILLQGTPVAQMTEDAVDAER**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

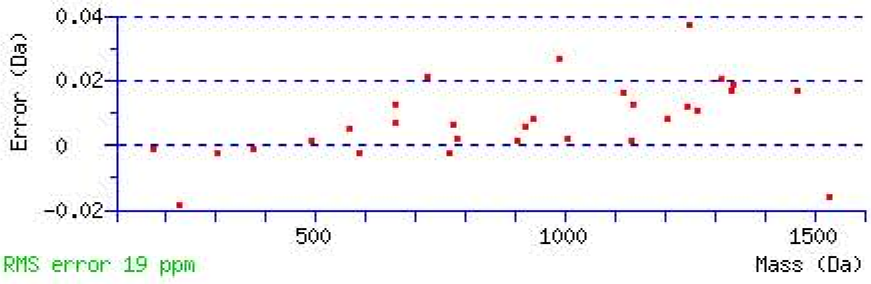
Match to Query 55784: 2467.260642 from(823.427490,3+) rtinseconds(2676) index(40595)
Title: Locus:1.1.1.3350.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●

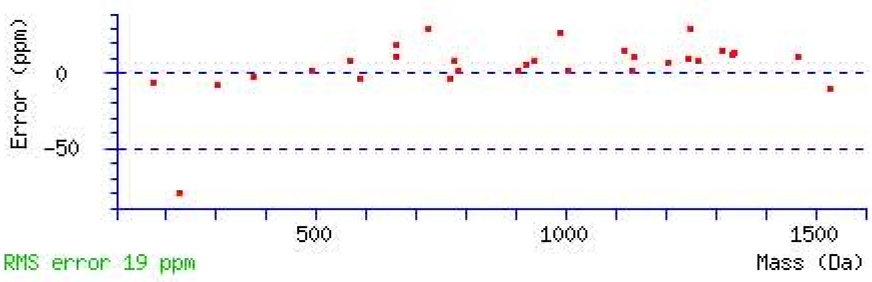


```
Monoisotopic mass of neutral peptide Mr(calc): 2467.245071
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 80  Expect: 3.3e-007
Matches : 30/210 fragment ions using 51 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 20 |
| 2 | **227.175404** | 114.091340 | | | | | L | 2355.168297 | 1178.087786 | 2338.141748 | 1169.574512 | 2337.157732 | 1169.082504 | 19 |
| 3 | 340.259468 | 170.633372 | | | | | L | 2242.084233 | 1121.545754 | 2225.057684 | 1113.032480 | 2224.073668 | 1112.540472 | 18 |
| 4 | 779.484794 | 390.246035 | 762.458245 | 381.732760 | | | Q | 2129.000169 | 1065.003722 | 2111.973620 | 1056.490448 | 2110.989604 | 1055.998440 | 17 |
| 5 | 836.506258 | 418.756767 | 819.479709 | 410.243493 | | | G | 1689.774843 | 845.391060 | 1672.748294 | 836.877785 | 1671.764278 | 836.385777 | 16 |
| 6 | **937.553937** | 469.280607 | 920.527388 | 460.767332 | 919.543372 | 460.275324 | T | 1632.753379 | 816.880328 | 1615.726830 | 808.367053 | 1614.742814 | 807.875045 | 15 |
| 7 | 1034.606701 | 517.806988 | 1017.580152 | 509.293714 | 1016.596136 | 508.801706 | P | ***1531.705700*** | 766.356488 | 1514.679151 | 757.843214 | 1513.695135 | 757.351206 | 14 |
| 8 | **1133.675115** | **567.341196** | 1116.648566 | 558.827921 | 1115.664550 | 558.335913 | V | 1434.652936 | 717.830106 | 1417.626387 | 709.316832 | 1416.642371 | 708.824824 | 13 |
| 9 | **1204.712229** | 602.859753 | 1187.685680 | 594.346478 | 1186.701664 | 593.854470 | A | ***1335.584522*** | 668.295899 | 1318.557973 | 659.782625 | 1317.573957 | 659.290617 | 12 |
| 10 | **1332.770807** | 666.889042 | 1315.744258 | 658.375767 | 1314.760242 | 657.883759 | Q | ***1264.547408*** | 632.777342 | 1247.520859 | 624.264068 | 1246.536843 | 623.772060 | 11 |
| 11 | **1463.811292** | 732.409284 | 1446.784743 | 723.896010 | 1445.800727 | 723.404002 | M | ***1136.488830*** | 568.748053 | 1119.462281 | 560.234779 | 1118.478265 | 559.742771 | 10 |
| 12 | 1564.858971 | **782.933124** | 1547.832422 | 774.419849 | 1546.848406 | 773.927841 | T | ***1005.448345*** | 503.227811 | 988.421796 | 494.714536 | 987.437780 | 494.222528 | 9 |
| 13 | 1693.901564 | 847.454420 | 1676.875015 | 838.941146 | 1675.890999 | 838.449138 | E | ***904.400666*** | 452.703971 | 887.374117 | 444.190697 | 886.390101 | 443.698689 | 8 |
| 14 | 1808.928507 | 904.967892 | 1791.901958 | 896.454617 | 1790.917942 | 895.962609 | D | ***775.358073*** | 388.182675 | 758.331524 | 379.669400 | 757.347508 | 379.177392 | 7 |
| 15 | 1879.965621 | 940.486449 | 1862.939072 | 931.973174 | 1861.955056 | 931.481166 | A | ***660.331130*** | 330.669203 | 643.304581 | 322.155929 | 642.320565 | 321.663921 | 6 |
| 16 | 1979.034035 | **990.020656** | 1962.007486 | 981.507381 | 1961.023470 | 981.015373 | V | ***589.294016*** | 295.150646 | 572.267467 | 286.637372 | 571.283451 | 286.145364 | 5 |
| 17 | 2094.060978 | 1047.534127 | 2077.034429 | 1039.020852 | 2076.050413 | 1038.528844 | D | ***490.225602*** | 245.616439 | 473.199053 | 237.103165 | 472.215037 | 236.611157 | 4 |
| 18 | 2165.098092 | 1083.052684 | 2148.071543 | 1074.539409 | 2147.087527 | 1074.047402 | A | ***375.198659*** | 188.102968 | 358.172110 | 179.589693 | 357.188094 | 179.097685 | 3 |
| 19 | 2294.140685 | 1147.573981 | 2277.114136 | 1139.060706 | 2276.130120 | 1138.568698 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 20 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 19 ppm



RMS error 19 ppm

NCBI **BLAST** search of ILLQGTPVAQMTEDAVDAER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 79.6 | 2467.245071 | 0.015571 | ILLQGTPVAQMTEDAVDAER |
| 54.1 | 2467.245071 | 0.015571 | ILLQGTPVAQMTEDAVDAER |

**Mascot:** http://www.matrixscience.com/

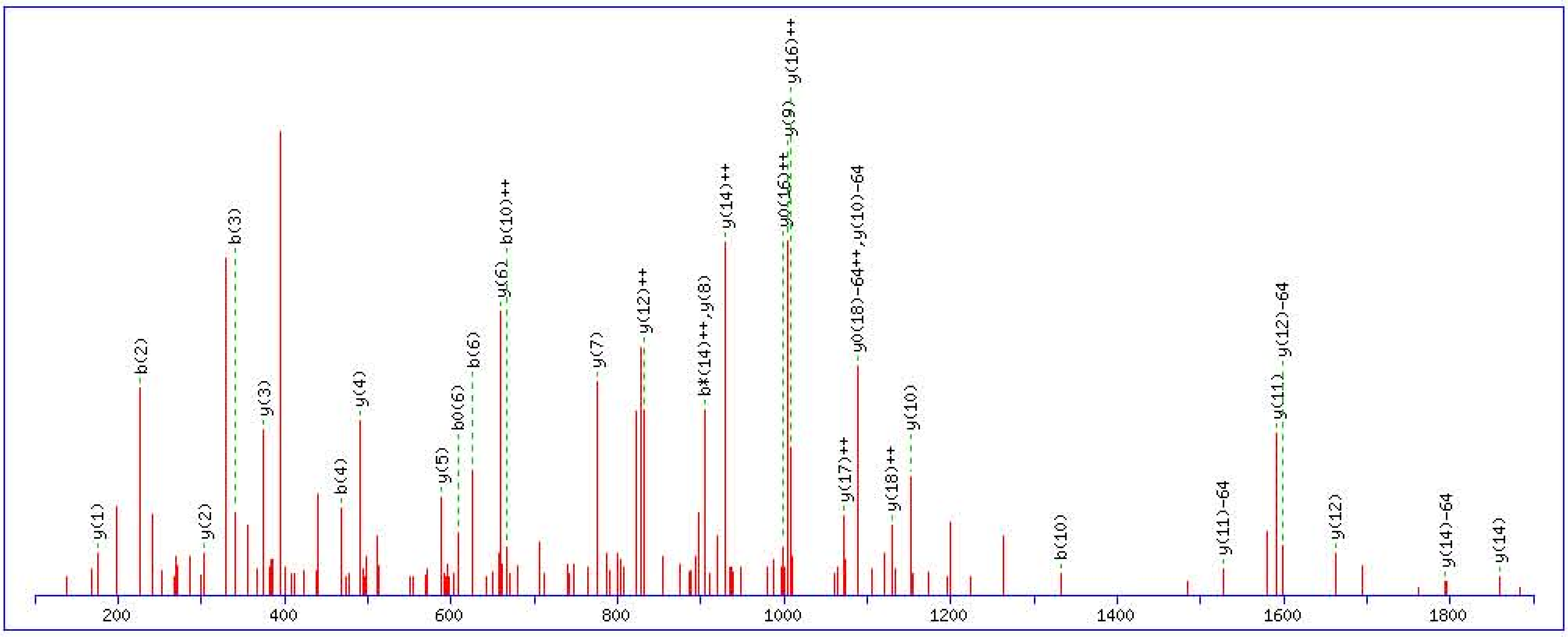
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ILLQGTPVAQMTEDAVDAER**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

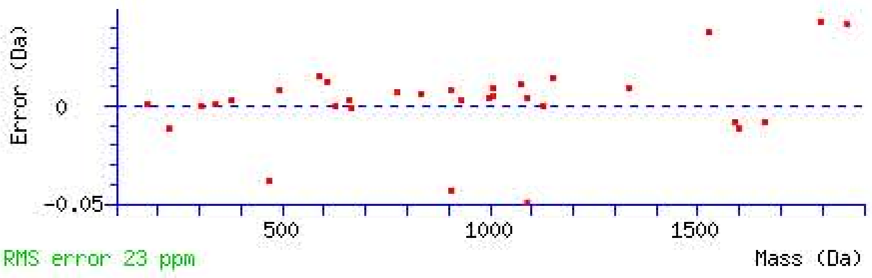
Match to Query 56191: 2483.252112 from(828.757980,3+) rtinseconds(2234) index(37885)
Title: Locus:1.1.1.3197.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

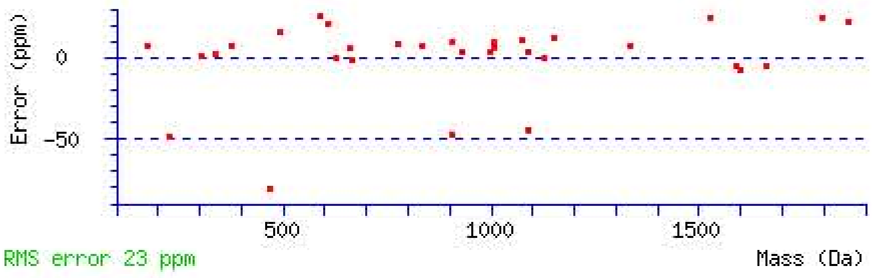
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2483.239990
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**M11** : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
**Ions Score:** 81 **Expect:** 2.4e-007
**Matches :** 32/324 fragment ions using 49 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 20 |
| 2 | **227.175404** | 114.091340 | | | | | L | 2371.163212 | 1186.085244 | 2354.136663 | 1177.571969 | 2353.152647 | 1177.079961 | 19 |
| 3 | **340.259468** | 170.633372 | | | | | L | 2258.079148 | 1129.543212 | 2241.052599 | 1121.029938 | 2240.068583 | 1120.537930 | 18 |
| 4 | **468.318046** | 234.662661 | 451.291497 | 226.149386 | | | Q | 2144.995084 | 1073.001180 | 2127.968535 | 1064.487905 | 2126.984519 | 1063.995898 | 17 |
| 5 | 525.339510 | 263.173393 | 508.312961 | 254.660119 | | | G | 2016.936506 | 1008.971891 | 1999.909957 | 1000.458617 | 1998.925941 | 999.966609 | 16 |
| 6 | **626.387189** | 313.697233 | 609.360640 | 305.183958 | 608.376624 | 304.691950 | T | 1959.915042 | 980.461159 | 1942.888493 | 971.947885 | 1941.904477 | 971.455877 | 15 |
| 7 | 723.439953 | 362.223615 | 706.413404 | 353.710340 | 705.429388 | 353.218332 | P | ***1858.867363*** | 929.937320 | 1841.840814 | 921.424045 | 1840.856798 | 920.932037 | 14 |
| 8 | 822.508367 | 411.757822 | 805.481818 | 403.244547 | 804.497802 | 402.752539 | V | 1761.814599 | 881.410938 | 1744.788050 | 872.897663 | 1743.804034 | 872.405655 | 13 |
| 9 | 893.545481 | 447.276379 | 876.518932 | 438.763104 | 875.534916 | 438.271096 | A | ***1662.746185*** | 831.876731 | 1645.719636 | 823.363456 | 1644.735620 | 822.871448 | 12 |
| 10 | **1332.770807** | 666.889042 | 1315.744258 | 658.375767 | 1314.760242 | 657.883759 | Q | ***1591.709071*** | 796.358174 | 1574.682522 | 787.844899 | 1573.698506 | 787.352891 | 11 |
| 11 | 1479.806207 | 740.406742 | 1462.779658 | 731.893467 | 1461.795642 | 731.401459 | M | ***1152.483745*** | 576.745511 | 1135.457196 | 568.232236 | 1134.473180 | 567.740228 | 10 |
| 12 | 1580.853886 | 790.930581 | 1563.827337 | 782.417307 | 1562.843321 | 781.925299 | T | ***1005.448345*** | 503.227811 | 988.421796 | 494.714536 | 987.437780 | 494.222528 | 9 |
| 13 | 1709.896479 | 855.451878 | 1692.869930 | 846.938603 | 1691.885914 | 846.446595 | E | ***904.400666*** | 452.703971 | 887.374117 | 444.190697 | 886.390101 | 443.698689 | 8 |
| 14 | 1824.923422 | 912.965349 | 1807.896873 | 904.452075 | 1806.912857 | 903.960067 | D | ***775.358073*** | 388.182675 | 758.331524 | 379.669400 | 757.347508 | 379.177392 | 7 |
| 15 | 1895.960536 | 948.483906 | 1878.933987 | 939.970632 | 1877.949971 | 939.478624 | A | ***660.331130*** | 330.669203 | 643.304581 | 322.155929 | 642.320565 | 321.663921 | 6 |
| 16 | 1995.028950 | 998.018113 | 1978.002401 | 989.504839 | 1977.018385 | 989.012831 | V | ***589.294016*** | 295.150646 | 572.267467 | 286.637372 | 571.283451 | 286.145364 | 5 |
| 17 | 2110.055893 | 1055.531585 | 2093.029344 | 1047.018310 | 2092.045328 | 1046.526302 | D | ***490.225602*** | 245.616439 | 473.199053 | 237.103165 | 472.215037 | 236.611157 | 4 |
| 18 | 2181.093007 | 1091.050142 | 2164.066458 | 1082.536867 | 2163.082442 | 1082.044859 | A | ***375.198659*** | 188.102968 | 358.172110 | 179.589693 | 357.188094 | 179.097685 | 3 |
| 19 | 2310.135600 | 1155.571438 | 2293.109051 | 1147.058164 | 2292.125035 | 1146.566156 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 20 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ILLQGTPVAQMTEDAVDAER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 81.0 | 2483.239990 | 0.012122 | ILLQGTPVAQMTEDAVDAER |
| 33.8 | 2483.239990 | 0.012122 | ILLQGTPVAQMTEDAVDAER |

**Mascot:** http://www.matrixscience.com/

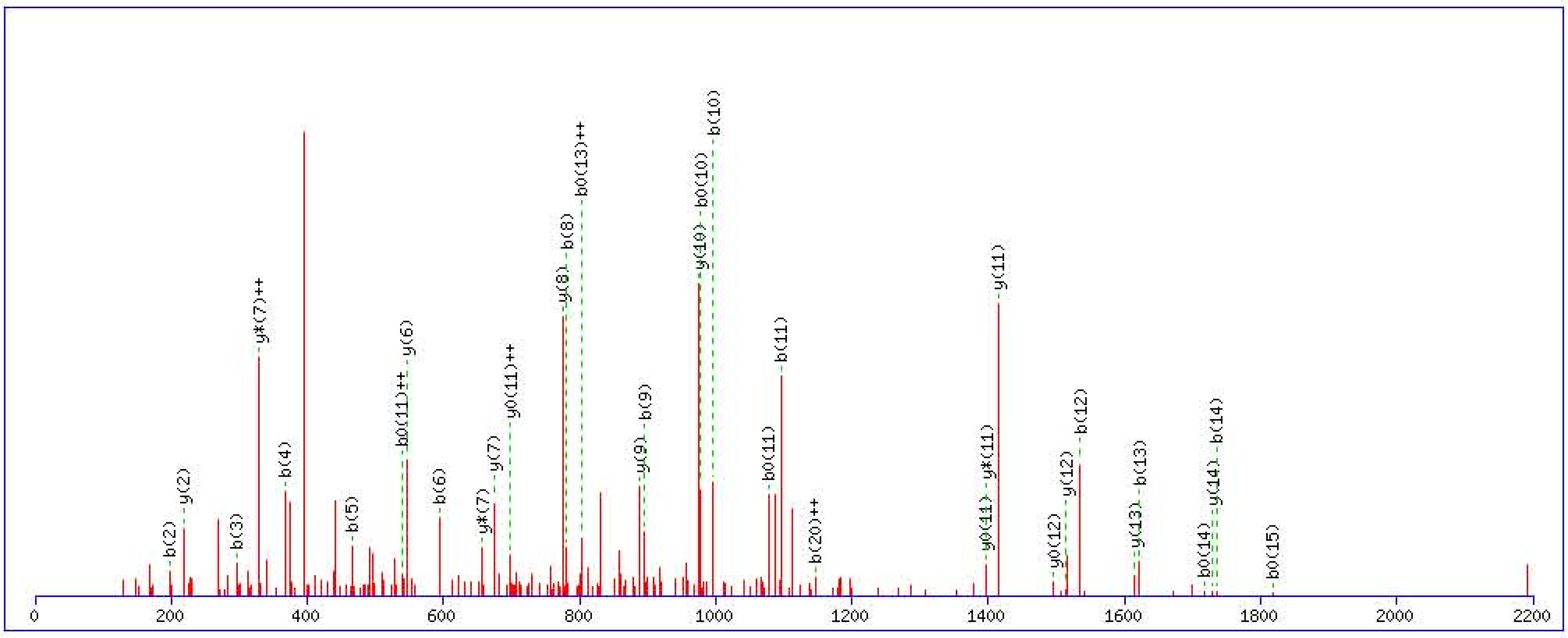
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VPVAVQGEDTVQSLTQGDGVAK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

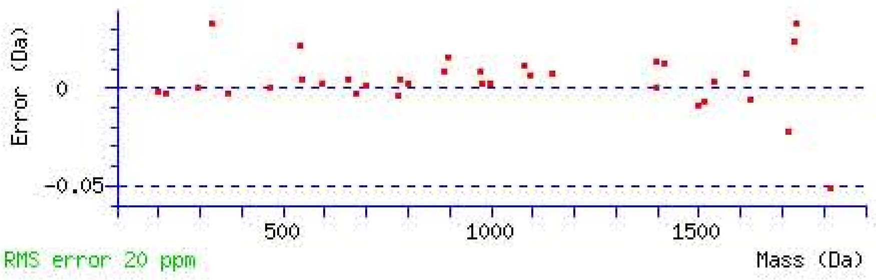
Match to Query 56831: 2508.305142 from(837.108990,3+) rtinseconds(2220) index(37789)
Title: Locus:1.1.1.3192.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

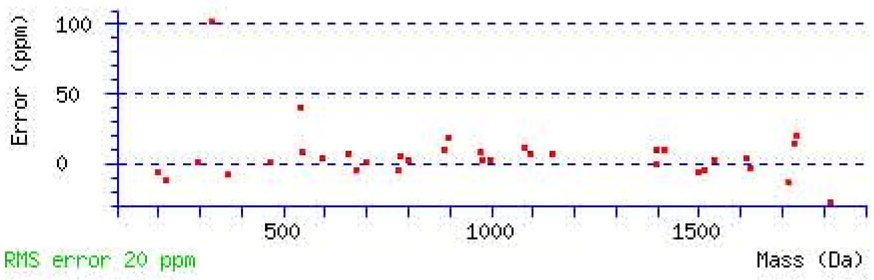
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2508.289429
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 83  Expect: 1.4e-007
Matches : 35/220 fragment ions using 52 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 22 |
| 2 | ***197.128454*** | 99.067865 | | | | | P | 2410.228255 | 1205.617765 | 2393.201706 | 1197.104491 | 2392.217690 | 1196.612483 | 21 |
| 3 | ***296.196868*** | 148.602072 | | | | | V | 2313.175491 | 1157.091383 | 2296.148942 | 1148.578109 | 2295.164926 | 1148.086101 | 20 |
| 4 | ***367.233982*** | 184.120629 | | | | | A | 2214.107077 | 1107.557176 | 2197.080528 | 1099.043902 | 2196.096512 | 1098.551894 | 19 |
| 5 | ***466.302396*** | 233.654836 | | | | | V | 2143.069963 | 1072.038619 | 2126.043414 | 1063.525345 | 2125.059398 | 1063.033337 | 18 |
| 6 | ***594.360974*** | 297.684125 | 577.334425 | 289.170851 | | | Q | 2044.001549 | 1022.504413 | 2026.975000 | 1013.991138 | 2025.990984 | 1013.499130 | 17 |
| 7 | 651.382438 | 326.194857 | 634.355889 | 317.681583 | | | G | 1915.942971 | 958.475124 | 1898.916422 | 949.961849 | 1897.932406 | 949.469841 | 16 |
| 8 | ***780.425031*** | 390.716154 | 763.398482 | 382.202879 | 762.414466 | 381.710871 | E | 1858.921507 | 929.964391 | 1841.894958 | 921.451117 | 1840.910942 | 920.959109 | 15 |
| 9 | ***895.451974*** | 448.229625 | 878.425425 | 439.716351 | 877.441409 | 439.224343 | D | ***1729.878914*** | 865.443095 | 1712.852365 | 856.929821 | 1711.868349 | 856.437812 | 14 |
| 10 | ***996.499653*** | 498.753465 | 979.473104 | 490.240190 | 978.489088 | 489.748182 | T | ***1614.851971*** | 807.929623 | 1597.825422 | 799.416349 | 1596.841406 | 798.924341 | 13 |
| 11 | ***1095.568067*** | 548.287672 | 1078.541518 | 539.774397 | 1077.557502 | 539.282389 | V | ***1513.804292*** | 757.405784 | 1496.777743 | 748.892510 | 1495.793727 | 748.400502 | 12 |
| 12 | ***1534.793393*** | 767.900335 | 1517.766844 | 759.387060 | 1516.782828 | 758.895052 | Q | ***1414.735878*** | 707.871577 | 1397.709329 | 699.358303 | 1396.725313 | 698.866294 | 11 |
| 13 | ***1621.825421*** | 811.416349 | 1604.798872 | 802.903074 | 1603.814856 | 802.411066 | S | ***975.510552*** | 488.258914 | 958.484003 | 479.745639 | 957.499987 | 479.253631 | 10 |
| 14 | ***1734.909485*** | 867.958381 | 1717.882936 | 859.445106 | 1716.898920 | 858.953098 | L | ***888.478524*** | 444.742900 | 871.451975 | 436.229625 | 870.467959 | 435.737617 | 9 |
| 15 | 1835.957164 | 918.482220 | 1818.930615 | 909.968946 | 1817.946599 | 909.476938 | T | ***775.394460*** | 388.200868 | 758.367911 | 379.687593 | 757.383895 | 379.195585 | 8 |
| 16 | 1964.015742 | 982.511509 | 1946.989193 | 973.998235 | 1946.005177 | 973.506227 | Q | ***674.346781*** | 337.677029 | 657.320232 | 329.163754 | 656.336216 | 328.671746 | 7 |
| 17 | 2021.037206 | 1011.022241 | 2004.010657 | 1002.508967 | 2003.026641 | 1002.016959 | G | ***546.288203*** | 273.647739 | 529.261654 | 265.134465 | 528.277638 | 264.642457 | 6 |
| 18 | 2136.064149 | 1068.535712 | 2119.037600 | 1060.022438 | 2118.053584 | 1059.530430 | D | 489.266739 | 245.137007 | 472.240190 | 236.623733 | 471.256174 | 236.131725 | 5 |
| 19 | 2193.085613 | 1097.046444 | 2176.059064 | 1088.533170 | 2175.075048 | 1088.041162 | G | 374.239796 | 187.623536 | 357.213247 | 179.110261 | | | 4 |
| 20 | 2292.154027 | 1146.580651 | 2275.127478 | 1138.067377 | 2274.143462 | 1137.575369 | V | 317.218332 | 159.112804 | 300.191783 | 150.599530 | | | 3 |
| 21 | 2363.191141 | 1182.099208 | 2346.164592 | 1173.585934 | 2345.180576 | 1173.093926 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065323 | | | 2 |
| 22 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VPVAVQGEDTVQSLTQGDGVAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 82.8 | 2508.289429 | 0.015713 | VPVAVQGEDTVQSLTQGDGVAK |
| 48.5 | 2508.289429 | 0.015713 | VPVAVQGEDTVQSLTQGDGVAK |
| 31.3 | 2508.289429 | 0.015713 | VPVAVQGEDTVQSLTQGDGVAK |

**Mascot:** http://www.matrixscience.com/

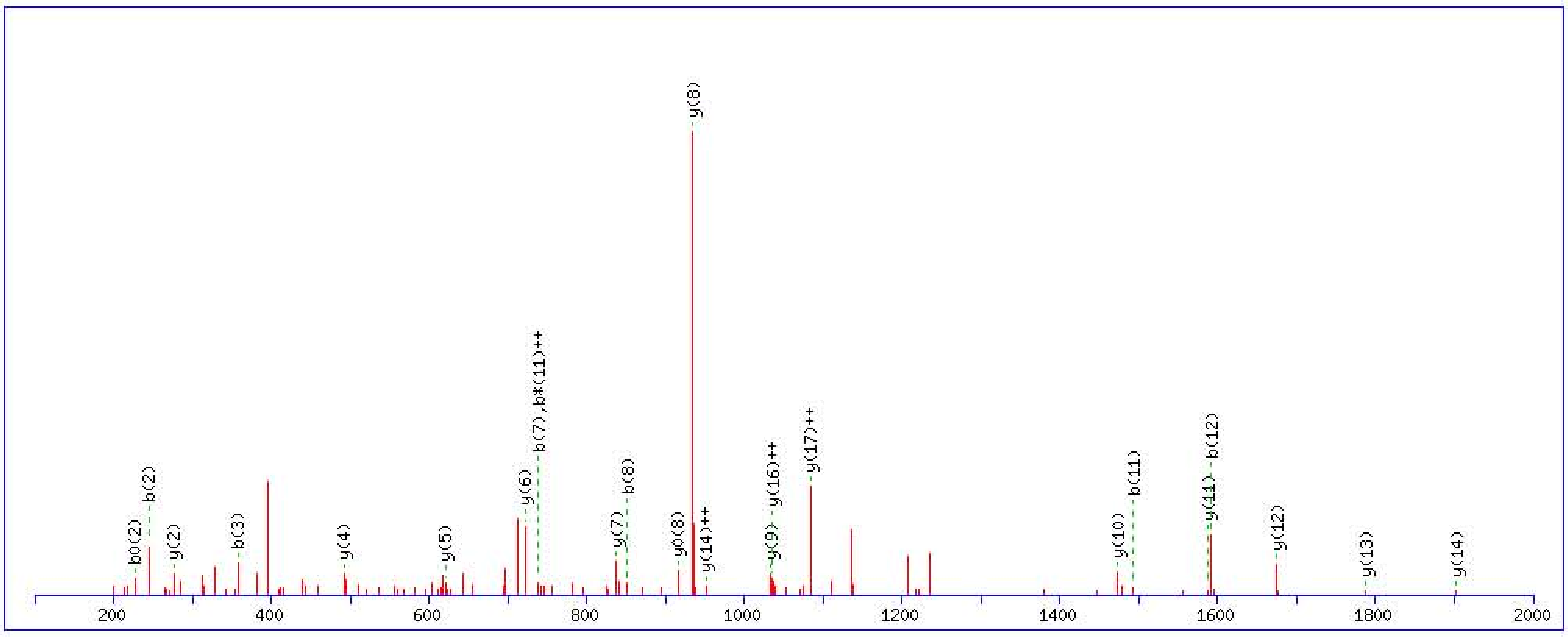
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EDIPPADLSDQVPDTESETR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

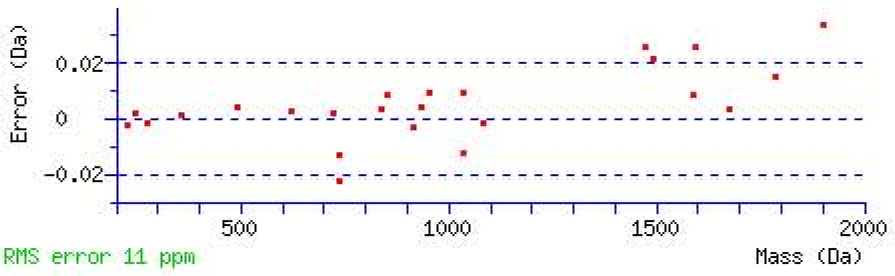
Match to Query 57007: 2524.176792 from(842.399540,3+) rtinseconds(2096) index(37001)
Title: Locus:1.1.1.3149.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

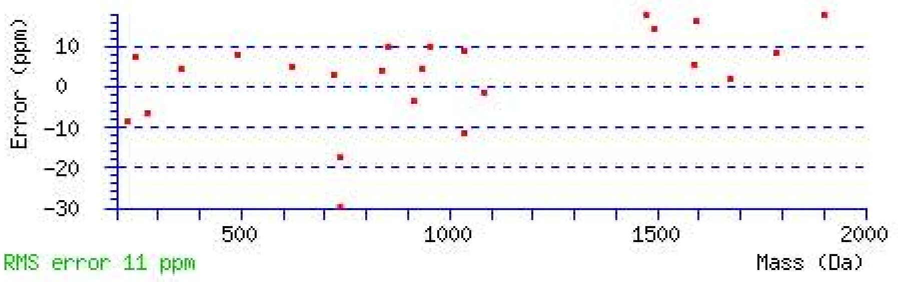
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2524.163910
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 6.4e-005
Matches : 24/206 fragment ions using 56 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 20 |
| 2 | **245.076812** | 123.042044 | | | 227.066247 | 114.036762 | D | 2396.128598 | 1198.567937 | 2379.102049 | 1190.054662 | 2378.118033 | 1189.562654 | 19 |
| 3 | **358.160876** | 179.584076 | | | 340.150311 | 170.578794 | I | 2281.101655 | 1141.054465 | 2264.075106 | 1132.541191 | 2263.091090 | 1132.049183 | 18 |
| 4 | 455.213640 | 228.110458 | | | 437.203075 | 219.105176 | P | 2168.017591 | 1084.512433 | 2150.991042 | 1075.999159 | 2150.007026 | 1075.507151 | 17 |
| 5 | 552.266404 | 276.636840 | | | 534.255839 | 267.631558 | P | 2070.964827 | 1035.986051 | 2053.938278 | 1027.472777 | 2052.954262 | 1026.980769 | 16 |
| 6 | 623.303518 | 312.155397 | | | 605.292953 | 303.150115 | A | 1973.912063 | 987.459670 | 1956.885514 | 978.946395 | 1955.901498 | 978.454387 | 15 |
| 7 | **738.330461** | 369.668869 | | | 720.319896 | 360.663586 | D | ***1902.874949*** | 951.941113 | 1885.848400 | 943.427838 | 1884.864384 | 942.935830 | 14 |
| 8 | **851.414525** | 426.210901 | | | 833.403960 | 417.205618 | L | ***1787.848006*** | 894.427641 | 1770.821457 | 885.914367 | 1769.837441 | 885.422359 | 13 |
| 9 | 938.446553 | 469.726915 | | | 920.435988 | 460.721632 | S | ***1674.763942*** | 837.885609 | 1657.737393 | 829.372335 | 1656.753377 | 828.880327 | 12 |
| 10 | 1053.473496 | 527.240386 | | | 1035.462931 | 518.235104 | D | ***1587.731914*** | 794.369595 | 1570.705365 | 785.856321 | 1569.721349 | 785.364313 | 11 |
| 11 | **1492.698822** | 746.853049 | 1475.672273 | 738.339775 | 1474.688257 | 737.847767 | Q | ***1472.704971*** | 736.856124 | 1455.678422 | 728.342849 | 1454.694406 | 727.850841 | 10 |
| 12 | **1591.767236** | 796.387256 | 1574.740687 | 787.873982 | 1573.756671 | 787.381974 | V | ***1033.479645*** | 517.243461 | 1016.453096 | 508.730186 | 1015.469080 | 508.238178 | 9 |
| 13 | 1688.820000 | 844.913638 | 1671.793451 | 836.400364 | 1670.809435 | 835.908356 | P | ***934.411231*** | 467.709254 | 917.384682 | 459.195979 | 916.400666 | 458.703971 | 8 |
| 14 | 1803.846943 | 902.427110 | 1786.820394 | 893.913835 | 1785.836378 | 893.421827 | D | ***837.358467*** | 419.182872 | 820.331918 | 410.669597 | 819.347902 | 410.177589 | 7 |
| 15 | 1904.894622 | 952.950949 | 1887.868073 | 944.437675 | 1886.884057 | 943.945667 | T | ***722.331524*** | 361.669400 | 705.304975 | 353.156125 | 704.320959 | 352.664117 | 6 |
| 16 | 2033.937215 | 1017.472246 | 2016.910666 | 1008.958971 | 2015.926650 | 1008.466963 | E | ***621.283845*** | 311.145560 | 604.257296 | 302.632286 | 603.273280 | 302.140278 | 5 |
| 17 | 2120.969243 | 1060.988259 | 2103.942694 | 1052.474985 | 2102.958678 | 1051.982977 | S | ***492.241252*** | 246.624264 | 475.214703 | 238.110989 | 474.230687 | 237.618981 | 4 |
| 18 | 2250.011836 | 1125.509556 | 2232.985287 | 1116.996281 | 2232.001271 | 1116.504274 | E | 405.209224 | 203.108250 | 388.182675 | 194.594975 | 387.198659 | 194.102967 | 3 |
| 19 | 2351.059515 | 1176.033395 | 2334.032966 | 1167.520121 | 2333.048950 | 1167.028113 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 20 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EDIPPADLSDQVPDTESETR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 53.6 | 2524.163910 | 0.012882 | EDIPPADLSDQVPDTESETR |

**Mascot:** http://www.matrixscience.com/

{MATRIX SCIENCE}

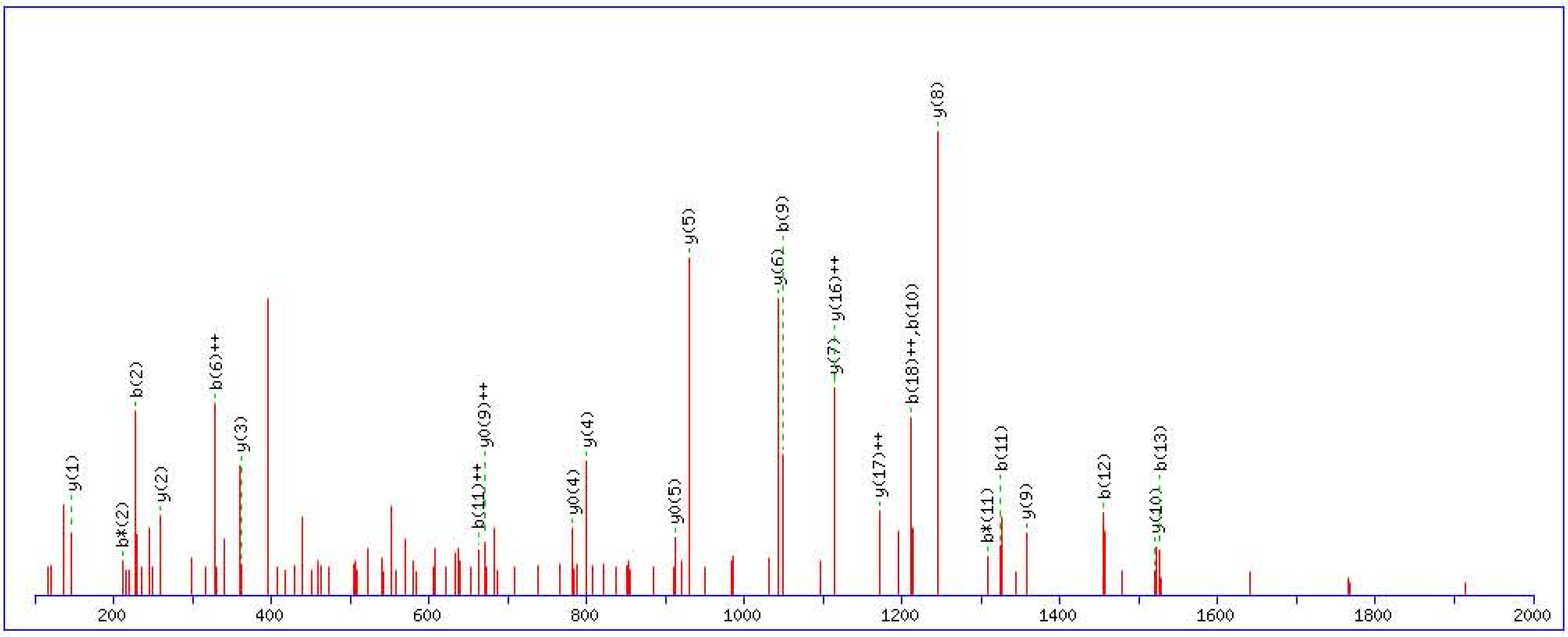
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VQLSNDFDEYIMAIEQTIK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

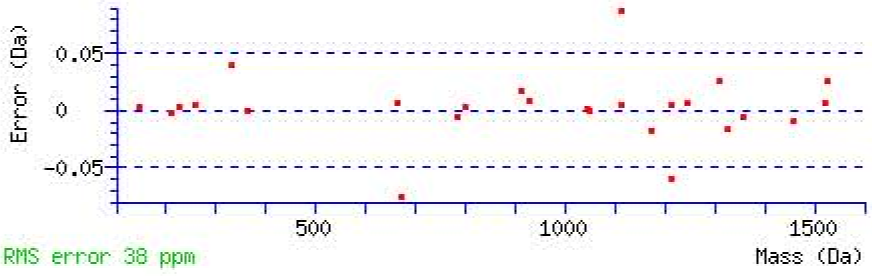
Match to Query 57316: 2567.276352 from(856.766060,3+) rtinseconds(3246) index(44662)
Title: Locus:1.1.1.3544.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

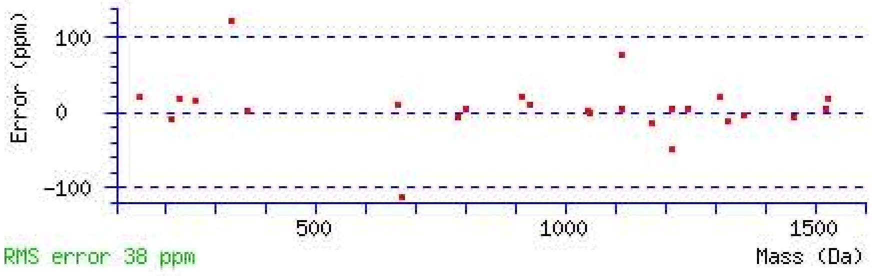
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2567.265121
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 35  Expect: 0.0098
Matches : 26/204 fragment ions using 63 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 19 |
| 2 | **228.134268** | 114.570772 | 211.107719 | 106.057498 | | | Q | 2469.204012 | 1235.105644 | 2452.177463 | 1226.592369 | 2451.193447 | 1226.100361 | 18 |
| 3 | 341.218332 | 171.112804 | 324.191783 | 162.599530 | | | L | 2341.145434 | 1171.076355 | 2324.118885 | 1162.563080 | 2323.134869 | 1162.071072 | 17 |
| 4 | 428.250360 | 214.628818 | 411.223811 | 206.115544 | 410.239795 | 205.623536 | S | 2228.061370 | 1114.534323 | 2211.034821 | 1106.021048 | 2210.050805 | 1105.529040 | 16 |
| 5 | 542.293287 | 271.650282 | 525.266738 | 263.137007 | 524.282722 | 262.644999 | N | 2141.029342 | 1071.018309 | 2124.002793 | 1062.505034 | 2123.018777 | 1062.013026 | 15 |
| 6 | 657.320230 | **329.163753** | 640.293681 | 320.650479 | 639.309665 | 320.158471 | D | 2026.986415 | 1013.996845 | 2009.959866 | 1005.483571 | 2008.975850 | 1004.991563 | 14 |
| 7 | 804.388644 | 402.697960 | 787.362095 | 394.184686 | 786.378079 | 393.692678 | F | 1911.959472 | 956.483374 | 1894.932923 | 947.970099 | 1893.948907 | 947.478091 | 13 |
| 8 | 919.415587 | 460.211432 | 902.389038 | 451.698157 | 901.405022 | 451.206149 | D | 1764.891058 | 882.949167 | 1747.864509 | 874.435893 | 1746.880493 | 873.943884 | 12 |
| 9 | **1048.458180** | 524.732728 | 1031.431631 | 516.219453 | 1030.447615 | 515.727445 | E | 1649.864115 | 825.435695 | 1632.837566 | 816.922421 | 1631.853550 | 816.430413 | 11 |
| 10 | **1211.521509** | 606.264392 | 1194.494960 | 597.751118 | 1193.510944 | 597.259110 | Y | ***1520.821522*** | 760.914399 | 1503.794973 | 752.401125 | 1502.810957 | 751.909116 | 10 |
| 11 | **1324.605573** | **662.806424** | 1307.579024 | 654.293150 | 1306.595008 | 653.801142 | I | ***1357.758193*** | 679.382734 | 1340.731644 | 670.869460 | 1339.747628 | 670.377452 | 9 |
| 12 | **1455.646058** | 728.326667 | 1438.619509 | 719.813392 | 1437.635493 | 719.321384 | M | ***1244.674129*** | 622.840703 | 1227.647580 | 614.327428 | 1226.663564 | 613.835420 | 8 |
| 13 | **1526.683172** | 763.845224 | 1509.656623 | 755.331949 | 1508.672607 | 754.839941 | A | ***1113.633644*** | 557.320460 | 1096.607095 | 548.807186 | 1095.623079 | 548.315178 | 7 |
| 14 | 1639.767236 | 820.387256 | 1622.740687 | 811.873981 | 1621.756671 | 811.381973 | I | ***1042.596530*** | 521.801903 | 1025.569981 | 513.288629 | 1024.585965 | 512.796621 | 6 |
| 15 | 1768.809829 | 884.908552 | 1751.783280 | 876.395278 | 1750.799264 | 875.903270 | E | ***929.512466*** | 465.259871 | 912.485917 | 456.746597 | 911.501901 | 456.254589 | 5 |
| 16 | 2208.035155 | 1104.521215 | 2191.008606 | 1096.007941 | 2190.024590 | 1095.515933 | Q | ***800.469873*** | 400.738575 | 783.443324 | 392.225300 | 782.459308 | 391.733292 | 4 |
| 17 | 2309.082834 | 1155.045055 | 2292.056285 | 1146.531780 | 2291.072269 | 1146.039772 | T | ***361.244547*** | 181.125911 | 344.217998 | 172.612637 | 343.233982 | 172.120629 | 3 |
| 18 | 2422.166898 | **1211.587087** | 2405.140349 | 1203.073812 | 2404.156333 | 1202.581804 | I | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 19 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VQLSNDFDEYIMAIEQTIK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 34.5 | 2567.265121 | 0.011231 | VQLSNDFDEYIMAIEQTIK |

**Mascot:** http://www.matrixscience.com/

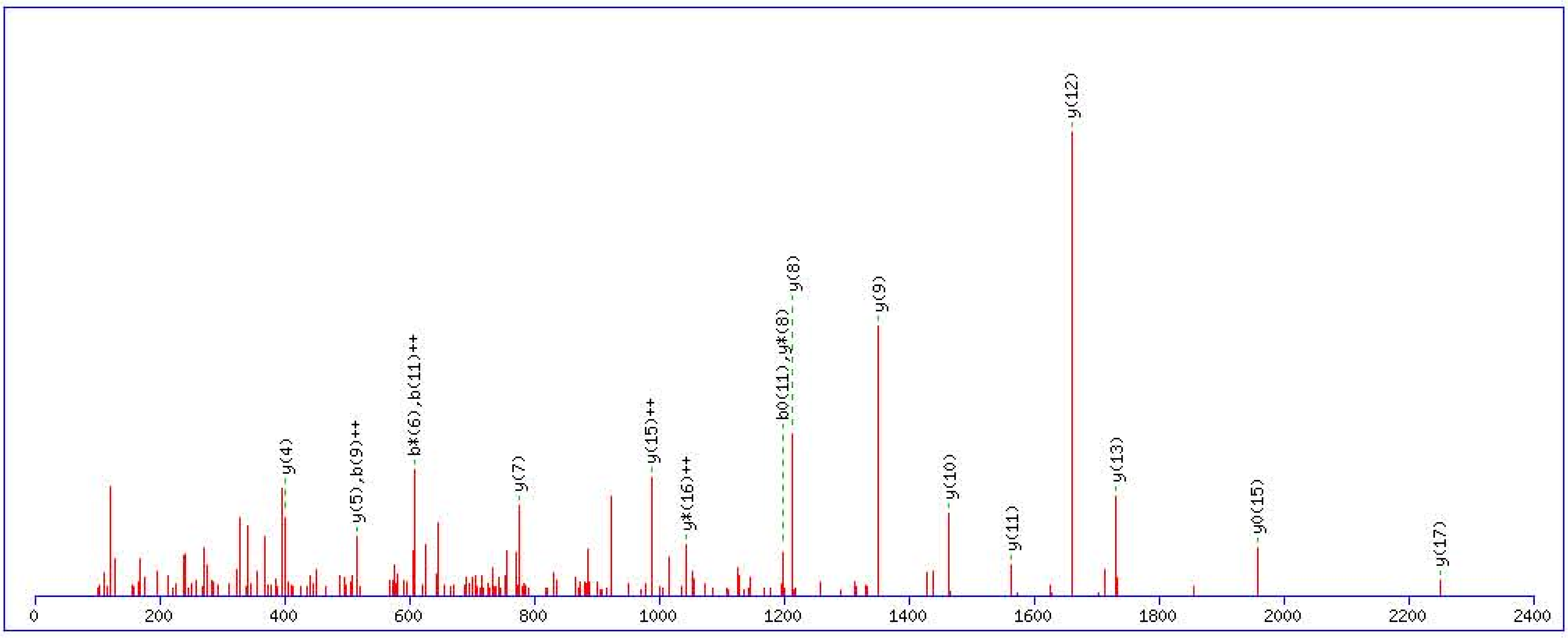
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QKPDGVFQEDAPVIHQEMIGGLR**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

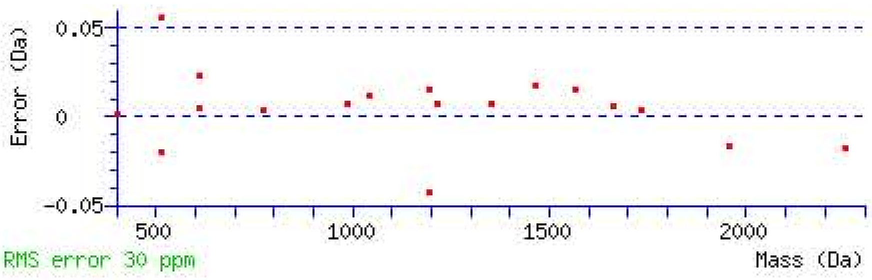
Match to Query 60616: 2874.463176 from(719.623070,4+) rtinseconds(2217) index(37760)
Title: Locus:1.1.1.3191.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

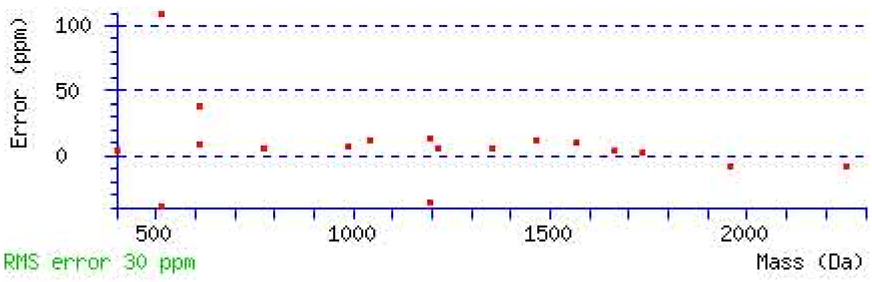
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2874.452057
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q16** : Biotin:Thermo-21345 (Q)
**Ions Score:** 68 **Expect:** 4.3e-006
**Matches** : 18/246 fragment ions using 20 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.065854 | 65.036565 | 112.039305 | 56.523291 |  |  | Q |  |  |  |  |  |  | 23 |
| 2 | 257.160817 | 129.084047 | 240.134268 | 120.570772 |  |  | K | 2747.400756 | 1374.204016 | 2730.374207 | 1365.690741 | 2729.390191 | 1365.198733 | 22 |
| 3 | 354.213581 | 177.610429 | 337.187032 | 169.097154 |  |  | P | 2619.305793 | 1310.156534 | 2602.279244 | 1301.643260 | 2601.295228 | 1301.151252 | 21 |
| 4 | 469.240524 | 235.123900 | 452.213975 | 226.610626 | 451.229959 | 226.118618 | D | 2522.253029 | 1261.630152 | 2505.226480 | 1253.116878 | 2504.242464 | 1252.624870 | 20 |
| 5 | 526.261988 | 263.634632 | 509.235439 | 255.121358 | 508.251423 | 254.629350 | G | 2407.226086 | 1204.116681 | 2390.199537 | 1195.603406 | 2389.215521 | 1195.111398 | 19 |
| 6 | 625.330402 | 313.168839 | 608.303853 | 304.655565 | 607.319837 | 304.163557 | V | 2350.204622 | 1175.605949 | 2333.178073 | 1167.092674 | 2332.194057 | 1166.600666 | 18 |
| 7 | 772.398816 | 386.703046 | 755.372267 | 378.189772 | 754.388251 | 377.697764 | F | ***2251.136208*** | 1126.071742 | 2234.109659 | 1117.558467 | 2233.125643 | 1117.066459 | 17 |
| 8 | 900.457394 | 450.732335 | 883.430845 | 442.219061 | 882.446829 | 441.727053 | Q | 2104.067794 | 1052.537535 | 2087.041245 | 1044.024260 | 2086.057229 | 1043.532252 | 16 |
| 9 | 1029.499987 | **515.253631** | 1012.473438 | 506.740357 | 1011.489422 | 506.248349 | E | 1976.009216 | 988.508246 | 1958.982667 | 979.994972 | 1957.998651 | 979.502964 | 15 |
| 10 | 1144.526930 | 572.767103 | 1127.500381 | 564.253829 | 1126.516365 | 563.761821 | D | 1846.966623 | 923.986950 | 1829.940074 | 915.473675 | 1828.956058 | 914.981667 | 14 |
| 11 | 1215.564044 | **608.285660** | 1198.537495 | 599.772386 | 1197.553479 | 599.280377 | A | ***1731.939680*** | 866.473478 | 1714.913131 | 857.960204 | 1713.929115 | 857.468196 | 13 |
| 12 | 1312.616808 | 656.812042 | 1295.590259 | 648.298768 | 1294.606243 | 647.806760 | P | ***1660.902566*** | 830.954921 | 1643.876017 | 822.441647 | 1642.892001 | 821.949639 | 12 |
| 13 | 1411.685222 | 706.346249 | 1394.658673 | 697.832975 | 1393.674657 | 697.340967 | V | ***1563.849802*** | 782.428539 | 1546.823253 | 773.915265 | 1545.839237 | 773.423257 | 11 |
| 14 | 1524.769286 | 762.888281 | 1507.742737 | 754.375007 | 1506.758721 | 753.882998 | I | ***1464.781388*** | 732.894332 | 1447.754839 | 724.381058 | 1446.770823 | 723.889050 | 10 |
| 15 | 1661.828198 | 831.417737 | 1644.801649 | 822.904463 | 1643.817633 | 822.412454 | H | ***1351.697324*** | 676.352300 | 1334.670775 | 667.839026 | 1333.686759 | 667.347018 | 9 |
| 16 | 2101.053524 | 1051.030400 | 2084.026975 | 1042.517125 | 2083.042959 | 1042.025117 | Q | ***1214.638412*** | 607.822844 | 1197.611863 | 599.309570 | 1196.627847 | 598.817562 | 8 |
| 17 | 2230.096117 | 1115.551696 | 2213.069568 | 1107.038422 | 2212.085552 | 1106.546414 | E | ***775.413086*** | 388.210181 | 758.386537 | 379.696907 | 757.402521 | 379.204899 | 7 |
| 18 | 2361.136602 | 1181.071939 | 2344.110053 | 1172.558664 | 2343.126037 | 1172.066656 | M | 646.370493 | 323.688885 | 629.343944 | 315.175610 |  |  | 6 |
| 19 | 2474.220666 | 1237.613971 | 2457.194117 | 1229.100696 | 2456.210101 | 1228.608689 | I | ***515.330008*** | 258.168642 | 498.303459 | 249.655368 |  |  | 5 |
| 20 | 2531.242130 | 1266.124703 | 2514.215581 | 1257.611428 | 2513.231565 | 1257.119420 | G | ***402.245944*** | 201.626610 | 385.219395 | 193.113335 |  |  | 4 |
| 21 | 2588.263594 | 1294.635435 | 2571.237045 | 1286.122160 | 2570.253029 | 1285.630152 | G | 345.224480 | 173.115878 | 328.197931 | 164.602603 |  |  | 3 |
| 22 | 2701.347658 | 1351.177467 | 2684.321109 | 1342.664192 | 2683.337093 | 1342.172185 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 |  |  | 2 |
| 23 |  |  |  |  |  |  | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 |  |  | 1 |





NCBI **BLAST** search of QKPDGVFQEDAPVIHQEMIGGLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 68.3 | 2874.452057 | 0.011119 | QKPDGVFQEDAPVIHQEMIGGLR |
| 6.5 | 2874.452057 | 0.011119 | QKPDGVFQEDAPVIHQEMIGGLR |

**Mascot:** http://www.matrixscience.com/

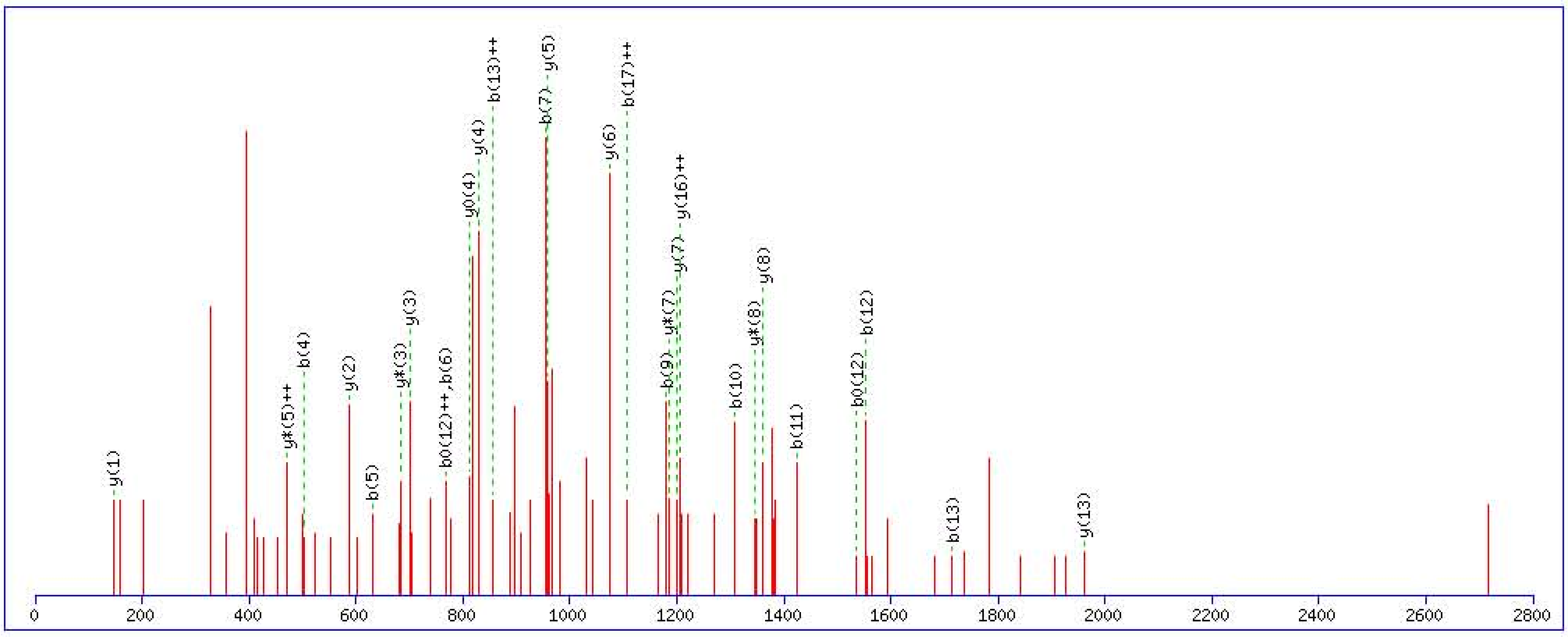
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DTWVEHWPEEDECQDEENQK**
Found in **CO3_HUMAN**, Complement C3 OS=Homo sapiens GN=C3 PE=1 SV=2

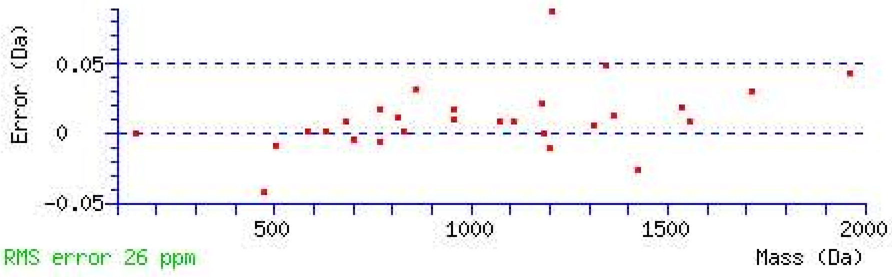
Match to Query 60968: 2913.206682 from(972.076170,3+) rtinseconds(2114) index(37109)
Title: Locus:1.1.1.3155.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

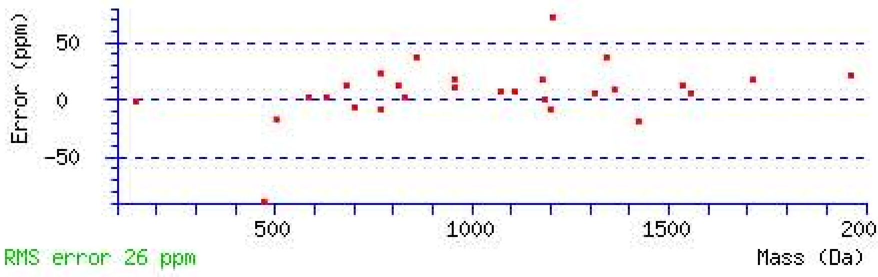
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2913.185776
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q19    : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 3.4e-005
Matches : 28/196 fragment ions using 59 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 20 |
| 2 | 217.081898 | 109.044587 | | | 199.071333 | 100.039304 | T | 2799.166123 | 1400.086699 | 2782.139574 | 1391.573425 | 2781.155558 | 1391.081417 | 19 |
| 3 | 403.161211 | 202.084244 | | | 385.150646 | 193.078961 | W | 2698.118444 | 1349.562860 | 2681.091895 | 1341.049585 | 2680.107879 | 1340.557577 | 18 |
| 4 | ***502.229625*** | 251.618451 | | | 484.219060 | 242.613168 | V | 2512.039131 | 1256.523203 | 2495.012582 | 1248.009929 | 2494.028566 | 1247.517921 | 17 |
| 5 | ***631.272218*** | 316.139747 | | | 613.261653 | 307.134465 | E | 2412.970717 | 1206.988996 | 2395.944168 | 1198.475722 | 2394.960152 | 1197.983714 | 16 |
| 6 | ***768.331130*** | 384.669203 | | | 750.320565 | 375.663921 | H | 2283.928124 | 1142.467700 | 2266.901575 | 1133.954425 | 2265.917559 | 1133.462417 | 15 |
| 7 | ***954.410443*** | 477.708860 | | | 936.399878 | 468.703577 | W | 2146.869212 | 1073.938244 | 2129.842663 | 1065.424969 | 2128.858647 | 1064.932961 | 14 |
| 8 | 1051.463207 | 526.235242 | | | 1033.452642 | 517.229959 | P | ***1960.789899*** | 980.898588 | 1943.763350 | 972.385313 | 1942.779334 | 971.893305 | 13 |
| 9 | ***1180.505800*** | 590.756538 | | | 1162.495235 | 581.751256 | E | 1863.737135 | 932.372206 | 1846.710586 | 923.858931 | 1845.726570 | 923.366923 | 12 |
| 10 | ***1309.548393*** | 655.277835 | | | 1291.537828 | 646.272552 | E | 1734.694542 | 867.850909 | 1717.667993 | 859.337635 | 1716.683977 | 858.845627 | 11 |
| 11 | ***1424.575336*** | 712.791306 | | | 1406.564771 | 703.786024 | D | 1605.651949 | 803.329613 | 1588.625400 | 794.816338 | 1587.641384 | 794.324330 | 10 |
| 12 | ***1553.617929*** | 777.312603 | | | 1535.607364 | 768.307320 | E | 1490.625006 | 745.816141 | 1473.598457 | 737.302867 | 1472.614441 | 736.810859 | 9 |
| 13 | ***1713.648578*** | **857.327927** | | | 1695.638013 | 848.322645 | C | ***1361.582413*** | 681.294845 | 1344.555864 | 672.781570 | 1343.571848 | 672.289562 | 8 |
| 14 | 1841.707156 | 921.357216 | 1824.680607 | 912.843942 | 1823.696591 | 912.351934 | Q | ***1201.551764*** | 601.279520 | 1184.525215 | 592.766246 | 1183.541199 | 592.274238 | 7 |
| 15 | 1956.734099 | 978.870688 | 1939.707550 | 970.357413 | 1938.723534 | 969.865405 | D | ***1073.493186*** | 537.250231 | 1056.466637 | 528.736957 | 1055.482621 | 528.244949 | 6 |
| 16 | 2085.776692 | 1043.391984 | 2068.750143 | 1034.878709 | 2067.766127 | 1034.386701 | E | ***958.466243*** | 479.736760 | 941.439694 | 471.223485 | 940.455678 | 470.731477 | 5 |
| 17 | 2214.819285 | **1107.913280** | 2197.792736 | 1099.400006 | 2196.808720 | 1098.907998 | E | ***829.423650*** | 415.215463 | 812.397101 | 406.702189 | 811.413085 | 406.210181 | 4 |
| 18 | 2328.862212 | 1164.934744 | 2311.835663 | 1156.421469 | 2310.851647 | 1155.929461 | N | ***700.381057*** | 350.694167 | 683.354508 | 342.180892 | | | 3 |
| 19 | 2768.087538 | 1384.547407 | 2751.060989 | 1376.034132 | 2750.076973 | 1375.542125 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 20 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of DTWVEHWPEEDECQDEENQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.8 | 2913.185776 | 0.020906 | DTWVEHWPEEDECQDEENQK |
| 17.9 | 2913.185776 | 0.020906 | DTWVEHWPEEDECQDEENQK |

**Mascot:** http://www.matrixscience.com/

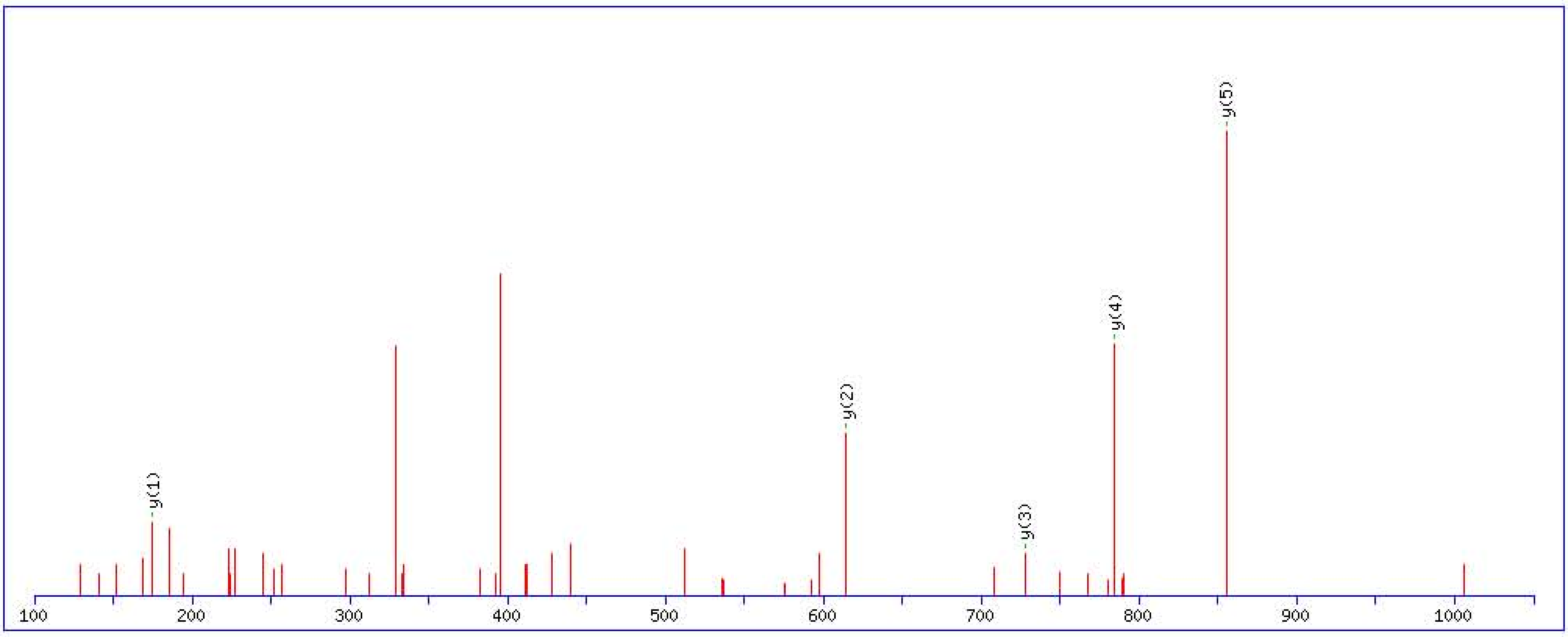
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GQAGLQR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

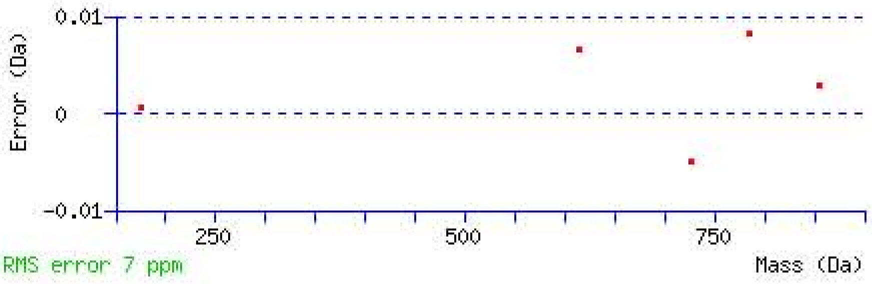
Match to Query 17300: 1039.555588 from(520.785070,2+) rtinseconds(1467) index(49286)
Title: Locus:1.1.1.1126.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

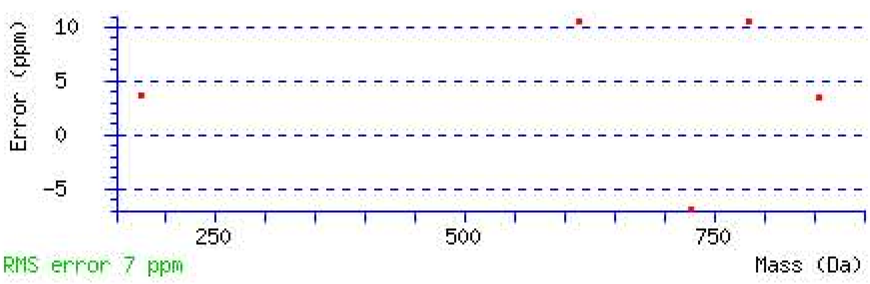
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1039.559677
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 34 **Expect:** 0.0068
**Matches** : 5/46 fragment ions using 9 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | G | | | | | 7 |
| 2 | 186.087318 | 93.547297 | 169.060769 | 85.034023 | Q | 983.545498 | 492.276387 | 966.518949 | 483.763113 | 6 |
| 3 | 257.124432 | 129.065854 | 240.097883 | 120.552580 | A | ***855.486920*** | 428.247098 | 838.460371 | 419.733824 | 5 |
| 4 | 314.145896 | 157.576586 | 297.119347 | 149.063312 | G | ***784.449806*** | 392.728541 | 767.423257 | 384.215267 | 4 |
| 5 | 427.229960 | 214.118618 | 410.203411 | 205.605344 | L | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | 3 |
| 6 | 866.455286 | 433.731281 | 849.428737 | 425.218007 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | 2 |
| 7 | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | 1 |





NCBI **BLAST** search of GQAGLQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.5 | 1039.559677 | -0.004089 | GQAGLQR |
| 19.5 | 1039.559677 | -0.004089 | GQQIQR |
| 9.5 | 1039.559677 | -0.004089 | KGGPSQR |
| 7.8 | 1039.541061 | 0.014527 | GQGDLLQPGR |
| 5.5 | 1039.552277 | 0.003311 | QRAALDGGPR |
| 5.2 | 1039.548431 | 0.007157 | SPEIQR |
| 3.2 | 1039.541046 | 0.014542 | NATTAPNPVR |
| 1.8 | 1039.563522 | -0.007934 | ARRGGDGVPR |

**Mascot:** http://www.matrixscience.com/

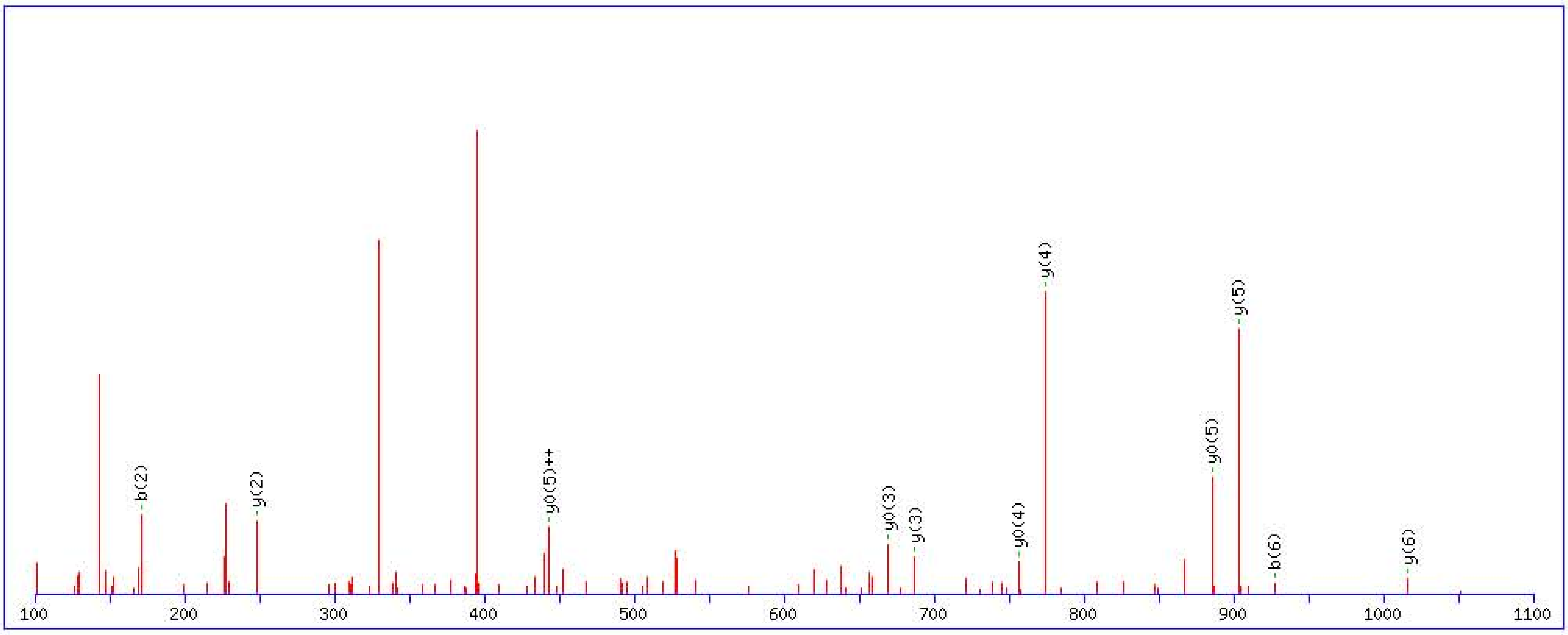
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GLESQTK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

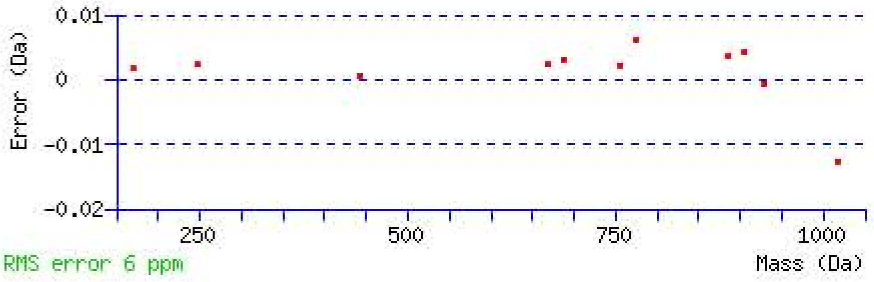
Match to Query 18125: 1072.558368 from(537.286460,2+) rtinseconds(1491) index(49479)
Title: Locus:1.1.1.1134.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

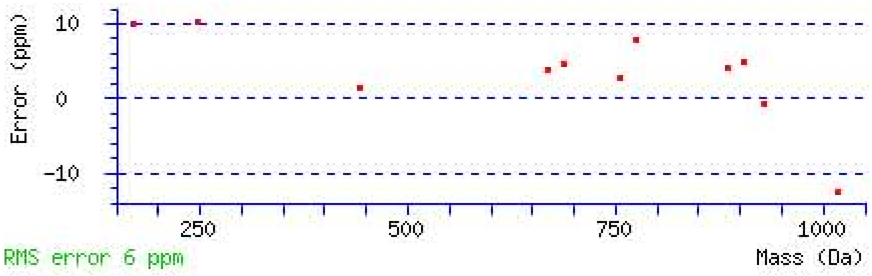
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1072.558670
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5     : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.011
Matches : 11/58 fragment ions using 20 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 7 |
| 2 | **171.112804** | 86.060040 | | | | | L | ***1016.544494*** | 508.775885 | 999.517945 | 500.262611 | 998.533929 | 499.770603 | 6 |
| 3 | 300.155397 | 150.581336 | | | 282.144832 | 141.576054 | E | ***903.460430*** | 452.233853 | 886.433881 | 443.720579 | 885.449865 | 443.228571 | 5 |
| 4 | 387.187425 | 194.097351 | | | 369.176860 | 185.092068 | S | ***774.417837*** | 387.712557 | 757.391288 | 379.199282 | 756.407272 | 378.707274 | 4 |
| 5 | 826.412751 | 413.710014 | 809.386202 | 405.196739 | 808.402186 | 404.704731 | Q | ***687.385809*** | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 6 | **927.460430** | 464.233853 | 910.433881 | 455.720579 | 909.449865 | 455.228571 | T | ***248.160483*** | 124.583879 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 7 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GLESQTK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.2 | 1072.558670 | -0.000302 | GLESQTK |
| 7.9 | 1072.558670 | -0.000302 | QSEGLTK |
| 7.2 | 1072.558670 | -0.000302 | LGECPAVLSK |
| 7.0 | 1072.551254 | 0.007114 | KEAPRDETK |
| 3.8 | 1072.551285 | 0.007083 | GPRTTEPSTK |
| 0.4 | 1072.566559 | -0.008191 | VQIHFGGSTK |
| 0.3 | 1072.544739 | 0.013629 | LGEPQARMR |

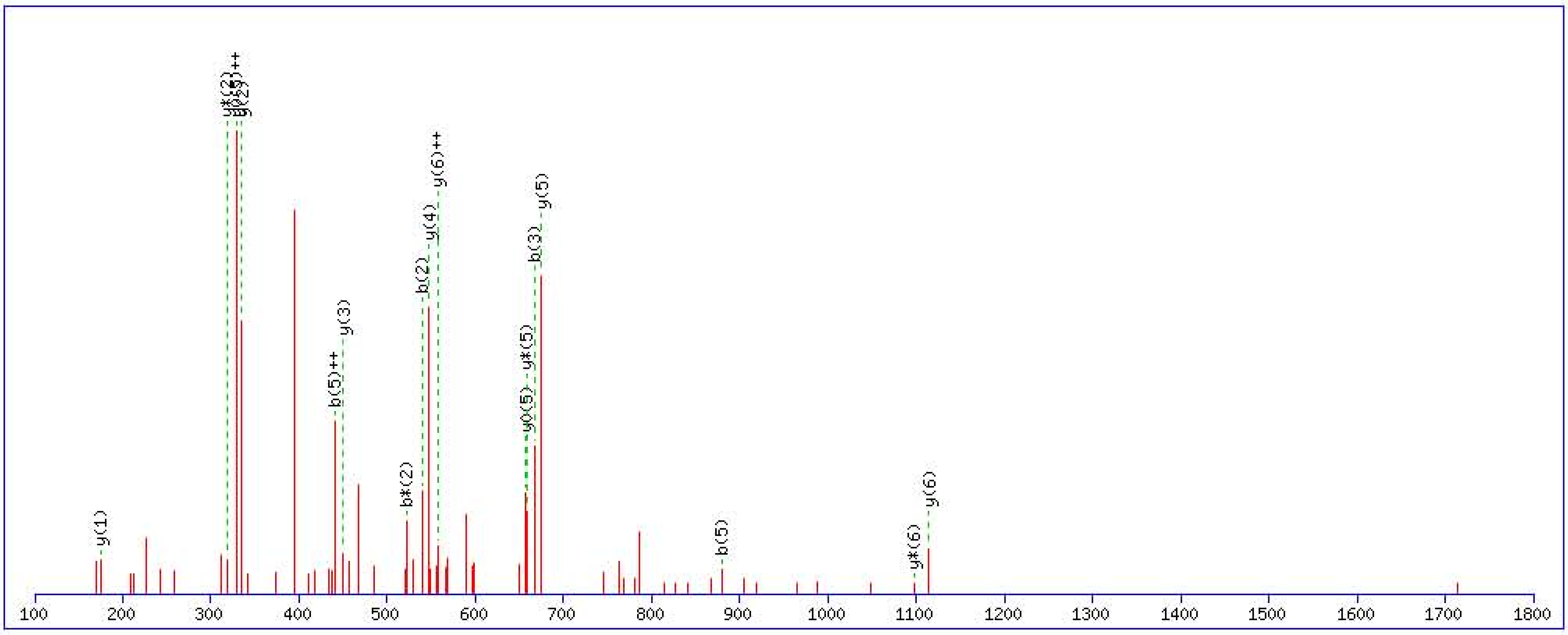
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VQQPDCR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

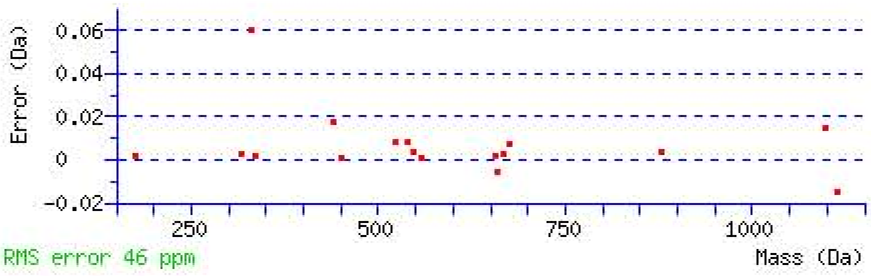
Match to Query 23594: 1212.574068 from(607.294310,2+) rtinseconds(1319) index(48351)
Title: Locus:1.1.1.1074.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

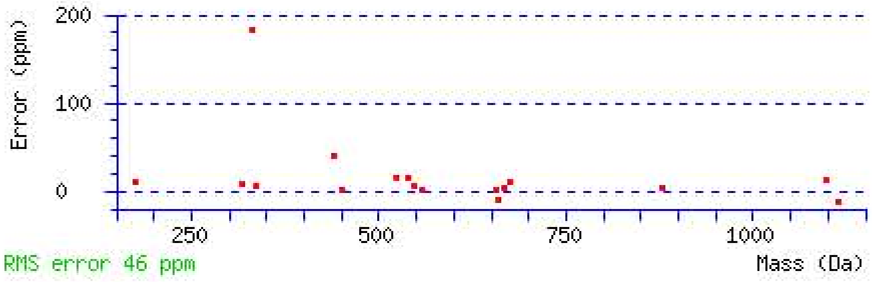
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1212.574356
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.0052
Matches : 17/58 fragment ions using 35 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 7 |
| 2 | **539.301016** | 270.154146 | 522.274467 | 261.640872 | | | Q | ***1114.513212*** | 557.760244 | 1097.486663 | 549.246970 | 1096.502647 | 548.754962 | 6 |
| 3 | **667.359594** | 334.183435 | 650.333045 | 325.670161 | | | Q | ***675.287886*** | 338.147581 | 658.261337 | 329.634307 | 657.277321 | 329.142299 | 5 |
| 4 | 764.412358 | 382.709817 | 747.385809 | 374.196543 | | | P | ***547.229308*** | 274.118292 | 530.202759 | 265.605018 | 529.218743 | 265.113010 | 4 |
| 5 | **879.439301** | 440.223289 | 862.412752 | 431.710014 | 861.428736 | 431.218006 | D | ***450.176544*** | 225.591910 | 433.149995 | 217.078635 | 432.165979 | 216.586627 | 3 |
| 6 | 1039.469950 | 520.238613 | 1022.443401 | 511.725339 | 1021.459385 | 511.233331 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VQQPDCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.6 | 1212.574356 | -0.000288 | VQQPDCR |
| 12.6 | 1212.574356 | -0.000288 | VQQPDCR |
| 5.2 | 1212.592102 | -0.018034 | VQEDQQR |

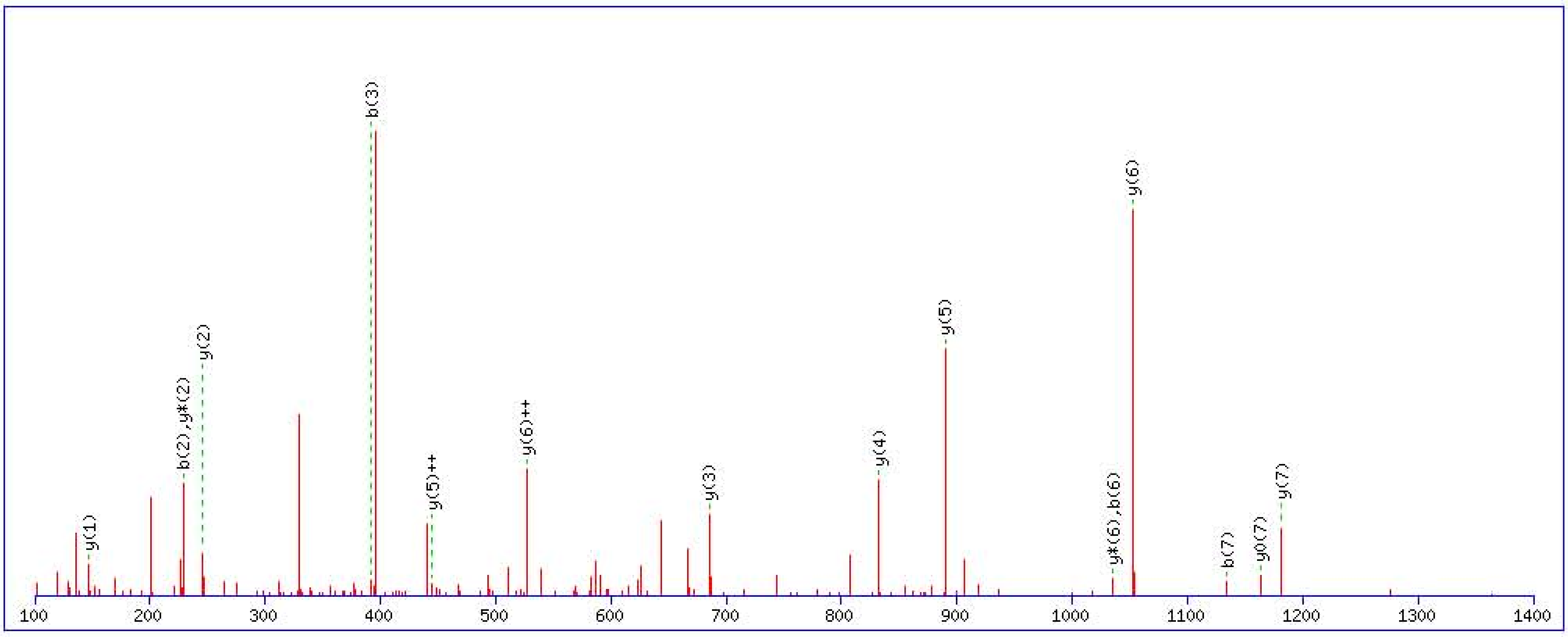
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VEYGFQVK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

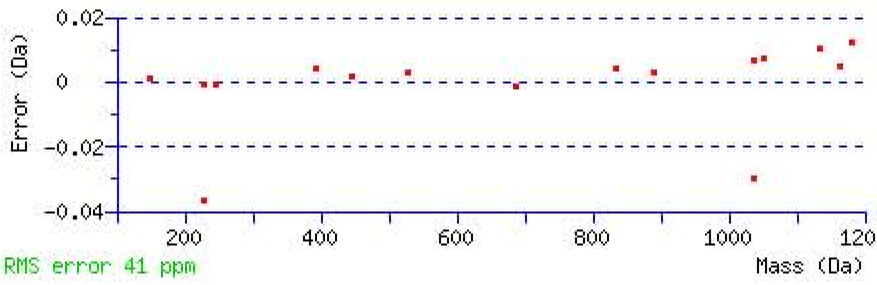
Match to Query 25584: 1279.667348 from(640.840950,2+) rtinseconds(2022) index(53086)
Title: Locus:1.1.1.1319.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

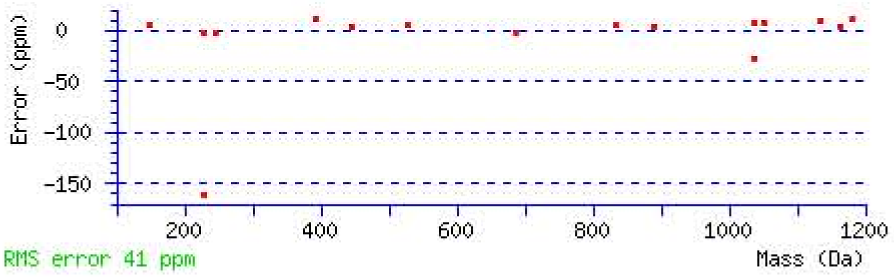
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1400] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1279.663483
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.0029
Matches : 16/60 fragment ions using 34 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | **229.118283** | 115.062780 | | | 211.107718 | 106.057497 | E | ***1181.602344*** | 591.304810 | 1164.575795 | 582.791536 | 1163.591779 | 582.299528 | 7 |
| 3 | **392.181612** | 196.594444 | | | 374.171047 | 187.589162 | Y | ***1052.559751*** | 526.783514 | 1035.533202 | 518.270239 | | | 6 |
| 4 | 449.203076 | 225.105176 | | | 431.192511 | 216.099894 | G | ***889.496422*** | 445.251849 | 872.469873 | 436.738575 | | | 5 |
| 5 | 596.271490 | 298.639383 | | | 578.260925 | 289.634101 | F | ***832.474958*** | 416.741117 | 815.448409 | 408.227843 | | | 4 |
| 6 | **1035.496816** | 518.252046 | 1018.470267 | 509.738772 | 1017.486251 | 509.246764 | Q | ***685.406544*** | 343.206910 | 668.379995 | 334.693636 | | | 3 |
| 7 | **1134.565230** | 567.786253 | 1117.538681 | 559.272979 | 1116.554665 | 558.780971 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VEYGFQVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.1 | 1279.663483 | 0.003865 | VEYGFQVK |
| 5.9 | 1279.681229 | -0.013881 | EVTVKEWYVK |
| 5.9 | 1279.663483 | 0.003865 | QFVGYLDK |
| 5.7 | 1279.659470 | 0.007878 | VCSFGKQVVEK |
| 4.0 | 1279.677216 | -0.009868 | VFKTEDTQGKK |
| 3.8 | 1279.684601 | -0.017253 | MSASAVFILDVK |
| 2.0 | 1279.666824 | 0.000524 | VKEWSLMIMK |

**Mascot:** http://www.matrixscience.com/

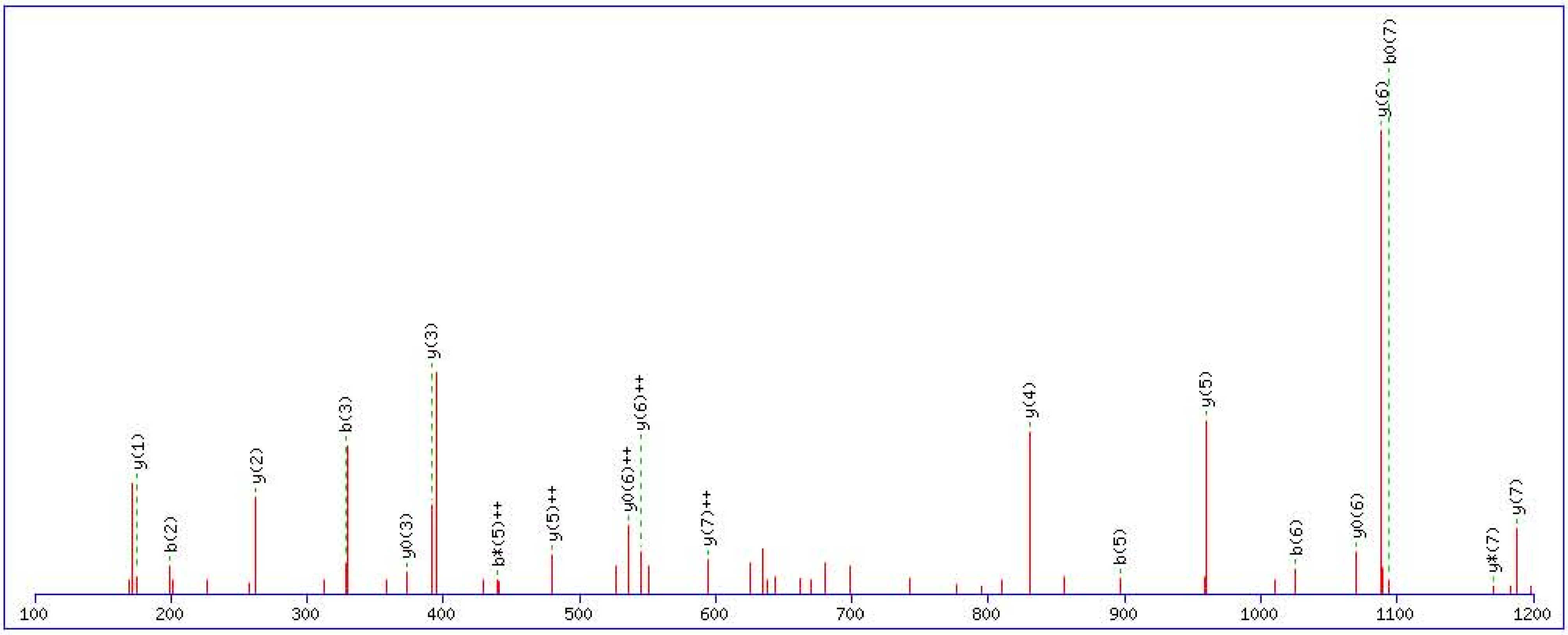
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VVEEQESR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

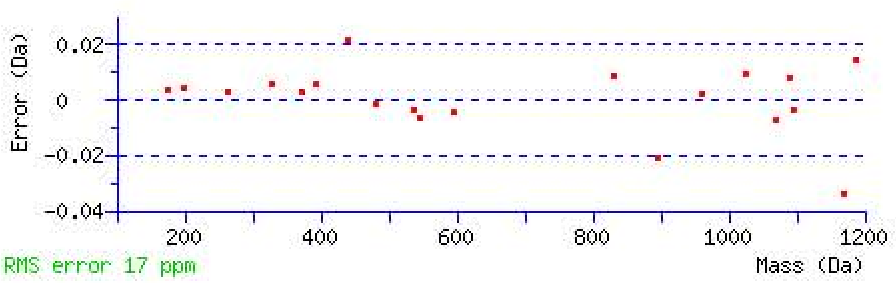
Match to Query 25907: 1285.634328 from(643.824440,2+) rtinseconds(1393) index(48807)
Title: Locus:1.1.1.1100.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

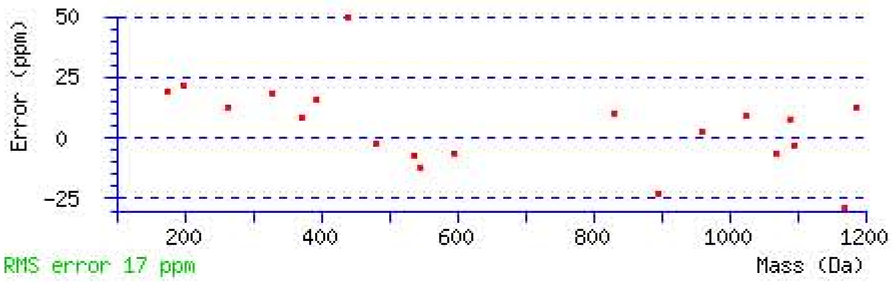
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1285.633621
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5     : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.00057
Matches : 20/70 fragment ions using 41 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | **199.144104** | 100.075690 | | | | | V | ***1187.572499*** | 594.289888 | 1170.545950 | 585.776613 | 1169.561934 | 585.284605 | 7 |
| 3 | **328.186697** | 164.596987 | | | 310.176132 | 155.591704 | E | ***1088.504085*** | 544.755681 | 1071.477536 | 536.242406 | 1070.493520 | 535.750398 | 6 |
| 4 | 457.229290 | 229.118283 | | | 439.218725 | 220.113001 | E | ***959.461492*** | 480.234384 | 942.434943 | 471.721110 | 941.450927 | 471.229102 | 5 |
| 5 | **896.454616** | 448.730946 | 879.428067 | 440.217672 | 878.444051 | 439.725664 | Q | ***830.418899*** | 415.713088 | 813.392350 | 407.199813 | 812.408334 | 406.707805 | 4 |
| 6 | **1025.497209** | 513.252243 | 1008.470660 | 504.738968 | 1007.486644 | 504.246960 | E | ***391.193573*** | 196.100425 | 374.167024 | 187.587150 | 373.183008 | 187.095142 | 3 |
| 7 | 1112.529237 | 556.768257 | 1095.502688 | 548.254982 | 1094.518672 | 547.762974 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VVEEQESR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.8 | 1285.633621 | 0.000707 | VVEEQESR |
| 3.2 | 1285.644867 | -0.010539 | DTLHSAMAVVSR |
| 2.3 | 1285.637451 | -0.003123 | TAPASGSAPRESR |

**Mascot:** http://www.matrixscience.com/

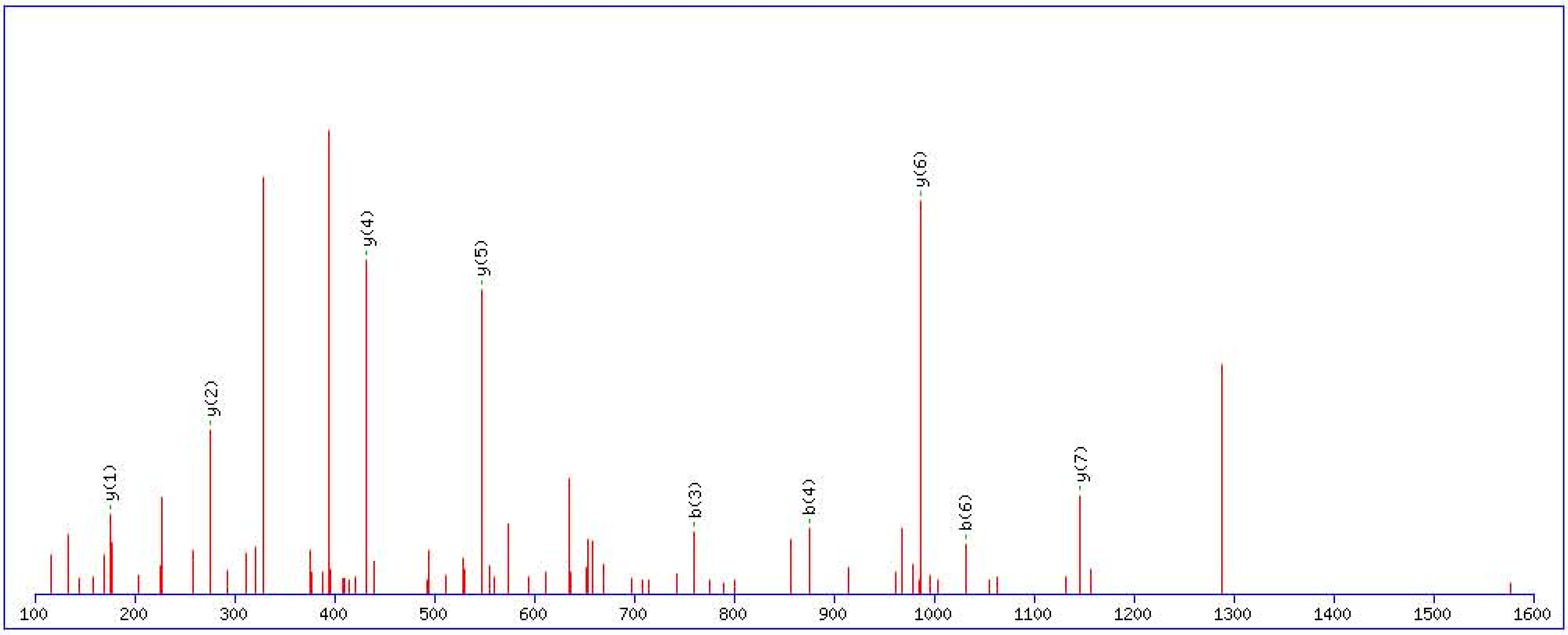
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **CCQDGVTR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

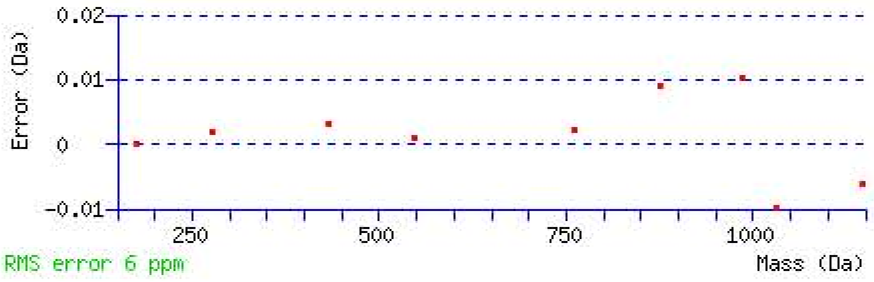
Match to Query 26305: 1305.566628 from(653.790590,2+) rtinseconds(1405) index(48858)
Title: Locus:1.1.1.1104.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

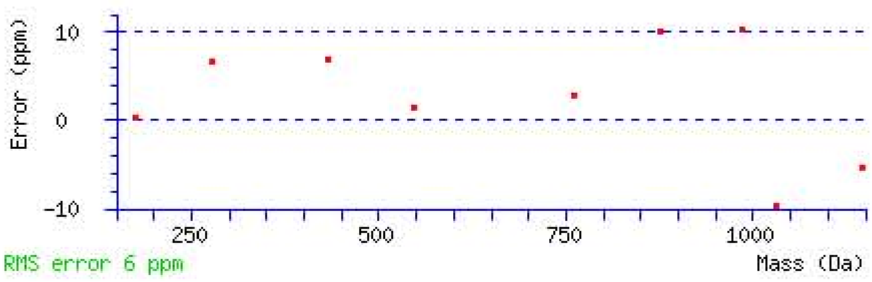
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1305.562820
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 7e-005
Matches : 9/72 fragment ions using 12 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 8 |
| 2 | 321.068574 | 161.037925 | | | | | C | ***1146.539427*** | 573.773352 | 1129.512878 | 565.260077 | 1128.528862 | 564.768069 | 7 |
| 3 | **760.293900** | 380.650588 | 743.267351 | 372.137314 | | | Q | ***986.508778*** | 493.758027 | 969.482229 | 485.244753 | 968.498213 | 484.752745 | 6 |
| 4 | **875.320843** | 438.164060 | 858.294294 | 429.650785 | 857.310278 | 429.158777 | D | ***547.283452*** | 274.145364 | 530.256903 | 265.632090 | 529.272887 | 265.140082 | 5 |
| 5 | 932.342307 | 466.674792 | 915.315758 | 458.161517 | 914.331742 | 457.669509 | G | ***432.256509*** | 216.631893 | 415.229960 | 208.118618 | 414.245944 | 207.626610 | 4 |
| 6 | **1031.410721** | 516.208999 | 1014.384172 | 507.695724 | 1013.400156 | 507.203716 | V | 375.235045 | 188.121161 | 358.208496 | 179.607886 | 357.224480 | 179.115878 | 3 |
| 7 | 1132.458400 | 566.732838 | 1115.431851 | 558.219564 | 1114.447835 | 557.727556 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CCQDGVTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.7 | 1305.562820 | 0.003808 | CCQDGVTR |
| 6.0 | 1305.577194 | -0.010566 | CDAGWLADGSVR |
| 5.7 | 1305.562805 | 0.003823 | CCTSPSQR |
| 0.6 | 1305.583679 | -0.017051 | EQEPDFEEKR |

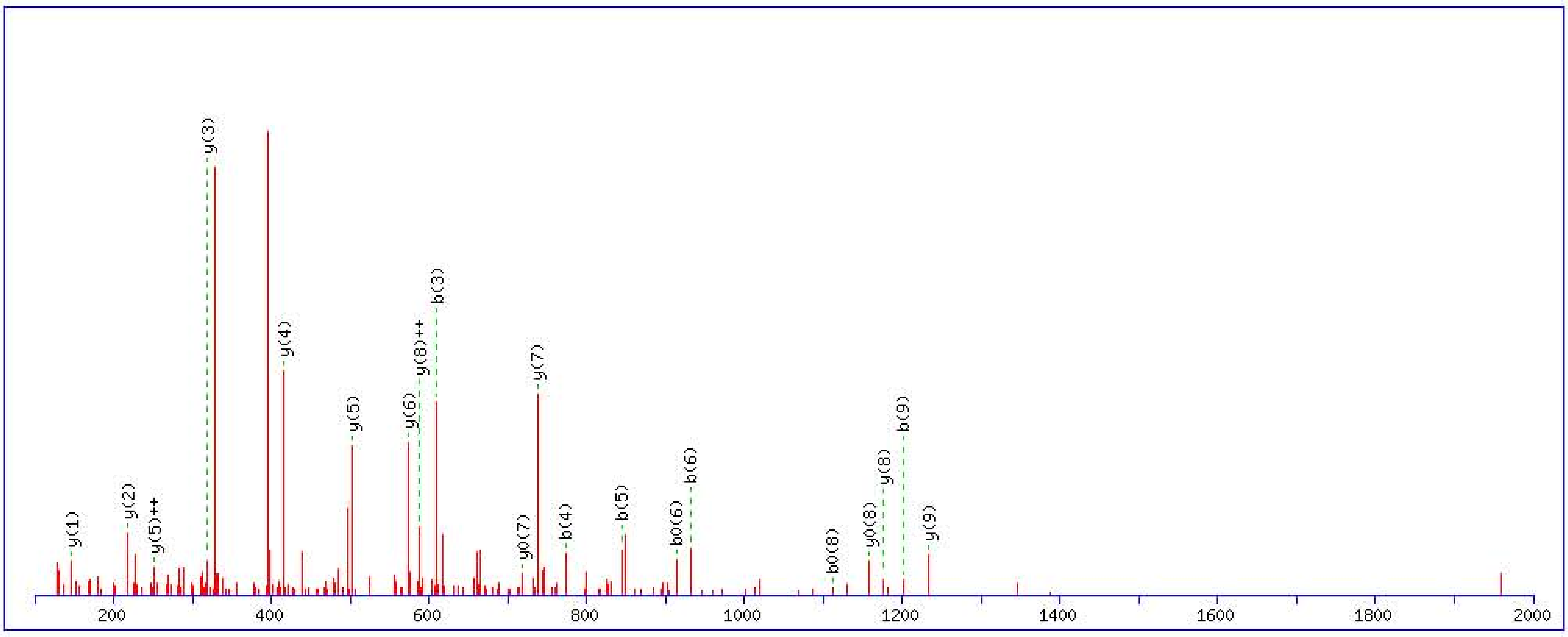
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LGQYASPTAK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

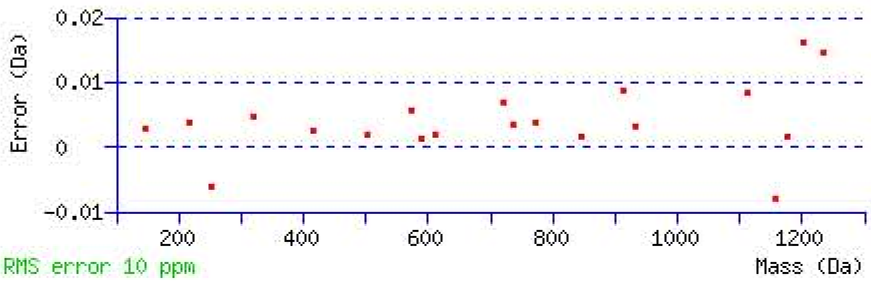
Match to Query 27133: 1345.709368 from(673.861960,2+) rtinseconds(1630) index(50468)
Title: Locus:1.1.1.1183.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

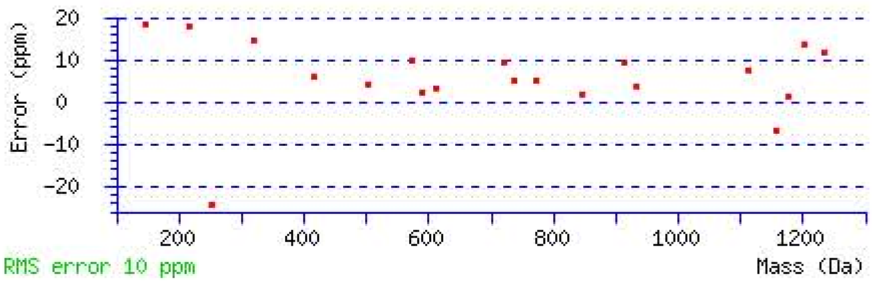
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1345.706390
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q3** : Biotin:Thermo-21345 (Q)
**Ions Score:** 63 **Expect:** 1.4e-005
**Matches :** 20/90 fragment ions using 34 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 10 |
| 2 | 171.112804 | 86.060040 | | | | | G | ***1233.629622*** | 617.318449 | 1216.603073 | 608.805175 | 1215.619057 | 608.313167 | 9 |
| 3 | **610.338130** | 305.672703 | 593.311581 | 297.159429 | | | Q | ***1176.608158*** | 588.807717 | 1159.581609 | 580.294443 | 1158.597593 | 579.802435 | 8 |
| 4 | **773.401459** | 387.204368 | 756.374910 | 378.691093 | | | Y | ***737.382832*** | 369.195054 | 720.356283 | 360.681780 | 719.372267 | 360.189772 | 7 |
| 5 | **844.438573** | 422.722925 | 827.412024 | 414.209650 | | | A | ***574.319503*** | 287.663389 | 557.292954 | 279.150115 | 556.308938 | 278.658107 | 6 |
| 6 | **931.470601** | 466.238939 | 914.444052 | 457.725664 | 913.460036 | 457.233656 | S | ***503.282389*** | 252.144832 | 486.255840 | 243.631558 | 485.271824 | 243.139550 | 5 |
| 7 | 1028.523365 | 514.765321 | 1011.496816 | 506.252046 | 1010.512800 | 505.760038 | P | ***416.250361*** | 208.628818 | 399.223812 | 200.115544 | 398.239796 | 199.623536 | 4 |
| 8 | 1129.571044 | 565.289160 | 1112.544495 | 556.775886 | 1111.560479 | 556.283878 | T | ***319.197597*** | 160.102436 | 302.171048 | 151.589162 | 301.187032 | 151.097154 | 3 |
| 9 | **1200.608158** | 600.807717 | 1183.581609 | 592.294443 | 1182.597593 | 591.802435 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LGQYASPTAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.1 | 1345.706390 | 0.002978 | LGQYASPTAK |
| 14.4 | 1345.706390 | 0.002978 | LGQYDQALK |
| 13.1 | 1345.724182 | -0.014814 | LGAVPATSGPTTFK |
| 10.9 | 1345.706406 | 0.002962 | QGLYTPQTK |
| 7.0 | 1345.692474 | 0.016894 | VASCRYPALGPR |
| 6.7 | 1345.717636 | -0.008268 | QMPQPTFTLRK |
| 5.8 | 1345.727509 | -0.018141 | LGLMDNEIKVAK |
| 5.5 | 1345.727509 | -0.018141 | DKLKMEVDQLK |
| 5.4 | 1345.720108 | -0.010740 | KQEEEVSTLRK |
| 3.0 | 1345.706390 | 0.002978 | HEMTLKFPSIK |

**Mascot:** http://www.matrixscience.com/

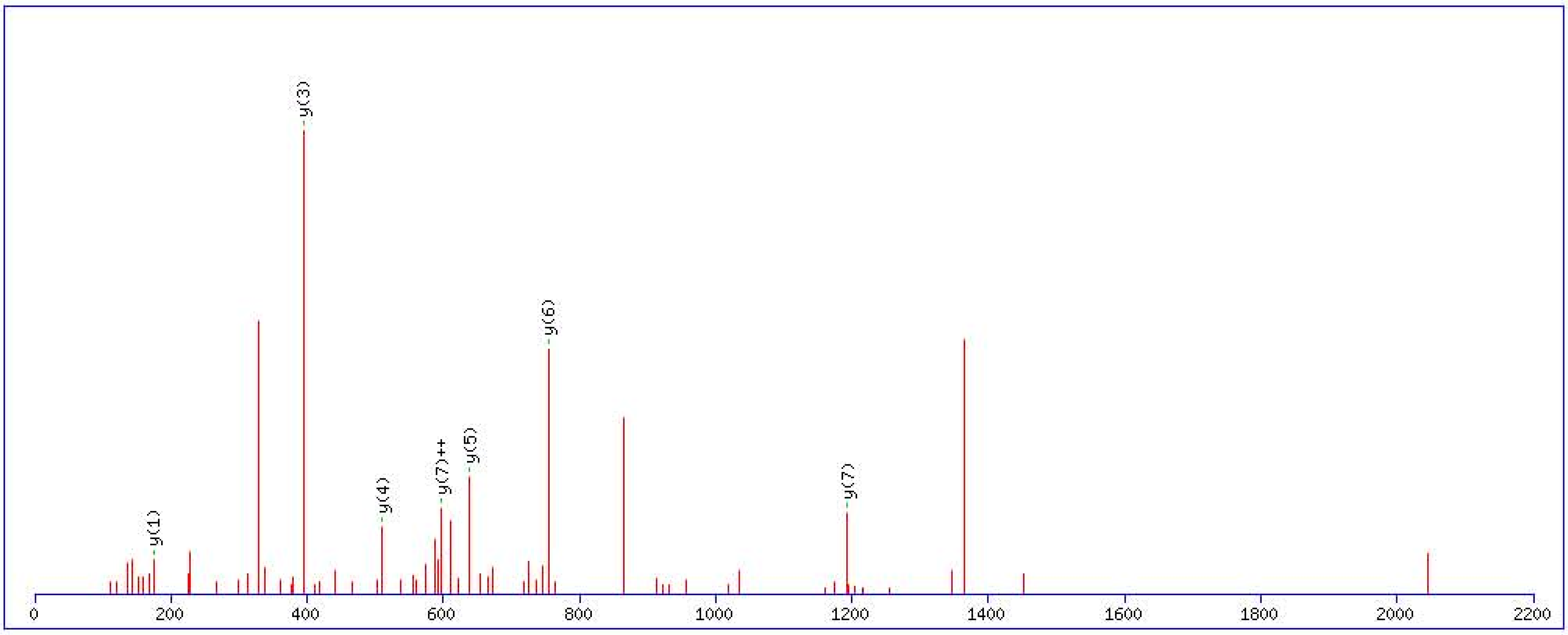
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GLQDEDGYR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

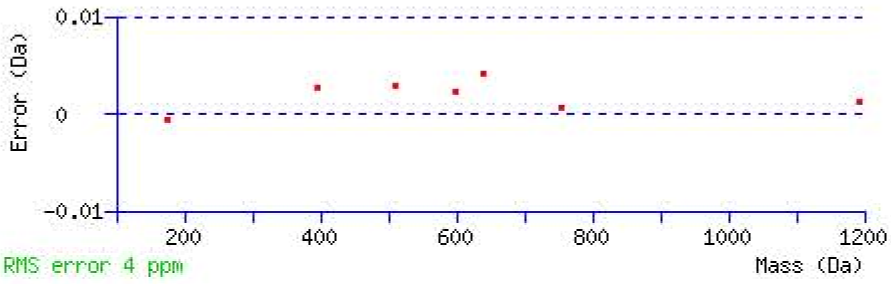
Match to Query 28904: 1362.626348 from(682.320450,2+) rtinseconds(1742) index(51102)
Title: Locus:1.1.1.1222.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

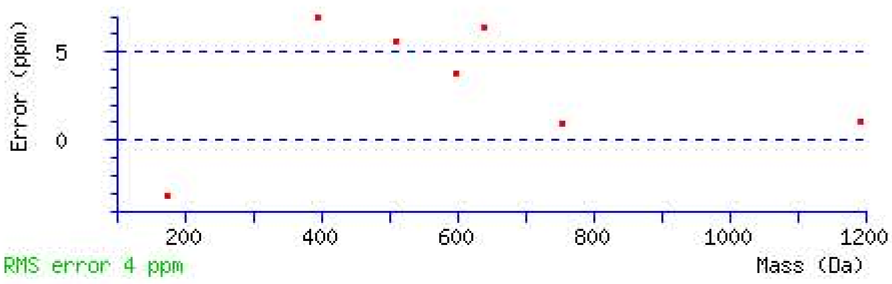
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1362.623795
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.00027
Matches : 7/80 fragment ions using 13 most intense peaks   (help)
```

| # | b | b$^{++}$ | b$^{*}$ | b$^{*++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y$^{*}$ | y$^{*++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 9 |
| 2 | 171.112804 | 86.060040 | | | | | L | 1306.609614 | 653.808445 | 1289.583065 | 645.295171 | 1288.599049 | 644.803163 | 8 |
| 3 | 610.338130 | 305.672703 | 593.311581 | 297.159429 | | | Q | ***1193.525550*** | 597.266413 | 1176.499001 | 588.753139 | 1175.514985 | 588.261131 | 7 |
| 4 | 725.365073 | 363.186175 | 708.338524 | 354.672900 | 707.354508 | 354.180892 | D | ***754.300224*** | 377.653750 | 737.273675 | 369.140476 | 736.289659 | 368.648468 | 6 |
| 5 | 854.407666 | 427.707471 | 837.381117 | 419.194197 | 836.397101 | 418.702189 | E | ***639.273281*** | 320.140279 | 622.246732 | 311.627004 | 621.262716 | 311.134996 | 5 |
| 6 | 969.434609 | 485.220943 | 952.408060 | 476.707668 | 951.424044 | 476.215660 | D | ***510.230688*** | 255.618982 | 493.204139 | 247.105707 | 492.220123 | 246.613700 | 4 |
| 7 | 1026.456073 | 513.731675 | 1009.429524 | 505.218400 | 1008.445508 | 504.726392 | G | ***395.203745*** | 198.105511 | 378.177196 | 189.592236 | | | 3 |
| 8 | 1189.519402 | 595.263339 | 1172.492853 | 586.750065 | 1171.508837 | 586.258057 | Y | 338.182281 | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



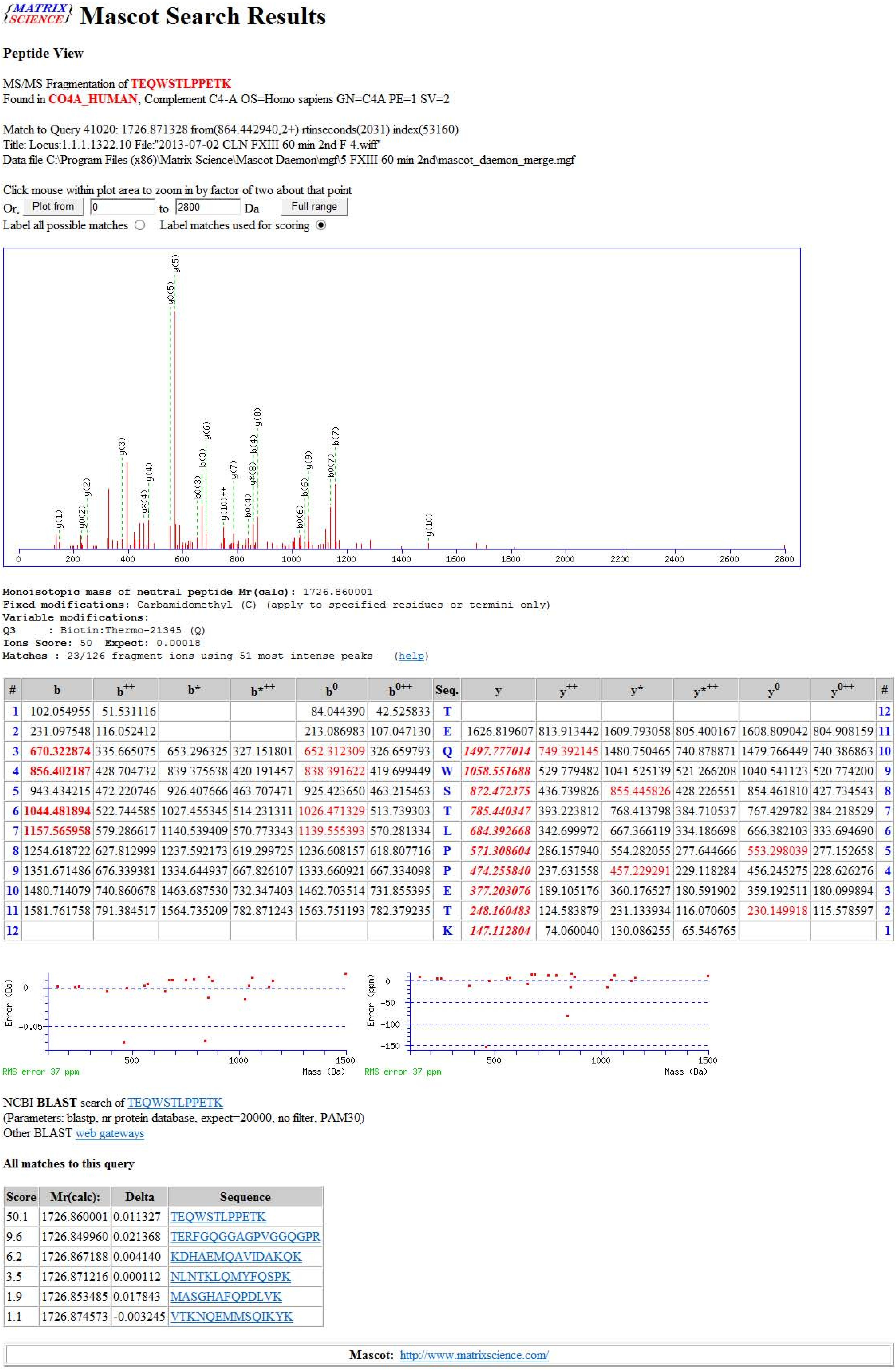


NCBI **BLAST** search of GLQDEDGYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.4 | 1362.623795 | 0.002553 | GLQDEDGYR |
| 2.4 | 1362.613251 | 0.013097 | MGAGATGRAMDGPR |
| 2.2 | 1362.623795 | 0.002553 | TGFLEIDEHMR |

**Mascot:** http://www.matrixscience.com/



# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **TEQWSTLPPETK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

Match to Query 41020: 1726.871328 from(864.442940,2+) rtinseconds(2031) index(53160)
Title: Locus:1.1.1.1322.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 1726.860001
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 0.00018
Matches : 23/126 fragment ions using 51 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 12 |
| 2 | 231.097548 | 116.052412 | | | 213.086983 | 107.047130 | E | 1626.819607 | 813.913442 | 1609.793058 | 805.400167 | 1608.809042 | 804.908159 | 11 |
| 3 | **670.322874** | 335.665075 | 653.296325 | 327.151801 | 652.312309 | 326.659793 | Q | ***1497.777014*** | 749.392145 | 1480.750465 | 740.878871 | 1479.766449 | 740.386863 | 10 |
| 4 | **856.402187** | 428.704732 | 839.375638 | 420.191457 | 838.391622 | 419.699449 | W | ***1058.551688*** | 529.779482 | 1041.525139 | 521.266208 | 1040.541123 | 520.774200 | 9 |
| 5 | 943.434215 | 472.220746 | 926.407666 | 463.707471 | 925.423650 | 463.215463 | S | ***872.472375*** | 436.739826 | 855.445826 | 428.226551 | 854.461810 | 427.734543 | 8 |
| 6 | **1044.481894** | 522.744585 | 1027.455345 | 514.231311 | 1026.471329 | 513.739303 | T | ***785.440347*** | 393.223812 | 768.413798 | 384.710537 | 767.429782 | 384.218529 | 7 |
| 7 | **1157.565958** | 579.286617 | 1140.539409 | 570.773343 | 1139.555393 | 570.281334 | L | ***684.392668*** | 342.699972 | 667.366119 | 334.186698 | 666.382103 | 333.694690 | 6 |
| 8 | 1254.618722 | 627.812999 | 1237.592173 | 619.299725 | 1236.608157 | 618.807716 | P | ***571.308604*** | 286.157940 | 554.282055 | 277.644666 | 553.298039 | 277.152658 | 5 |
| 9 | 1351.671486 | 676.339381 | 1334.644937 | 667.826107 | 1333.660921 | 667.334098 | P | ***474.255840*** | 237.631558 | 457.229291 | 229.118284 | 456.245275 | 228.626276 | 4 |
| 10 | 1480.714079 | 740.860678 | 1463.687530 | 732.347403 | 1462.703514 | 731.855395 | E | ***377.203076*** | 189.105176 | 360.176527 | 180.591902 | 359.192511 | 180.099894 | 3 |
| 11 | 1581.761758 | 791.384517 | 1564.735209 | 782.871243 | 1563.751193 | 782.379235 | T | ***248.160483*** | 124.583879 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |

NCBI **BLAST** search of TEQWSTLPPETK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.1 | 1726.860001 | 0.011327 | TEQWSTLPPETK |
| 9.6 | 1726.849960 | 0.021368 | TERFGQGGAGPVGGQGPR |
| 6.2 | 1726.867188 | 0.004140 | KDHAEMQAVIDAKQK |
| 3.5 | 1726.871216 | 0.000112 | NLNTKLQMYFQSPK |
| 1.9 | 1726.853485 | 0.017843 | MASGHAFQPDLVK |
| 1.1 | 1726.874573 | -0.003245 | VTKNQEMMSQIKYK |

**Mascot:** http://www.matrixscience.com/

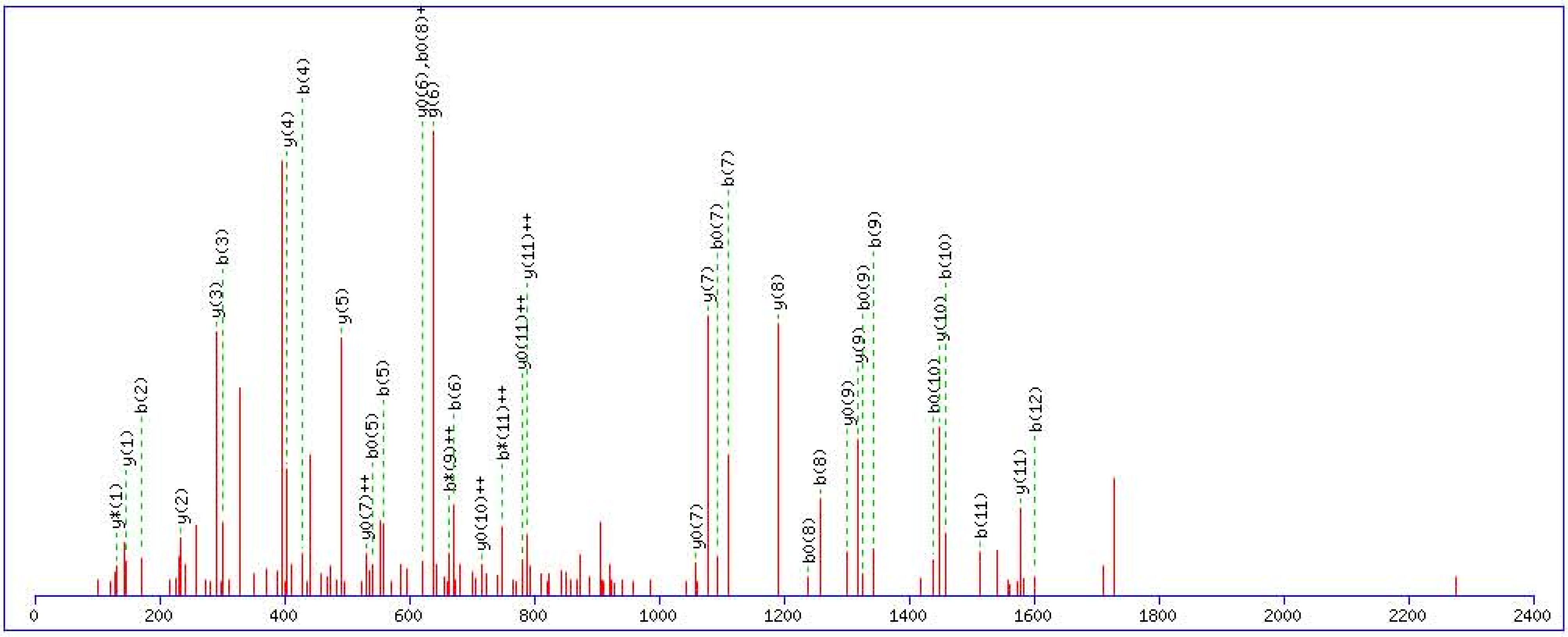
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GLEEELQFSLGSK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

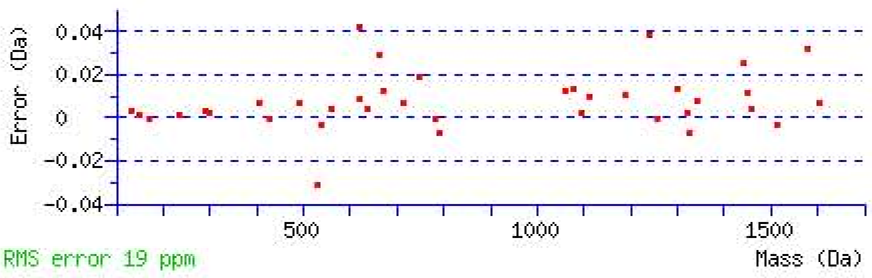
Match to Query 41586: 1746.900028 from(874.457290,2+) rtinseconds(2580) index(56406)
Title: Locus:1.1.1.1513.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

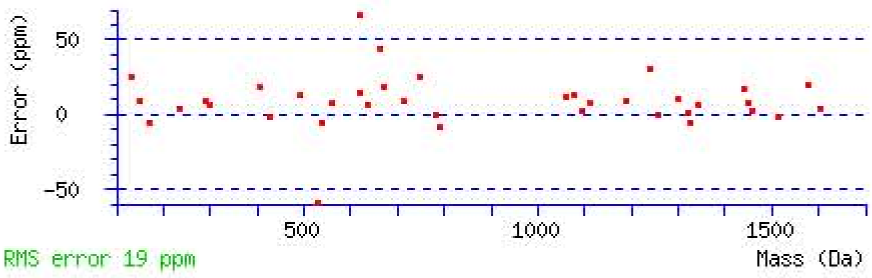
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1746.886200
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 75  Expect: 1.9e-007
Matches : 38/126 fragment ions using 59 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 13 |
| 2 | ***171.112804*** | 86.060040 | | | | | L | 1690.872035 | 845.939656 | 1673.845486 | 837.426381 | 1672.861470 | 836.934373 | 12 |
| 3 | ***300.155397*** | 150.581336 | | | 282.144832 | 141.576054 | E | **1577.787971** | 789.397624 | 1560.761422 | 780.884349 | 1559.777406 | 780.392341 | 11 |
| 4 | ***429.197990*** | 215.102633 | | | 411.187425 | 206.097351 | E | **1448.745378** | 724.876327 | 1431.718829 | 716.363053 | 1430.734813 | 715.871045 | 10 |
| 5 | ***558.240583*** | 279.623930 | | | 540.230018 | 270.618647 | E | **1319.702785** | 660.355031 | 1302.676236 | 651.841756 | 1301.692220 | 651.349748 | 9 |
| 6 | ***671.324647*** | 336.165962 | | | 653.314082 | 327.160679 | L | **1190.660192** | 595.833734 | 1173.633643 | 587.320460 | 1172.649627 | 586.828452 | 8 |
| 7 | ***1110.549973*** | 555.778624 | 1093.523424 | 547.265350 | 1092.539408 | 546.773342 | Q | **1077.576128** | 539.291702 | 1060.549579 | 530.778428 | 1059.565563 | 530.286419 | 7 |
| 8 | ***1257.618387*** | 629.312832 | 1240.591838 | 620.799557 | 1239.607822 | 620.307549 | F | **638.350802** | 319.679039 | 621.324253 | 311.165765 | 620.340237 | 310.673757 | 6 |
| 9 | ***1344.650415*** | 672.828846 | 1327.623866 | 664.315571 | 1326.639850 | 663.823563 | S | **491.282388** | 246.144832 | 474.255839 | 237.631557 | 473.271823 | 237.139549 | 5 |
| 10 | ***1457.734479*** | 729.370878 | 1440.707930 | 720.857603 | 1439.723914 | 720.365595 | L | **404.250360** | 202.628818 | 387.223811 | 194.115543 | 386.239795 | 193.623535 | 4 |
| 11 | ***1514.755943*** | 757.881609 | 1497.729394 | 749.368335 | 1496.745378 | 748.876327 | G | **291.166296** | 146.086786 | 274.139747 | 137.573512 | 273.155731 | 137.081504 | 3 |
| 12 | ***1601.787971*** | 801.397624 | 1584.761422 | 792.884349 | 1583.777406 | 792.392341 | S | **234.144832** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 13 | | | | | | | K | **147.112804** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GLEEELQFSLGSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 74.7 | 1746.886200 | 0.013828 | GLEEELQFSLGSK |
| 2.9 | 1746.887558 | 0.012470 | AVQSKAFCAGGLAPGWK |
| 1.3 | 1746.918533 | -0.018505 | AKLQMTEAALALSEQK |

**Mascot:** http://www.matrixscience.com/

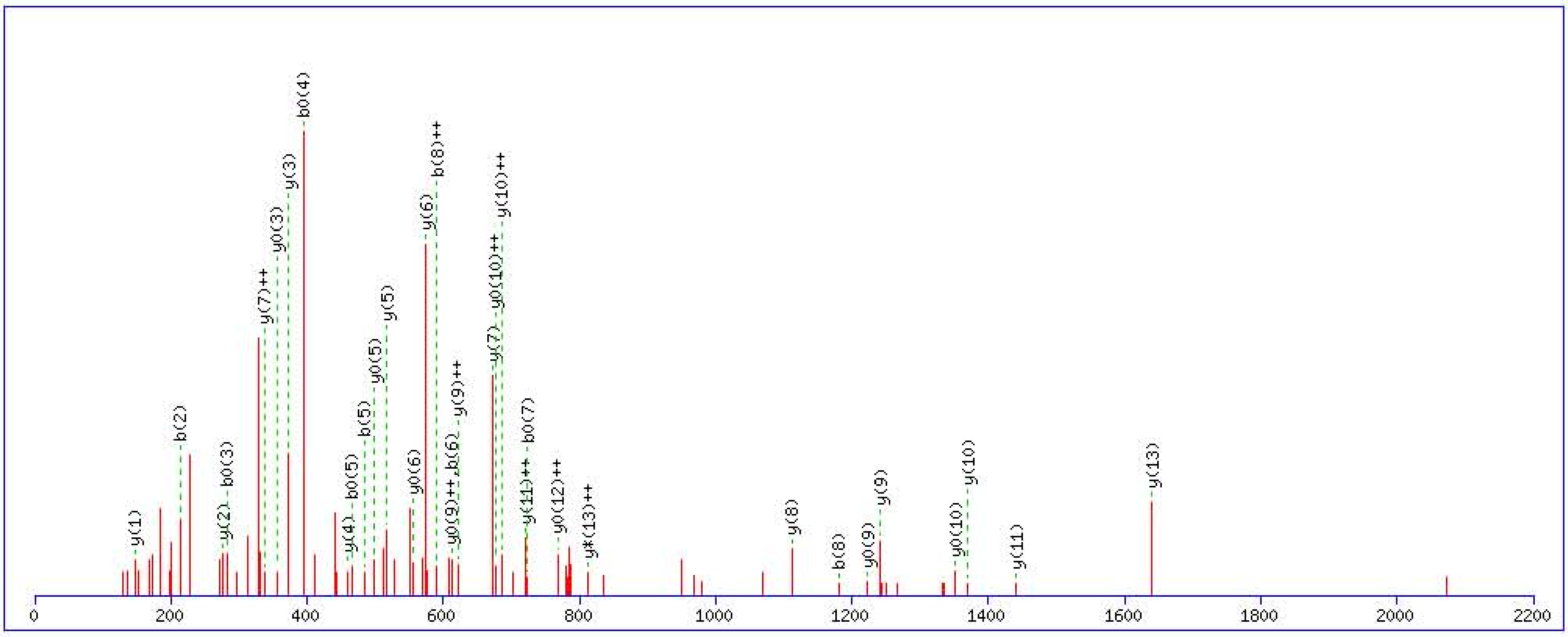
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VLSLAQEQVGGSPEK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

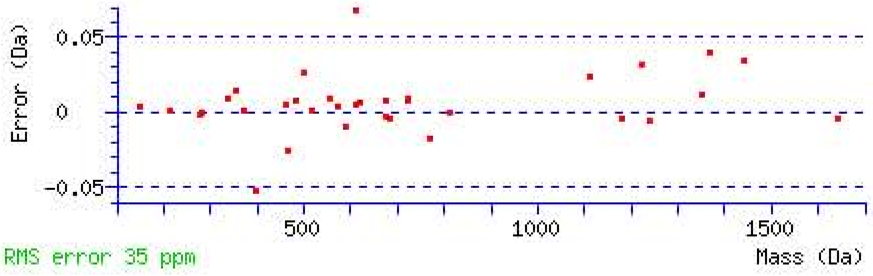
Match to Query 43649: 1851.979932 from(618.333920,3+) rtinseconds(2022) index(53085)
Title: Locus:1.1.1.1319.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

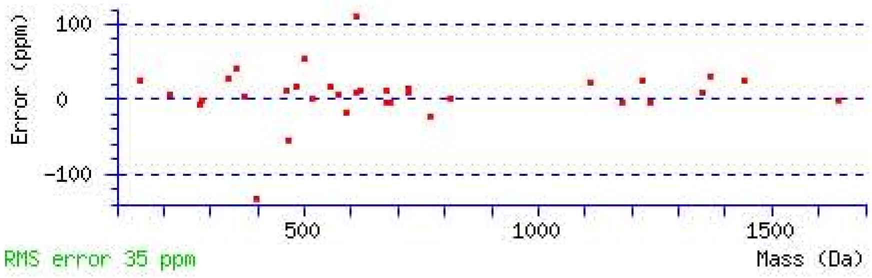
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1851.976425
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q8 : Biotin:Thermo-21345 (Q)
**Ions Score:** 66 **Expect:** 6.2e-006
**Matches :** 34/152 fragment ions using 68 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 15 |
| 2 | **213.159754** | 107.083515 | | | | | L | 1753.915298 | 877.461287 | 1736.888749 | 868.948013 | 1735.904733 | 868.456004 | 14 |
| 3 | 300.191782 | 150.599529 | | | 282.181217 | 141.594247 | S | ***1640.831234*** | 820.919255 | 1623.804685 | 812.405981 | 1622.820669 | 811.913973 | 13 |
| 4 | 413.275846 | 207.141561 | | | 395.265281 | 198.136279 | L | 1553.799206 | 777.403241 | 1536.772657 | 768.889967 | 1535.788641 | 768.397958 | 12 |
| 5 | **484.312960** | 242.660118 | | | 466.302395 | 233.654836 | A | ***1440.715142*** | 720.861209 | 1423.688593 | 712.347935 | 1422.704577 | 711.855927 | 11 |
| 6 | **612.371538** | 306.689407 | 595.344989 | 298.176133 | 594.360973 | 297.684125 | Q | ***1369.678028*** | 685.342652 | 1352.651479 | 676.829378 | 1351.667463 | 676.337370 | 10 |
| 7 | 741.414131 | 371.210704 | 724.387582 | 362.697429 | 723.403566 | 362.205421 | E | ***1241.619450*** | 621.313363 | 1224.592901 | 612.800089 | 1223.608885 | 612.308080 | 9 |
| 8 | **1180.639457** | 590.823367 | 1163.612908 | 582.310092 | 1162.628892 | 581.818084 | Q | ***1112.576857*** | 556.792066 | 1095.550308 | 548.278792 | 1094.566292 | 547.786784 | 8 |
| 9 | 1279.707871 | 640.357574 | 1262.681322 | 631.844299 | 1261.697306 | 631.352291 | V | ***673.351531*** | 337.179404 | 656.324982 | 328.666129 | 655.340966 | 328.174121 | 7 |
| 10 | 1336.729335 | 668.868306 | 1319.702786 | 660.355031 | 1318.718770 | 659.863023 | G | ***574.283117*** | 287.645197 | 557.256568 | 279.131922 | 556.272552 | 278.639914 | 6 |
| 11 | 1393.750799 | 697.379037 | 1376.724250 | 688.865763 | 1375.740234 | 688.373755 | G | ***517.261653*** | 259.134465 | 500.235104 | 250.621190 | 499.251088 | 250.129182 | 5 |
| 12 | 1480.782827 | 740.895052 | 1463.756278 | 732.381777 | 1462.772262 | 731.889769 | S | ***460.240189*** | 230.623732 | 443.213640 | 222.110458 | 442.229624 | 221.618450 | 4 |
| 13 | 1577.835591 | 789.421434 | 1560.809042 | 780.908159 | 1559.825026 | 780.416151 | P | ***373.208161*** | 187.107718 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 14 | 1706.878184 | 853.942730 | 1689.851635 | 845.429456 | 1688.867619 | 844.937447 | E | ***276.155397*** | 138.581336 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 15 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VLSLAQEQVGGSPEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.0 | 1851.976425 | 0.003507 | VLSLAQEQVGGSPEK |
| 41.9 | 1851.976425 | 0.003507 | VLSLAQEQVGGSPEK |

**Mascot:** http://www.matrixscience.com/

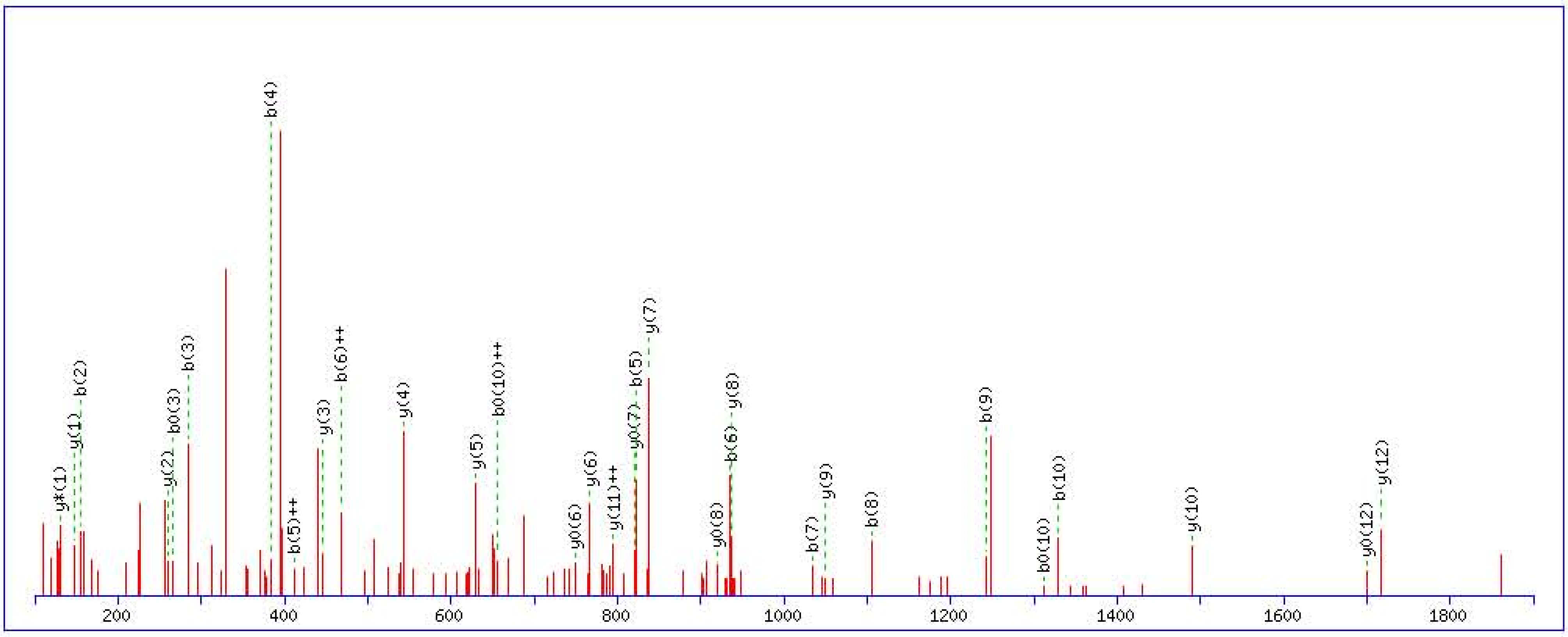
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GPEVQLVAHSPWLK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

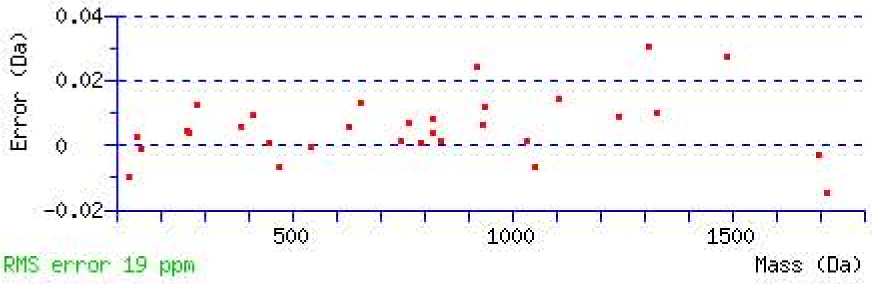
Match to Query 44158: 1871.022582 from(624.681470,3+) rtinseconds(2255) index(54583)
Title: Locus:1.1.1.1400.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

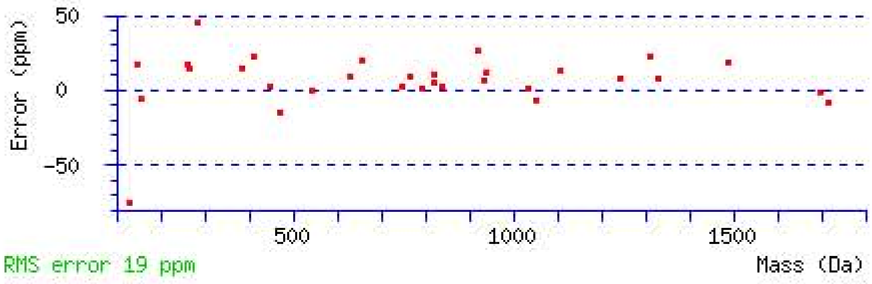
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1871.012756
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q5** : Biotin:Thermo-21345 (Q)
**Ions Score:** 46 **Expect:** 7.1e-005
**Matches :** 31/136 fragment ions using 77 most intense peaks (help)

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 14 |
| 2 | **155.081504** | 78.044390 | | | | | P | 1814.998574 | 908.002925 | 1797.972025 | 899.489651 | 1796.988009 | 898.997643 | 13 |
| 3 | **284.124097** | 142.565687 | | | 266.113532 | 133.560404 | E | ***1717.945810*** | 859.476543 | 1700.919261 | 850.963269 | 1699.935245 | 850.471261 | 12 |
| 4 | **383.192511** | 192.099894 | | | 365.181946 | 183.094611 | V | 1588.903217 | 794.955247 | 1571.876668 | 786.441972 | 1570.892652 | 785.949964 | 11 |
| 5 | **822.417837** | **411.712557** | 805.391288 | 403.199282 | 804.407272 | 402.707274 | Q | ***1489.834803*** | 745.421040 | 1472.808254 | 736.907765 | 1471.824238 | 736.415757 | 10 |
| 6 | **935.501901** | **468.254589** | 918.475352 | 459.741314 | 917.491336 | 459.249306 | L | ***1050.609477*** | 525.808377 | 1033.582928 | 517.295102 | 1032.598912 | 516.803094 | 9 |
| 7 | **1034.570315** | 517.788796 | 1017.543766 | 509.275521 | 1016.559750 | 508.783513 | V | ***937.525413*** | 469.266345 | 920.498864 | 460.753070 | 919.514848 | 460.261062 | 8 |
| 8 | **1105.607429** | 553.307353 | 1088.580880 | 544.794078 | 1087.596864 | 544.302070 | A | ***838.456999*** | 419.732138 | 821.430450 | 411.218863 | 820.446434 | 410.726855 | 7 |
| 9 | **1242.666341** | 621.836809 | 1225.639792 | 613.323534 | 1224.655776 | 612.831526 | H | ***767.419885*** | 384.213581 | 750.393336 | 375.700306 | 749.409320 | 375.208298 | 6 |
| 10 | **1329.698369** | 665.352823 | 1312.671820 | 656.839548 | 1311.687804 | 656.347540 | S | ***630.360973*** | 315.684125 | 613.334424 | 307.170850 | 612.350408 | 306.678842 | 5 |
| 11 | 1426.751133 | 713.879205 | 1409.724584 | 705.365930 | 1408.740568 | 704.873922 | P | ***543.328945*** | 272.168111 | 526.302396 | 263.654836 | | | 4 |
| 12 | 1612.830446 | 806.918861 | 1595.803897 | 798.405587 | 1594.819881 | 797.913579 | W | ***446.276181*** | 223.641728 | 429.249632 | 215.128454 | | | 3 |
| 13 | 1725.914510 | 863.460893 | 1708.887961 | 854.947619 | 1707.903945 | 854.455611 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 14 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GPEVQLVAHSPWLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.0 | 1871.012756 | 0.009826 | GPEVQLVAHSPWLK |
| 1.8 | 1871.002686 | 0.019896 | QRVLHWDLRGPGGGPAR |
| 1.6 | 1870.994781 | 0.027801 | NVNQAKLSEHRHK |

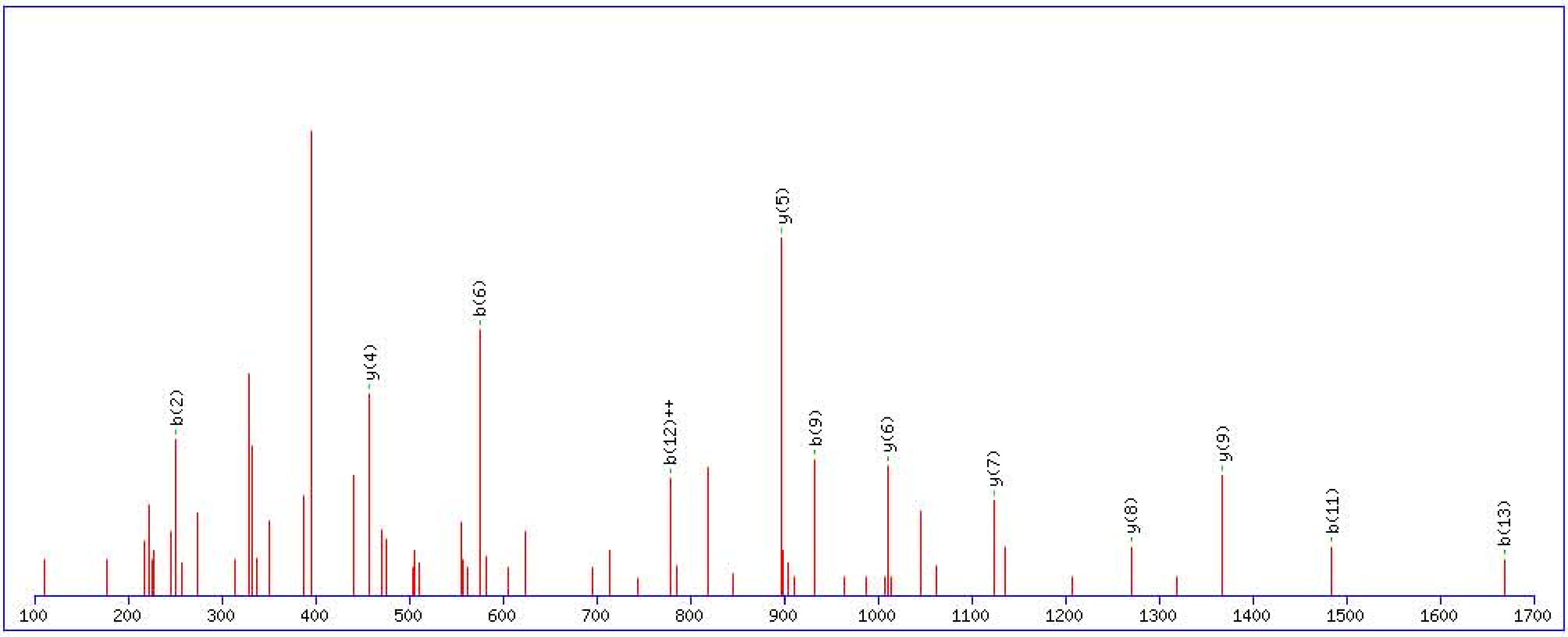
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HLVPGAPFLLQALVR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

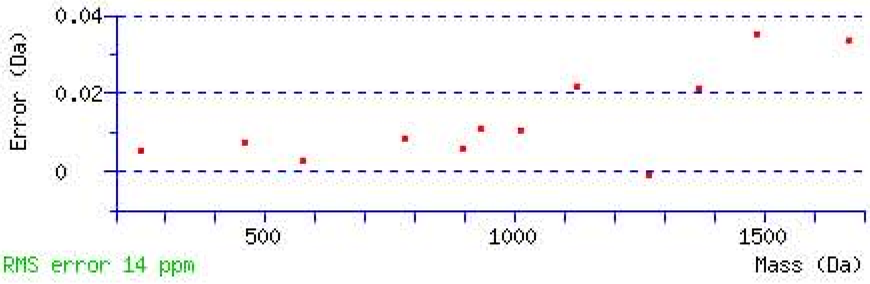
Match to Query 45393: 1941.152712 from(648.058180,3+) rtinseconds(2868) index(58426)
Title: Locus:1.1.1.1612.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

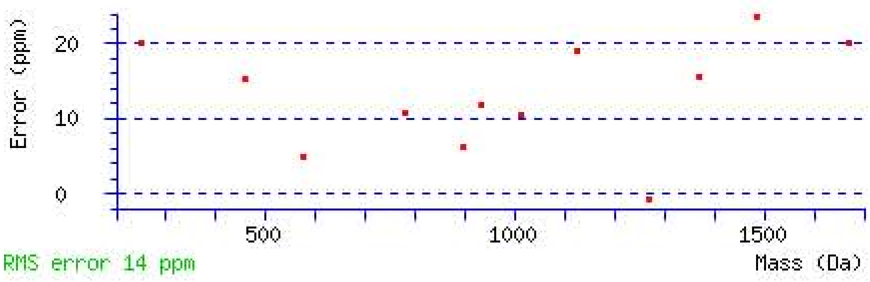
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1700] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1941.138626
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11    : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 4.6e-005
Matches : 12/92 fragment ions using 15 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | H | | | | | 15 |
| 2 | ***251.150252*** | 126.078764 | | | L | 1805.086996 | 903.047136 | 1788.060447 | 894.533862 | 14 |
| 3 | 350.218666 | 175.612971 | | | V | 1692.002932 | 846.505104 | 1674.976383 | 837.991830 | 13 |
| 4 | 447.271430 | 224.139353 | | | P | 1592.934518 | 796.970897 | 1575.907969 | 788.457623 | 12 |
| 5 | 504.292894 | 252.650085 | | | G | 1495.881754 | 748.444515 | 1478.855205 | 739.931241 | 11 |
| 6 | ***575.330008*** | 288.168642 | | | A | 1438.860290 | 719.933783 | 1421.833741 | 711.420509 | 10 |
| 7 | 672.382772 | 336.695024 | | | P | ***1367.823176*** | 684.415226 | 1350.796627 | 675.901952 | 9 |
| 8 | 819.451186 | 410.229231 | | | F | ***1270.770412*** | 635.888844 | 1253.743863 | 627.375570 | 8 |
| 9 | ***932.535250*** | 466.771263 | | | L | ***1123.701998*** | 562.354637 | 1106.675449 | 553.841363 | 7 |
| 10 | 1045.619314 | 523.313295 | | | L | ***1010.617934*** | 505.812605 | 993.591385 | 497.299331 | 6 |
| 11 | ***1484.844640*** | 742.925958 | 1467.818091 | 734.412684 | Q | ***897.533870*** | 449.270573 | 880.507321 | 440.757298 | 5 |
| 12 | 1555.881754 | 778.444515 | 1538.855205 | 769.931241 | A | ***458.308544*** | 229.657910 | 441.281995 | 221.144635 | 4 |
| 13 | ***1668.965818*** | 834.986547 | 1651.939269 | 826.473273 | L | 387.271430 | 194.139353 | 370.244881 | 185.626078 | 3 |
| 14 | 1768.034232 | 884.520754 | 1751.007683 | 876.007480 | V | 274.187366 | 137.597321 | 257.160817 | 129.084047 | 2 |
| 15 | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | 1 |





NCBI **BLAST** search of HLVPGAPFLLQALVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.9 | 1941.138626 | 0.014086 | HLVPGAPFLLQALVR |

**Mascot:** http://www.matrixscience.com/

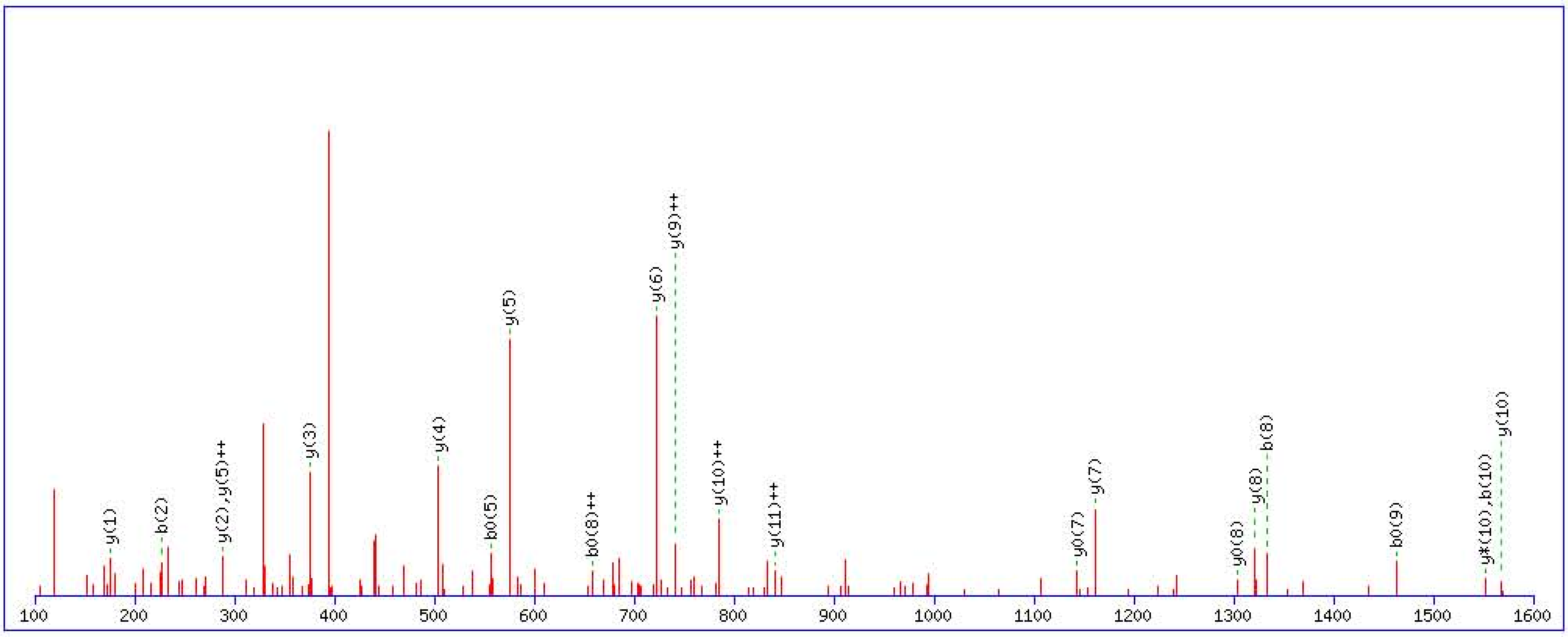
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EPFLSCCQFAESLR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

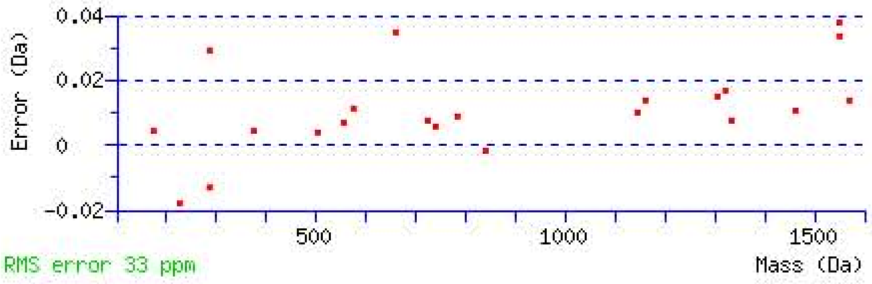
Match to Query 48472: 2053.960542 from(685.660790,3+) rtinseconds(2519) index(56008)
Title: Locus:1.1.1.1492.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

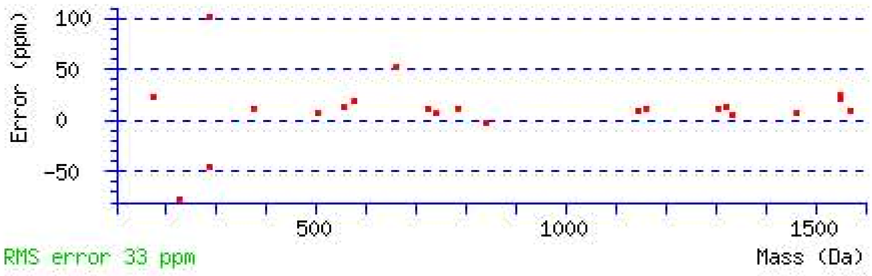
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2053.942368
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.0012
Matches : 22/138 fragment ions using 43 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 14 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 1925.907059 | 963.457168 | 1908.880510 | 954.943893 | 1907.896494 | 954.451885 | 13 |
| 3 | 374.171047 | 187.589161 | | | 356.160482 | 178.583879 | F | 1828.854295 | 914.930786 | 1811.827746 | 906.417511 | 1810.843730 | 905.925503 | 12 |
| 4 | 487.255111 | 244.131193 | | | 469.244546 | 235.125911 | L | 1681.785881 | 841.396579 | 1664.759332 | 832.883304 | 1663.775316 | 832.391296 | 11 |
| 5 | 574.287139 | 287.647208 | | | 556.276574 | 278.641925 | S | ***1568.701817*** | 784.854547 | 1551.675268 | 776.341272 | 1550.691252 | 775.849264 | 10 |
| 6 | 734.317788 | 367.662532 | | | 716.307223 | 358.657250 | C | 1481.669789 | 741.338533 | 1464.643240 | 732.825258 | 1463.659224 | 732.333250 | 9 |
| 7 | 894.348437 | 447.677857 | | | 876.337872 | 438.672574 | C | ***1321.639140*** | 661.323208 | 1304.612591 | 652.809934 | 1303.628575 | 652.317926 | 8 |
| 8 | **1333.573763** | 667.290520 | 1316.547214 | 658.777245 | 1315.563198 | 658.285237 | Q | ***1161.608491*** | 581.307884 | 1144.581942 | 572.794609 | 1143.597926 | 572.302601 | 7 |
| 9 | 1480.642177 | 740.824727 | 1463.615628 | 732.311452 | 1462.631612 | 731.819444 | F | ***722.383165*** | 361.695221 | 705.356616 | 353.181946 | 704.372600 | 352.689938 | 6 |
| 10 | **1551.679291** | 776.343284 | 1534.652742 | 767.830009 | 1533.668726 | 767.338001 | A | ***575.314751*** | 288.161014 | 558.288202 | 279.647739 | 557.304186 | 279.155731 | 5 |
| 11 | 1680.721884 | 840.864580 | 1663.695335 | 832.351306 | 1662.711319 | 831.859298 | E | ***504.277637*** | 252.642457 | 487.251088 | 244.129182 | 486.267072 | 243.637174 | 4 |
| 12 | 1767.753912 | 884.380594 | 1750.727363 | 875.867320 | 1749.743347 | 875.375312 | S | ***375.235044*** | 188.121160 | 358.208495 | 179.607885 | 357.224479 | 179.115877 | 3 |
| 13 | 1880.837976 | 940.922626 | 1863.811427 | 932.409352 | 1862.827411 | 931.917344 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 14 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EPFLSCCQFAESLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.8 | 2053.942368 | 0.018174 | EPFLSCCQFAESLR |

**Mascot:** http://www.matrixscience.com/

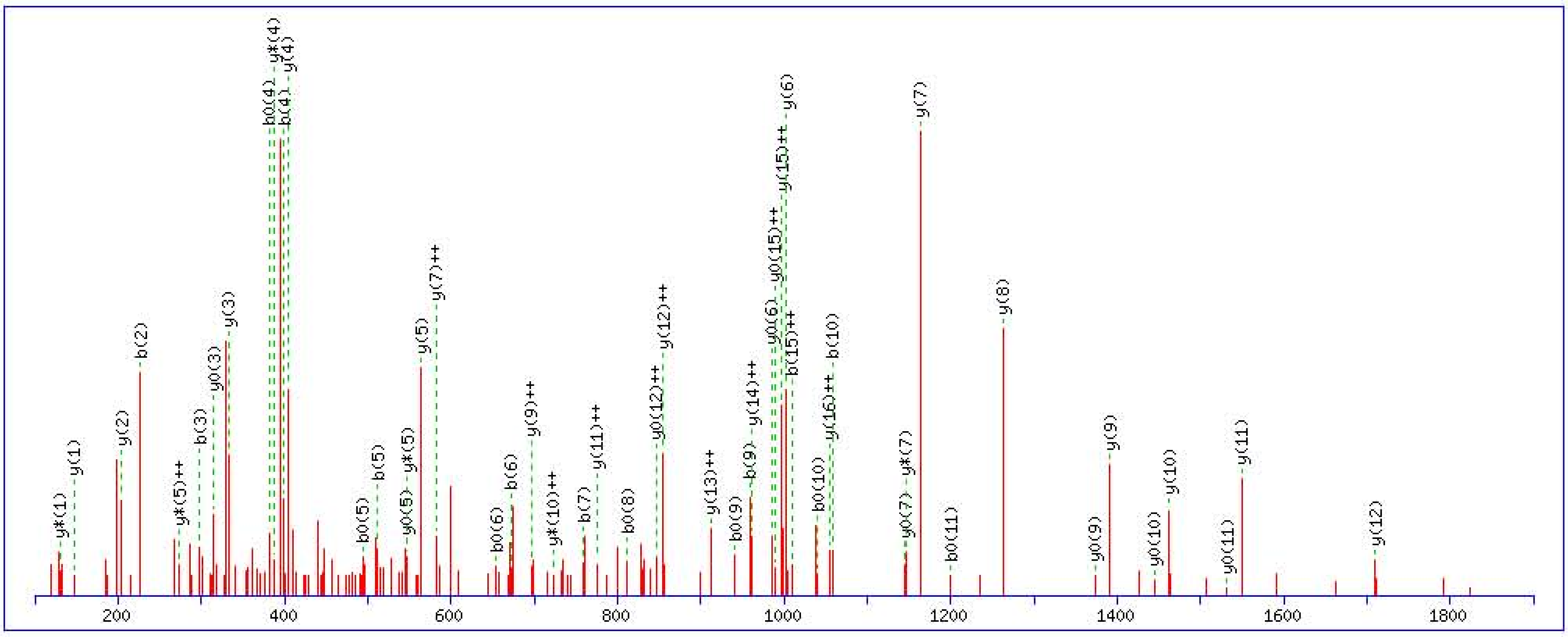
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LLATLCSAEVCQCAEGK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

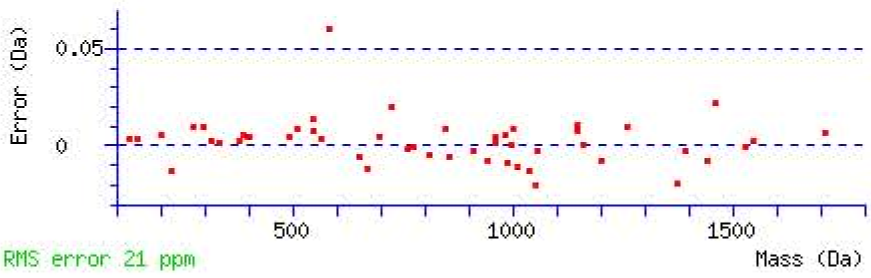
Match to Query 51483: 2220.042522 from(741.021450,3+) rtinseconds(2119) index(69497)
Title: Locus:1.1.1.1675.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

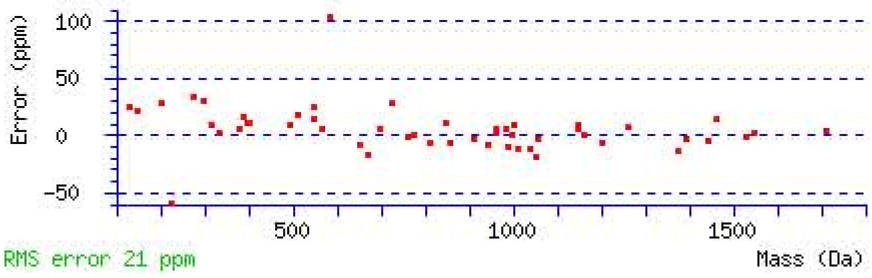
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2220.041092
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12    : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 1e-005
Matches : 51/160 fragment ions using 110 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 17 |
| 2 | **227.175404** | 114.091340 | | | | | L | 2107.964318 | 1054.485797 | 2090.937769 | 1045.972522 | 2089.953753 | 1045.480514 | 16 |
| 3 | **298.212518** | 149.609897 | | | | | A | 1994.880254 | 997.943765 | 1977.853705 | 989.430491 | 1976.869689 | 988.938483 | 15 |
| 4 | **399.260197** | 200.133737 | | | 381.249632 | 191.128454 | T | 1923.843140 | 962.425208 | 1906.816591 | 953.911934 | 1905.832575 | 953.419926 | 14 |
| 5 | **512.344261** | 256.675769 | | | 494.333696 | 247.670486 | L | 1822.795461 | 911.901369 | 1805.768912 | 903.388094 | 1804.784896 | 902.896086 | 13 |
| 6 | **672.374910** | 336.691093 | | | 654.364345 | 327.685811 | C | ***1709.711397*** | 855.359337 | 1692.684848 | 846.846062 | 1691.700832 | 846.354054 | 12 |
| 7 | **759.406938** | 380.207107 | | | 741.396373 | 371.201825 | S | ***1549.680748*** | 775.344012 | 1532.654199 | 766.830738 | 1531.670183 | 766.338730 | 11 |
| 8 | 830.444052 | 415.725664 | | | 812.433487 | 406.720382 | A | ***1462.648720*** | 731.827998 | 1445.622171 | 723.314724 | 1444.638155 | 722.822716 | 10 |
| 9 | **959.486645** | 480.246961 | | | 941.476080 | 471.241678 | E | ***1391.611606*** | 696.309441 | 1374.585057 | 687.796167 | 1373.601041 | 687.304159 | 9 |
| 10 | **1058.555059** | 529.781168 | | | 1040.544494 | 520.775885 | V | ***1262.569013*** | 631.788145 | 1245.542464 | 623.274870 | 1244.558448 | 622.782862 | 8 |
| 11 | 1218.585708 | 609.796492 | | | 1200.575143 | 600.791210 | C | ***1163.500599*** | 582.253938 | 1146.474050 | 573.740663 | 1145.490034 | 573.248655 | 7 |
| 12 | 1657.811034 | 829.409155 | 1640.784485 | 820.895881 | 1639.800469 | 820.403873 | Q | ***1003.469950*** | 502.238613 | 986.443401 | 493.725339 | 985.459385 | 493.233331 | 6 |
| 13 | 1817.841683 | 909.424480 | 1800.815134 | 900.911205 | 1799.831118 | 900.419197 | C | ***564.244624*** | 282.625950 | 547.218075 | 274.112676 | 546.234059 | 273.620668 | 5 |
| 14 | 1888.878797 | 944.943037 | 1871.852248 | 936.429762 | 1870.868232 | 935.937754 | A | ***404.213975*** | 202.610626 | 387.187426 | 194.097351 | 386.203410 | 193.605343 | 4 |
| 15 | 2017.921390 | 1009.464333 | 2000.894841 | 1000.951059 | 1999.910825 | 1000.459051 | E | ***333.176861*** | 167.092069 | 316.150312 | 158.578794 | 315.166296 | 158.086786 | 3 |
| 16 | 2074.942854 | 1037.975065 | 2057.916305 | 1029.461790 | 2056.932289 | 1028.969782 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 17 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LLATLCSAEVCQCAEGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 53.8 | 2220.041092 | 0.001430 | LLATLCSAEVCQCAEGK |
| 0.5 | 2220.048080 | -0.005558 | EPQEGAELPEATGTTSHR |

**Mascot:** http://www.matrixscience.com/

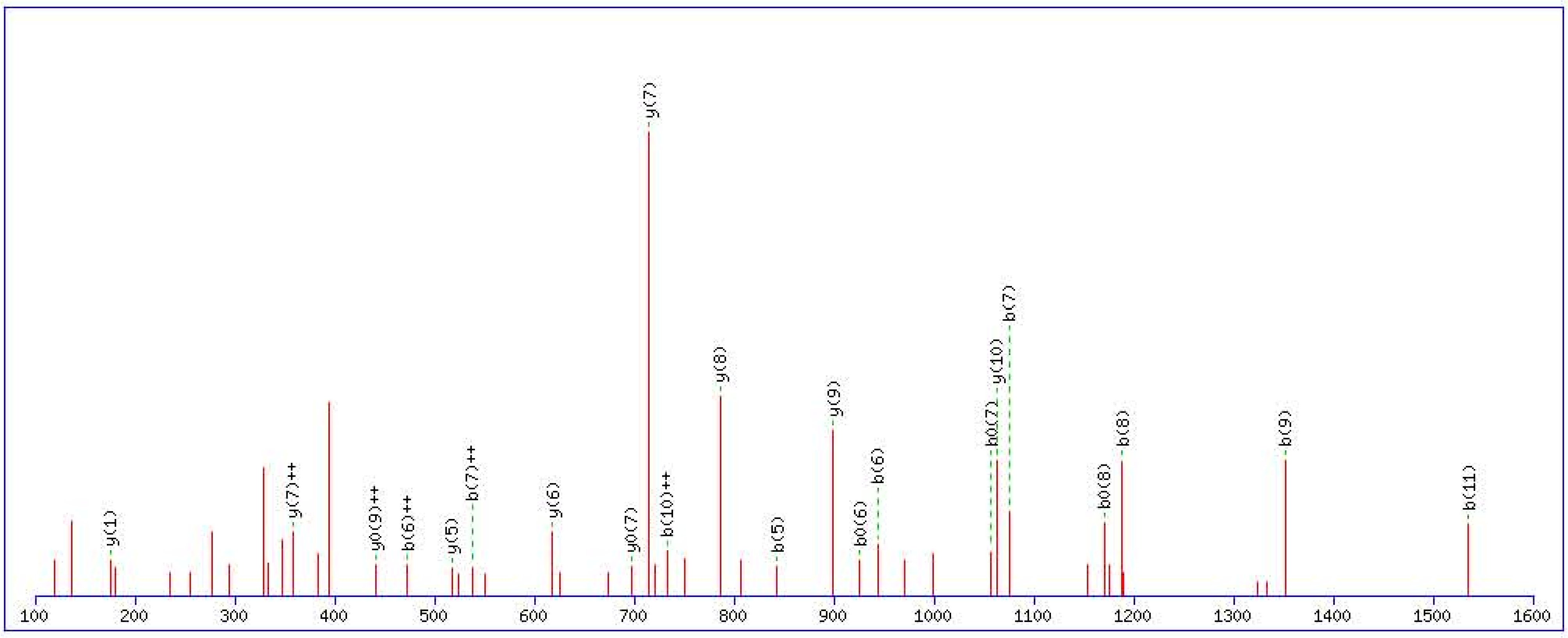
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GCGEQTMIYLAPTLAASR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

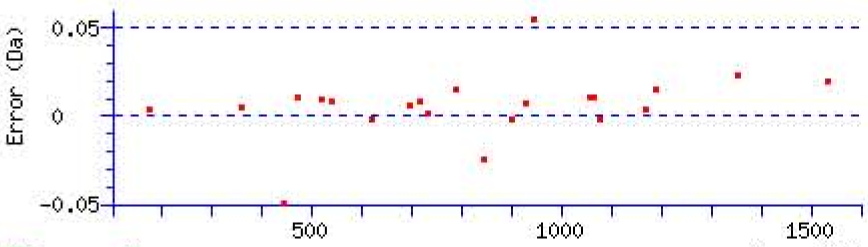
Match to Query 51975: 2249.122692 from(750.714840,3+) rtinseconds(2546) index(56228)
Title: Locus:1.1.1.1501.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1600] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●

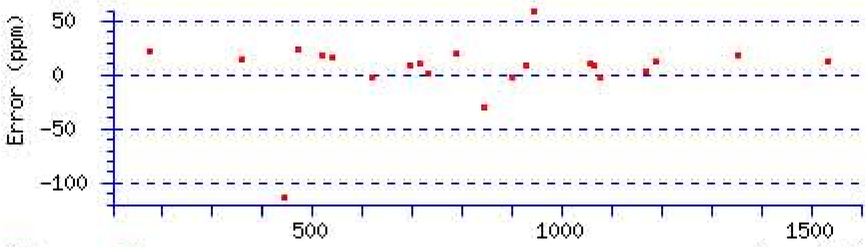


```
Monoisotopic mass of neutral peptide Mr(calc): 2249.100647
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 42  Expect: 0.00086
Matches : 22/188 fragment ions using 36 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 18 |
| 2 | 218.059389 | 109.533333 | | | | | C | 2193.086482 | 1097.046879 | 2176.059933 | 1088.533604 | 2175.075917 | 1088.041596 | 17 |
| 3 | 275.080853 | 138.044064 | | | | | G | 2033.055833 | 1017.031555 | 2016.029284 | 1008.518280 | 2015.045268 | 1008.026272 | 16 |
| 4 | 404.123446 | 202.565361 | | | 386.112881 | 193.560079 | E | 1976.034369 | 988.520822 | 1959.007820 | 980.007548 | 1958.023804 | 979.515540 | 15 |
| 5 | ***843.348772*** | 422.178024 | 826.322223 | 413.664750 | 825.338207 | 413.172742 | Q | 1846.991776 | 923.999526 | 1829.965227 | 915.486251 | 1828.981211 | 914.994243 | 14 |
| 6 | ***944.396451*** | **472.701864** | 927.369902 | 464.188589 | 926.385886 | 463.696581 | T | 1407.766450 | 704.386863 | 1390.739901 | 695.873588 | 1389.755885 | 695.381580 | 13 |
| 7 | ***1075.436936*** | **538.222106** | 1058.410387 | 529.708832 | 1057.426371 | 529.216824 | M | 1306.718771 | 653.863023 | 1289.692222 | 645.349749 | 1288.708206 | 644.857741 | 12 |
| 8 | ***1188.521000*** | 594.764138 | 1171.494451 | 586.250864 | 1170.510435 | 585.758855 | I | 1175.678286 | 588.342781 | 1158.651737 | 579.829506 | 1157.667721 | 579.337498 | 11 |
| 9 | ***1351.584329*** | 676.295803 | 1334.557780 | 667.782528 | 1333.573764 | 667.290520 | Y | ***1062.594222*** | 531.800749 | 1045.567673 | 523.287475 | 1044.583657 | 522.795466 | 10 |
| 10 | 1464.668393 | **732.837834** | 1447.641844 | 724.324560 | 1446.657828 | 723.832552 | L | ***899.530893*** | 450.269084 | 882.504344 | 441.755810 | 881.520328 | 441.263802 | 9 |
| 11 | ***1535.705507*** | 768.356391 | 1518.678958 | 759.843117 | 1517.694942 | 759.351109 | A | ***786.446829*** | 393.727053 | 769.420280 | 385.213778 | 768.436264 | 384.721770 | 8 |
| 12 | 1632.758271 | 816.882773 | 1615.731722 | 808.369499 | 1614.747706 | 807.877491 | P | ***715.409715*** | 358.208496 | 698.383166 | 349.695221 | 697.399150 | 349.203213 | 7 |
| 13 | 1733.805950 | 867.406613 | 1716.779401 | 858.893339 | 1715.795385 | 858.401330 | T | ***618.356951*** | 309.682114 | 601.330402 | 301.168839 | 600.346386 | 300.676831 | 6 |
| 14 | 1846.890014 | 923.948645 | 1829.863465 | 915.435370 | 1828.879449 | 914.943362 | L | ***517.309272*** | 259.158274 | 500.282723 | 250.644999 | 499.298707 | 250.152991 | 5 |
| 15 | 1917.927128 | 959.467202 | 1900.900579 | 950.953927 | 1899.916563 | 950.461919 | A | 404.225208 | 202.616242 | 387.198659 | 194.102967 | 386.214643 | 193.610959 | 4 |
| 16 | 1988.964242 | 994.985759 | 1971.937693 | 986.472484 | 1970.953677 | 985.980476 | A | 333.188094 | 167.097685 | 316.161545 | 158.584410 | 315.177529 | 158.092402 | 3 |
| 17 | 2075.996270 | 1038.501773 | 2058.969721 | 1029.988498 | 2057.985705 | 1029.496490 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 30 ppm



RMS error 30 ppm

NCBI **BLAST** search of GCGEQTMIYLAPTLAASR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.7 | 2249.100647 | 0.022045 | GCGEQTMIYLAPTLAASR |
| 8.5 | 2249.115051 | 0.007641 | YSTSLYASPSMVHEGVAVVPR |
| 4.1 | 2249.104492 | 0.018200 | AQLQQHNLEMVGEGTRQ |
| 1.0 | 2249.143570 | -0.020878 | TPPPQPPLISSMDSISQK |
| 0.8 | 2249.089874 | 0.032818 | EMIDIYSTREPQLAFHQR |
| 0.6 | 2249.150742 | -0.028050 | LRSIMMSQDLENVTSKEIR |
| 0.5 | 2249.137527 | -0.014835 | QKFERPICVSWSTDVKGGR |

**Mascot:** http://www.matrixscience.com/

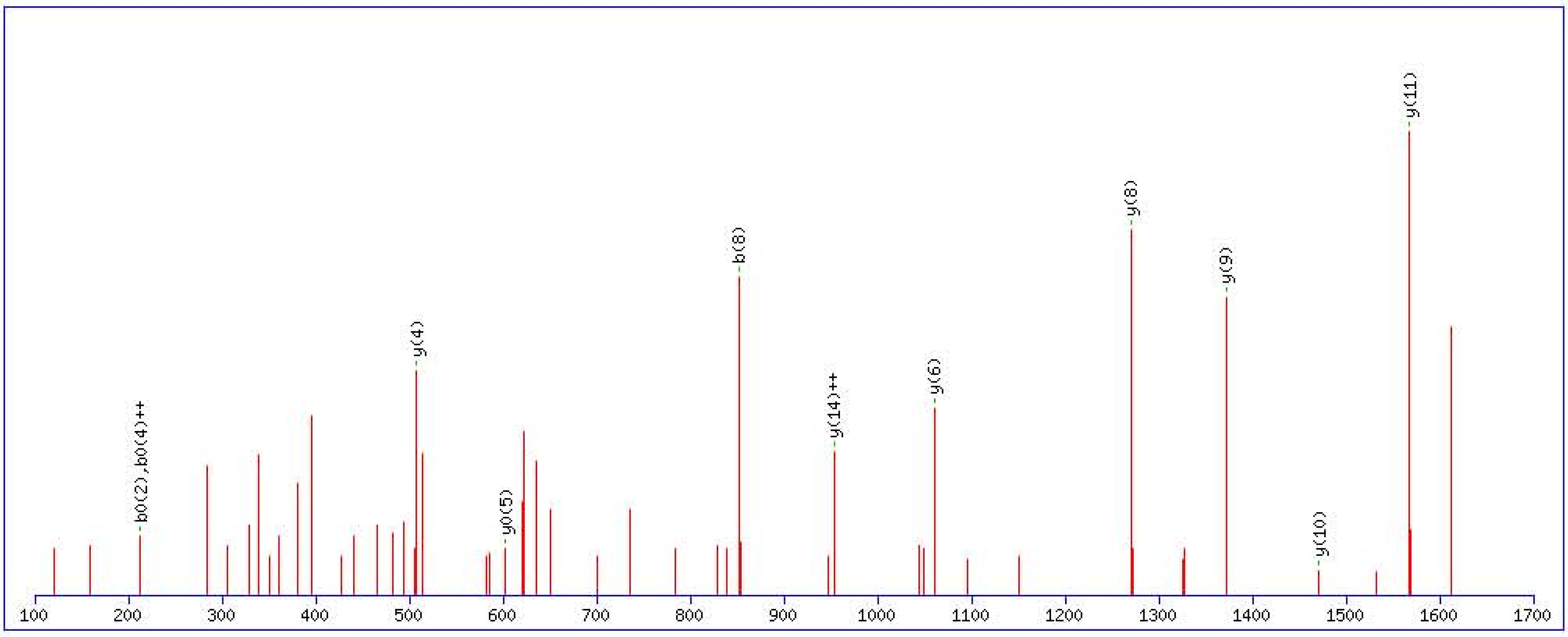
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DDPDAPLQPVTPLQLFEGR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

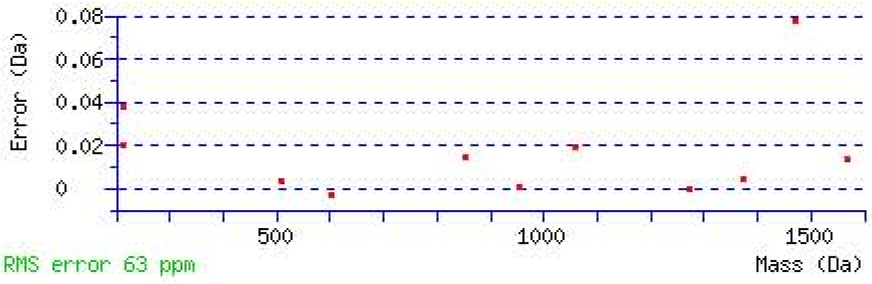
Match to Query 54809: 2418.243612 from(807.088480,3+) rtinseconds(3020) index(59691)
Title: Locus:1.1.1.1663.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

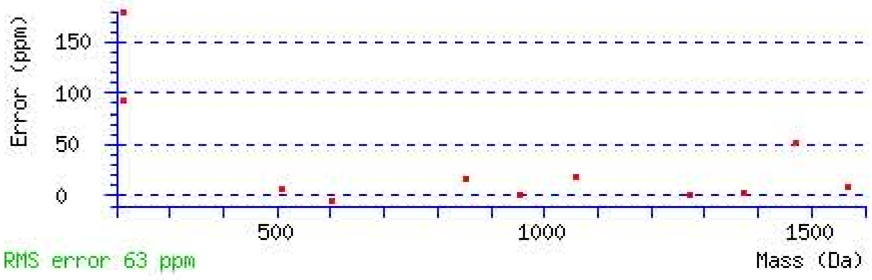
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2418.225342
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q14** : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.051
**Matches :** 11/198 fragment ions using 15 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 19 |
| 2 | 231.061162 | 116.034219 | | | 213.050597 | 107.028936 | D | 2304.205668 | 1152.606472 | 2287.179119 | 1144.093197 | 2286.195103 | 1143.601189 | 18 |
| 3 | 328.113926 | 164.560601 | | | 310.103361 | 155.555319 | P | 2189.178725 | 1095.093000 | 2172.152176 | 1086.579726 | 2171.168160 | 1086.087718 | 17 |
| 4 | 443.140869 | 222.074073 | | | 425.130304 | 213.068790 | D | 2092.125961 | 1046.566618 | 2075.099412 | 1038.053344 | 2074.115396 | 1037.561336 | 16 |
| 5 | 514.177983 | 257.592630 | | | 496.167418 | 248.587347 | A | 1977.099018 | 989.053147 | 1960.072469 | 980.539873 | 1959.088453 | 980.047865 | 15 |
| 6 | 611.230747 | 306.119012 | | | 593.220182 | 297.113729 | P | 1906.061904 | 953.534590 | 1889.035355 | 945.021316 | 1888.051339 | 944.529308 | 14 |
| 7 | 724.314811 | 362.661044 | | | 706.304246 | 353.655761 | L | 1809.009140 | 905.008208 | 1791.982591 | 896.494934 | 1790.998575 | 896.002926 | 13 |
| 8 | 852.373389 | 426.690333 | 835.346840 | 418.177058 | 834.362824 | 417.685050 | Q | 1695.925076 | 848.466176 | 1678.898527 | 839.952902 | 1677.914511 | 839.460894 | 12 |
| 9 | 949.426153 | 475.216715 | 932.399604 | 466.703440 | 931.415588 | 466.211432 | P | ***1567.866498*** | 784.436887 | 1550.839949 | 775.923613 | 1549.855933 | 775.431605 | 11 |
| 10 | 1048.494567 | 524.750922 | 1031.468018 | 516.237647 | 1030.484002 | 515.745639 | V | ***1470.813734*** | 735.910505 | 1453.787185 | 727.397231 | 1452.803169 | 726.905223 | 10 |
| 11 | 1149.542246 | 575.274761 | 1132.515697 | 566.761487 | 1131.531681 | 566.269479 | T | ***1371.745320*** | 686.376298 | 1354.718771 | 677.863024 | 1353.734755 | 677.371016 | 9 |
| 12 | 1246.595010 | 623.801143 | 1229.568461 | 615.287869 | 1228.584445 | 614.795861 | P | ***1270.697641*** | 635.852459 | 1253.671092 | 627.339184 | 1252.687076 | 626.847176 | 8 |
| 13 | 1359.679074 | 680.343175 | 1342.652525 | 671.829901 | 1341.668509 | 671.337893 | L | 1173.644877 | 587.326077 | 1156.618328 | 578.812802 | 1155.634312 | 578.320794 | 7 |
| 14 | 1798.904400 | 899.955838 | 1781.877851 | 891.442564 | 1780.893835 | 890.950556 | Q | ***1060.560813*** | 530.784045 | 1043.534264 | 522.270770 | 1042.550248 | 521.778762 | 6 |
| 15 | 1911.988464 | 956.497870 | 1894.961915 | 947.984596 | 1893.977899 | 947.492588 | L | 621.335487 | 311.171382 | 604.308938 | 302.658107 | 603.324922 | 302.166099 | 5 |
| 16 | 2059.056878 | 1030.032077 | 2042.030329 | 1021.518803 | 2041.046313 | 1021.026794 | F | ***508.251423*** | 254.629350 | 491.224874 | 246.116075 | 490.240858 | 245.624067 | 4 |
| 17 | 2188.099471 | 1094.553373 | 2171.072922 | 1086.040099 | 2170.088906 | 1085.548091 | E | 361.183009 | 181.095142 | 344.156460 | 172.581868 | 343.172444 | 172.089860 | 3 |
| 18 | 2245.120935 | 1123.064105 | 2228.094386 | 1114.550831 | 2227.110370 | 1114.058823 | G | 232.140416 | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 19 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DDPDAPLQPVTPLQLFEGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.1 | 2418.225342 | 0.018270 | DDPDAPLQPVTPLQLFEGR |

**Mascot:** http://www.matrixscience.com/

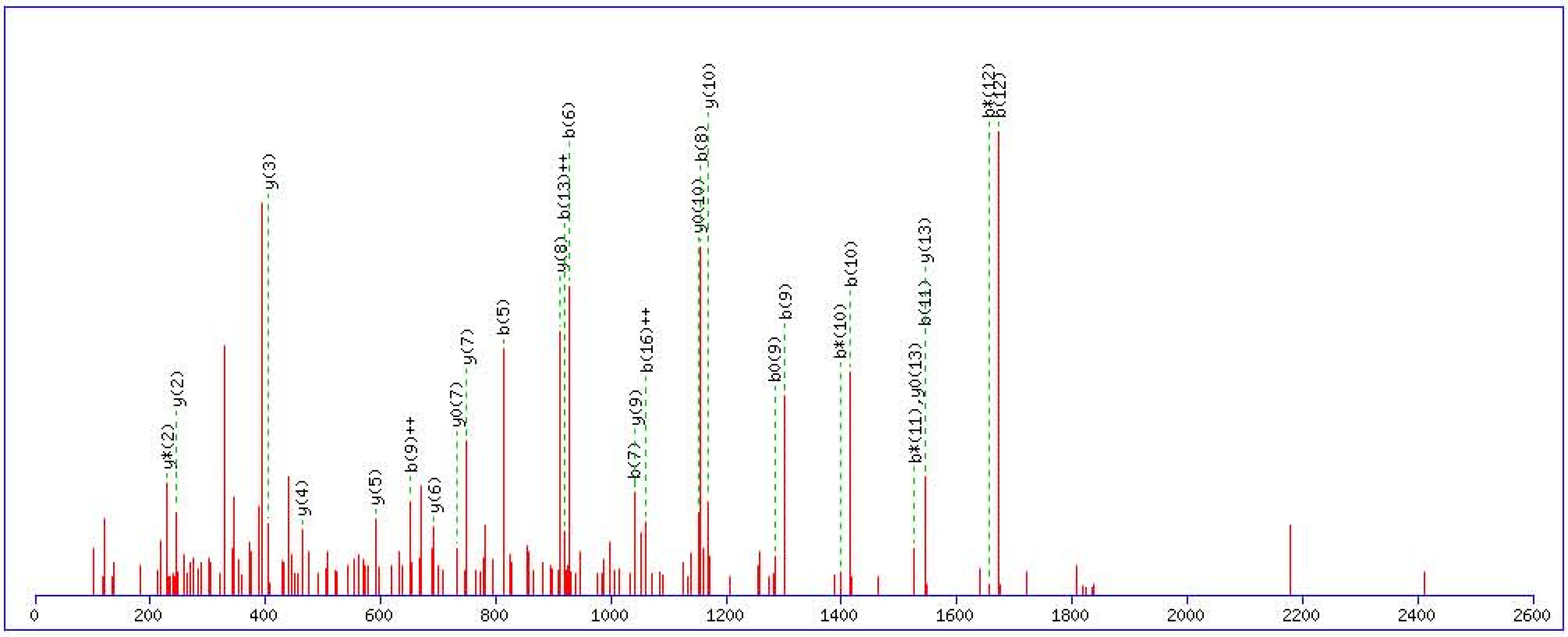
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AACAQLNDFLQEYGTQGCQV**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

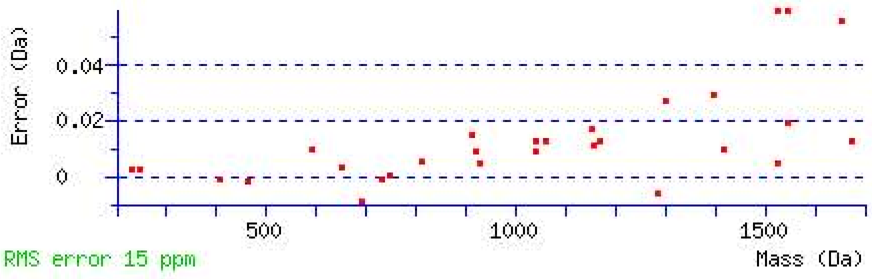
Match to Query 57447: 2583.179442 from(862.067090,3+) rtinseconds(2758) index(57495)
Title: Locus:1.1.1.1574.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

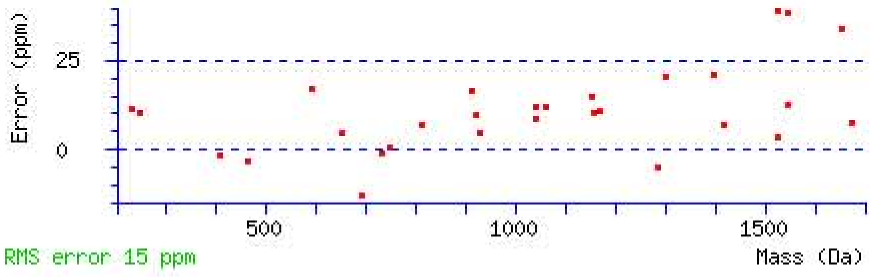
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2583.155624
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 4.4e-005
Matches : 29/194 fragment ions using 54 most intense peaks   (help)
```

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 20 |
| 2 | 143.081504 | 72.044390 | | | | | A | 2513.125782 | 1257.066529 | 2496.099233 | 1248.553254 | 2495.115217 | 1248.061246 | 19 |
| 3 | 303.112153 | 152.059714 | | | | | C | 2442.088668 | 1221.547972 | 2425.062119 | 1213.034697 | 2424.078103 | 1212.542689 | 18 |
| 4 | 374.149267 | 187.578271 | | | | | A | 2282.058019 | 1141.532647 | 2265.031470 | 1133.019373 | 2264.047454 | 1132.527365 | 17 |
| 5 | ***813.374593*** | 407.190935 | 796.348044 | 398.677660 | | | Q | 2211.020905 | 1106.014090 | 2193.994356 | 1097.500816 | 2193.010340 | 1097.008808 | 16 |
| 6 | ***926.458657*** | 463.732967 | 909.432108 | 455.219692 | | | L | 1771.795579 | 886.401428 | 1754.769030 | 877.888153 | 1753.785014 | 877.396145 | 15 |
| 7 | ***1040.501584*** | 520.754430 | 1023.475035 | 512.241155 | | | N | 1658.711515 | 829.859396 | 1641.684966 | 821.346121 | 1640.700950 | 820.854113 | 14 |
| 8 | ***1155.528527*** | 578.267902 | 1138.501978 | 569.754627 | 1137.517962 | 569.262619 | D | ***1544.668588*** | 772.837932 | 1527.642039 | 764.324658 | 1526.658023 | 763.832650 | 13 |
| 9 | ***1302.596941*** | **651.802109** | 1285.570392 | 643.288834 | 1284.586376 | 642.796826 | F | 1429.641645 | 715.324460 | 1412.615096 | 706.811186 | 1411.631080 | 706.319178 | 12 |
| 10 | ***1415.681005*** | 708.344141 | 1398.654456 | 699.830866 | 1397.670440 | 699.338858 | L | 1282.573231 | 641.790253 | 1265.546682 | 633.276979 | 1264.562666 | 632.784971 | 11 |
| 11 | ***1543.739583*** | 772.373430 | 1526.713034 | 763.860155 | 1525.729018 | 763.368147 | Q | ***1169.489167*** | 585.248222 | 1152.462618 | 576.734947 | 1151.478602 | 576.242939 | 10 |
| 12 | ***1672.782176*** | 836.894726 | 1655.755627 | 828.381452 | 1654.771611 | 827.889444 | E | ***1041.430589*** | 521.218932 | 1024.404040 | 512.705658 | 1023.420024 | 512.213650 | 9 |
| 13 | 1835.845505 | **918.426391** | 1818.818956 | 909.913116 | 1817.834940 | 909.421108 | Y | ***912.387996*** | 456.697636 | 895.361447 | 448.184361 | 894.377431 | 447.692353 | 8 |
| 14 | 1892.866969 | 946.937123 | 1875.840420 | 938.423848 | 1874.856404 | 937.931840 | G | ***749.324667*** | 375.165971 | 732.298118 | 366.652697 | 731.314102 | 366.160689 | 7 |
| 15 | 1993.914648 | 997.460962 | 1976.888099 | 988.947688 | 1975.904083 | 988.455680 | T | ***692.303203*** | 346.655239 | 675.276654 | 338.141965 | 674.292638 | 337.649957 | 6 |
| 16 | 2121.973226 | **1061.490251** | 2104.946677 | 1052.976976 | 2103.962661 | 1052.484968 | Q | ***591.255524*** | 296.131400 | 574.228975 | 287.618125 | | | 5 |
| 17 | 2178.994690 | 1090.000983 | 2161.968141 | 1081.487708 | 2160.984125 | 1080.995700 | G | ***463.196946*** | 232.102111 | 446.170397 | 223.588836 | | | 4 |
| 18 | 2339.025339 | 1170.016307 | 2321.998790 | 1161.503033 | 2321.014774 | 1161.011025 | C | ***406.175482*** | 203.591379 | 389.148933 | 195.078104 | | | 3 |
| 19 | 2467.083917 | 1234.045596 | 2450.057368 | 1225.532322 | 2449.073352 | 1225.040314 | Q | ***246.144833*** | 123.576054 | 229.118284 | 115.062780 | | | 2 |
| 20 | | | | | | | V | 118.086255 | 59.546765 | | | | | 1 |





NCBI **BLAST** search of AACAQLNDFLQEYGTQGCQV
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.1 | 2583.155624 | 0.023818 | AACAQLNDFLQEYGTQGCQV |
| 16.9 | 2583.155624 | 0.023818 | AACAQLNDFLQEYGTQGCQV |

**Mascot:** http://www.matrixscience.com/

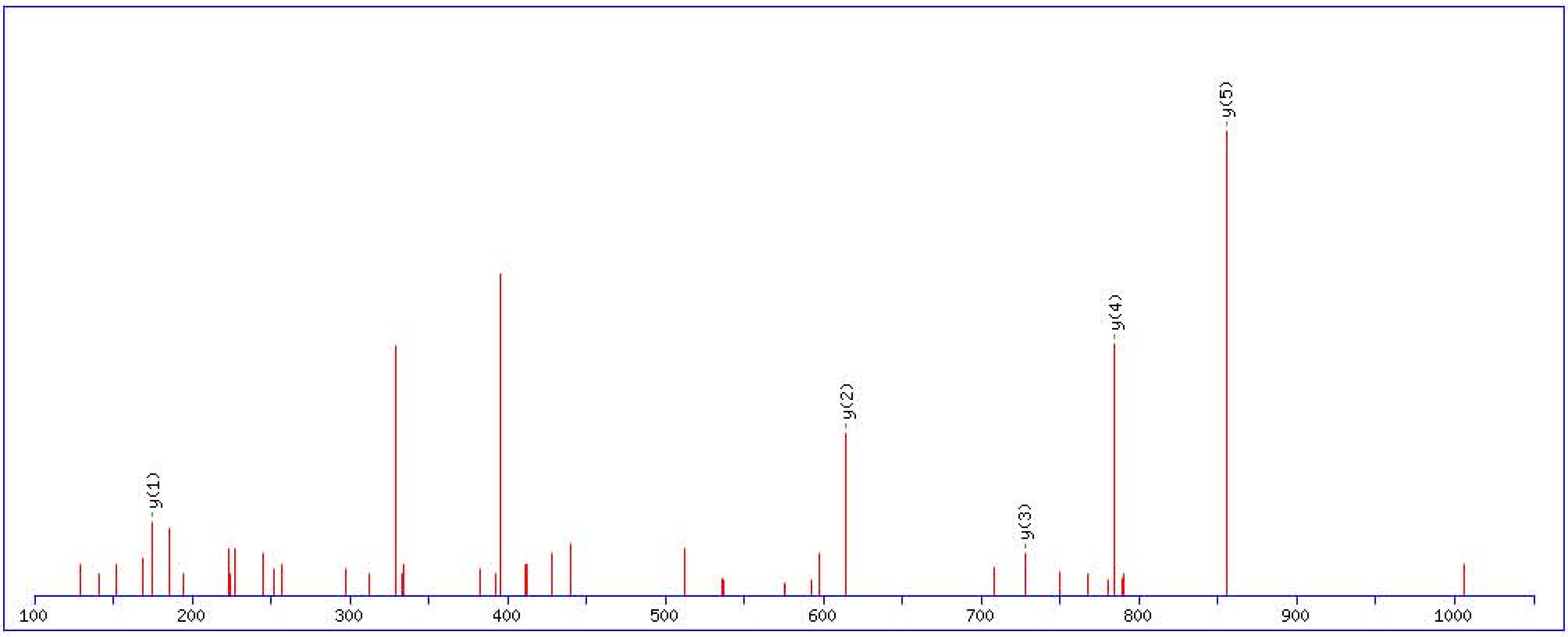
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GQAGLQR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

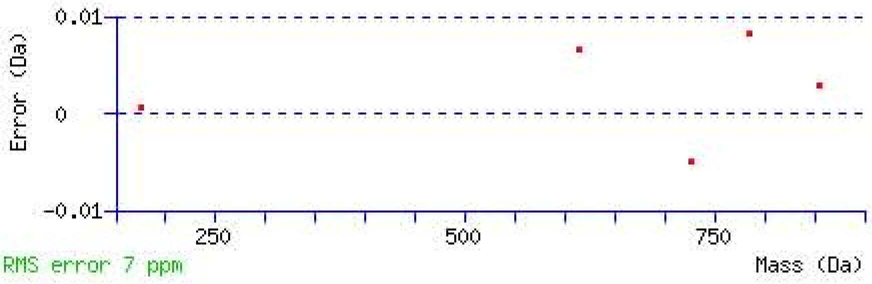
Match to Query 17300: 1039.555588 from(520.785070,2+) rtinseconds(1467) index(49286)
Title: Locus:1.1.1.1126.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

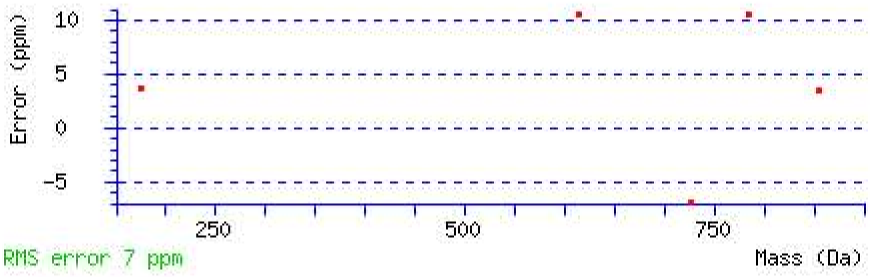
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1039.559677
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.0068
Matches : 5/46 fragment ions using 9 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | G | | | | | 7 |
| 2 | 186.087318 | 93.547297 | 169.060769 | 85.034023 | Q | 983.545498 | 492.276387 | 966.518949 | 483.763113 | 6 |
| 3 | 257.124432 | 129.065854 | 240.097883 | 120.552580 | A | ***855.486920*** | 428.247098 | 838.460371 | 419.733824 | 5 |
| 4 | 314.145896 | 157.576586 | 297.119347 | 149.063312 | G | ***784.449806*** | 392.728541 | 767.423257 | 384.215267 | 4 |
| 5 | 427.229960 | 214.118618 | 410.203411 | 205.605344 | L | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | 3 |
| 6 | 866.455286 | 433.731281 | 849.428737 | 425.218007 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | 2 |
| 7 | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | 1 |





NCBI **BLAST** search of GQAGLQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.5 | 1039.559677 | -0.004089 | GQAGLQR |
| 19.5 | 1039.559677 | -0.004089 | GQQIQR |
| 9.5 | 1039.559677 | -0.004089 | KGGPSQR |
| 7.8 | 1039.541061 | 0.014527 | GQGDLLQPGR |
| 5.5 | 1039.552277 | 0.003311 | QRAALDGGPR |
| 5.2 | 1039.548431 | 0.007157 | SPEIQR |
| 3.2 | 1039.541046 | 0.014542 | NATTAPNPVR |
| 1.8 | 1039.563522 | -0.007934 | ARRGGDGVPR |

**Mascot:** http://www.matrixscience.com/

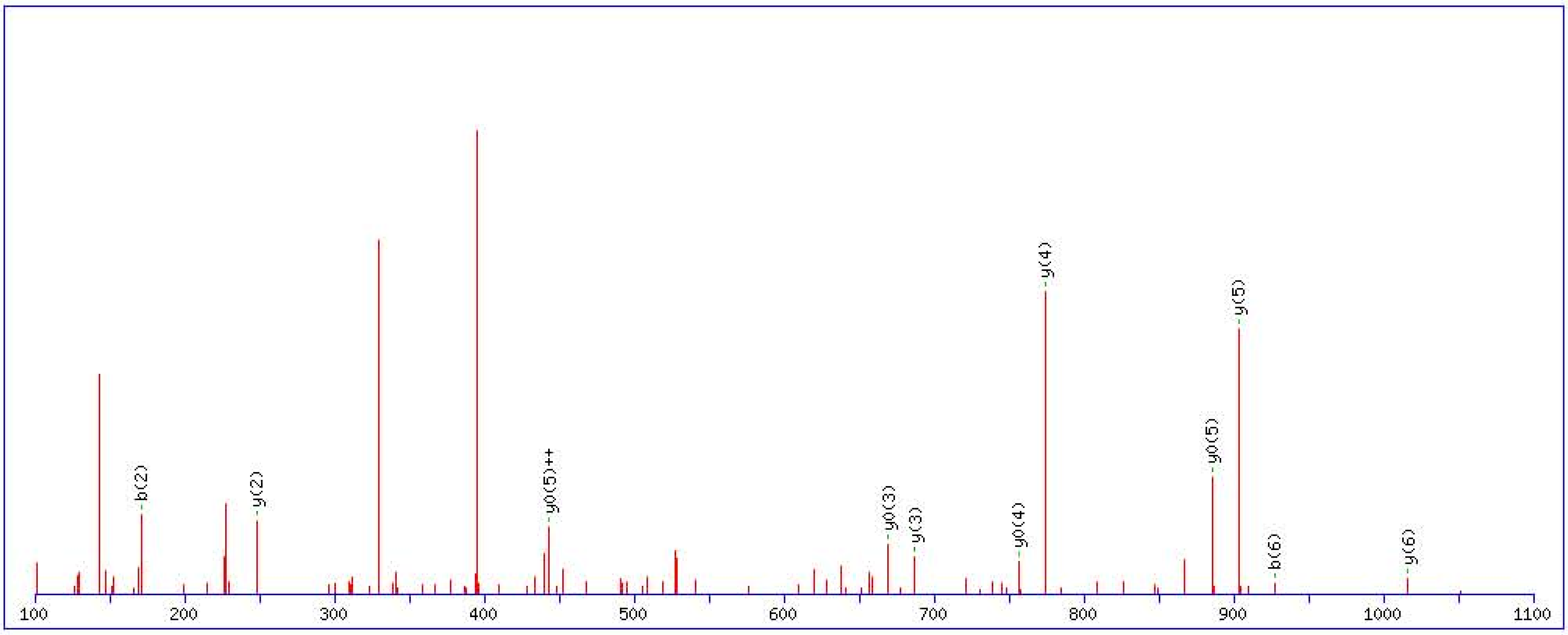
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GLESQTK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

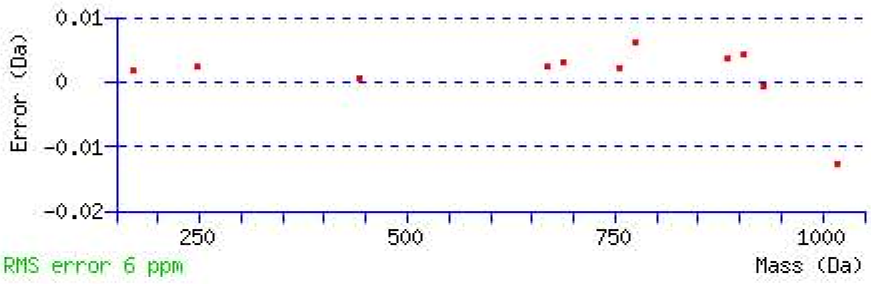
Match to Query 18125: 1072.558368 from(537.286460,2+) rtinseconds(1491) index(49479)
Title: Locus:1.1.1.1134.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

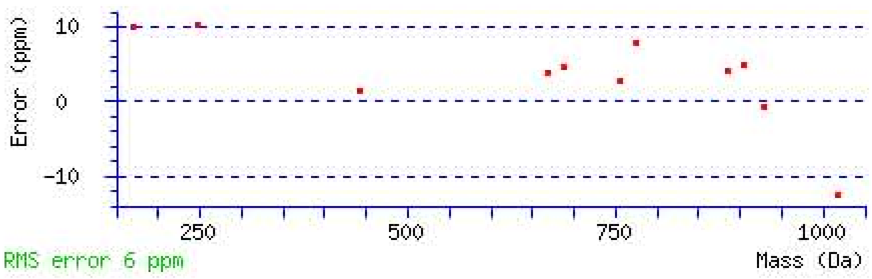
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1072.558670
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.011
Matches : 11/58 fragment ions using 20 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 7 |
| 2 | **171.112804** | 86.060040 | | | | | L | ***1016.544494*** | 508.775885 | 999.517945 | 500.262611 | 998.533929 | 499.770603 | 6 |
| 3 | 300.155397 | 150.581336 | | | 282.144832 | 141.576054 | E | ***903.460430*** | 452.233853 | 886.433881 | 443.720579 | 885.449865 | 443.228571 | 5 |
| 4 | 387.187425 | 194.097351 | | | 369.176860 | 185.092068 | S | ***774.417837*** | 387.712557 | 757.391288 | 379.199282 | 756.407272 | 378.707274 | 4 |
| 5 | 826.412751 | 413.710014 | 809.386202 | 405.196739 | 808.402186 | 404.704731 | Q | ***687.385809*** | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 6 | **927.460430** | 464.233853 | 910.433881 | 455.720579 | 909.449865 | 455.228571 | T | ***248.160483*** | 124.583879 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 7 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GLESQTK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.2 | 1072.558670 | -0.000302 | GLESQTK |
| 7.9 | 1072.558670 | -0.000302 | QSEGLTK |
| 7.2 | 1072.558670 | -0.000302 | LGECPAVLSK |
| 7.0 | 1072.551254 | 0.007114 | KEAPRDETK |
| 3.8 | 1072.551285 | 0.007083 | GPRTTEPSTK |
| 0.4 | 1072.566559 | -0.008191 | VQIHFGGSTK |
| 0.3 | 1072.544739 | 0.013629 | LGEPQARMR |

**Mascot:** http://www.matrixscience.com/

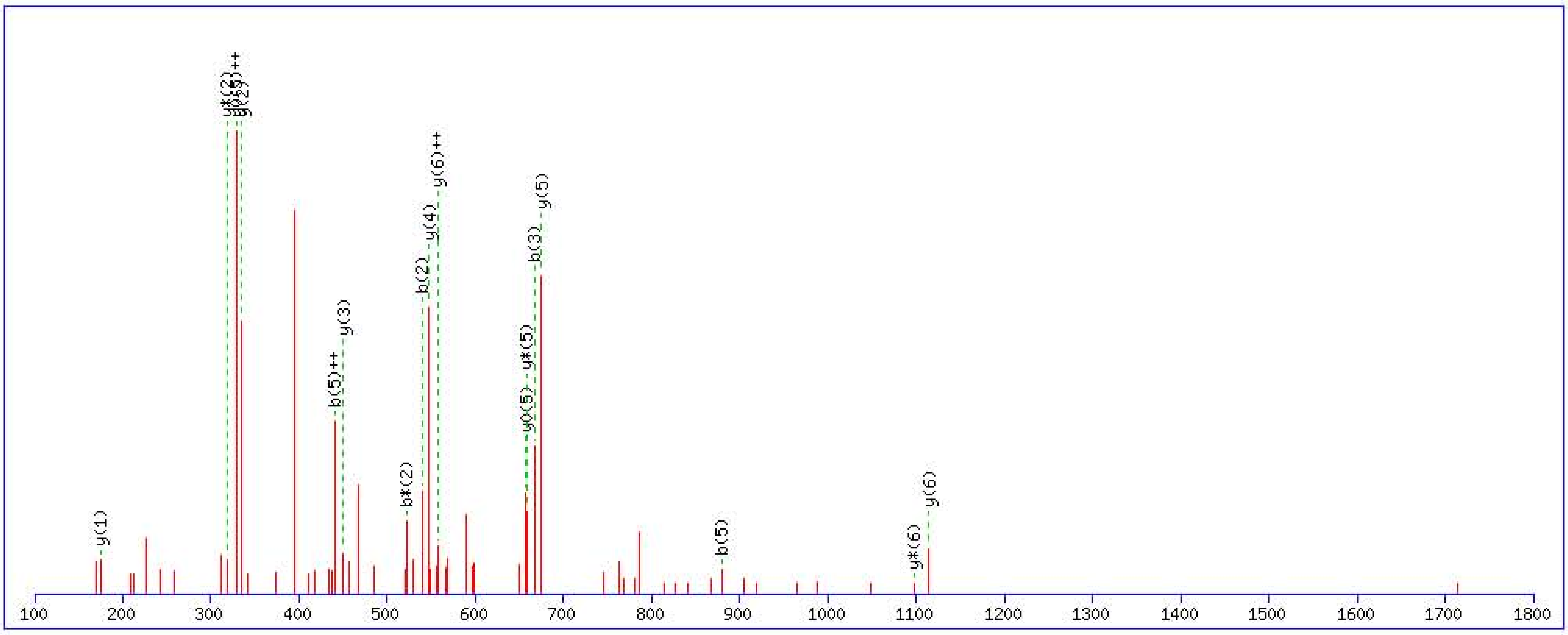
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VQQPDCR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

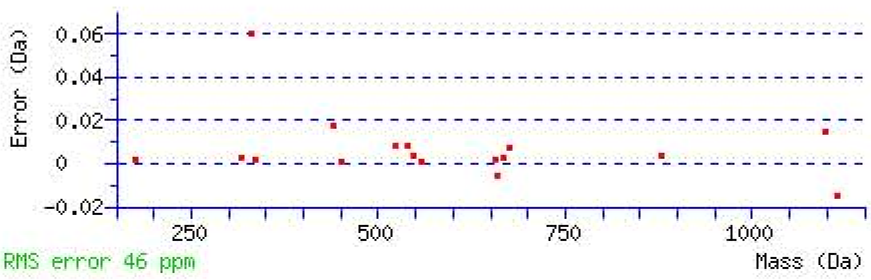
Match to Query 23594: 1212.574068 from(607.294310,2+) rtinseconds(1319) index(48351)
Title: Locus:1.1.1.1074.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

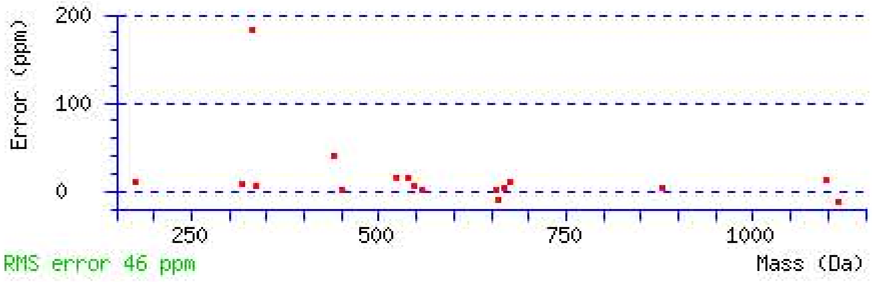
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1212.574356
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.0052
Matches : 17/58 fragment ions using 35 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 7 |
| 2 | **539.301016** | 270.154146 | 522.274467 | 261.640872 | | | Q | ***1114.513212*** | 557.760244 | 1097.486663 | 549.246970 | 1096.502647 | 548.754962 | 6 |
| 3 | **667.359594** | 334.183435 | 650.333045 | 325.670161 | | | Q | ***675.287886*** | 338.147581 | 658.261337 | 329.634307 | 657.277321 | 329.142299 | 5 |
| 4 | 764.412358 | 382.709817 | 747.385809 | 374.196543 | | | P | ***547.229308*** | 274.118292 | 530.202759 | 265.605018 | 529.218743 | 265.113010 | 4 |
| 5 | **879.439301** | 440.223289 | 862.412752 | 431.710014 | 861.428736 | 431.218006 | D | ***450.176544*** | 225.591910 | 433.149995 | 217.078635 | 432.165979 | 216.586627 | 3 |
| 6 | 1039.469950 | 520.238613 | 1022.443401 | 511.725339 | 1021.459385 | 511.233331 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VQQPDCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.6 | 1212.574356 | -0.000288 | VQQPDCR |
| 12.6 | 1212.574356 | -0.000288 | VQQPDCR |
| 5.2 | 1212.592102 | -0.018034 | VQEDQQR |

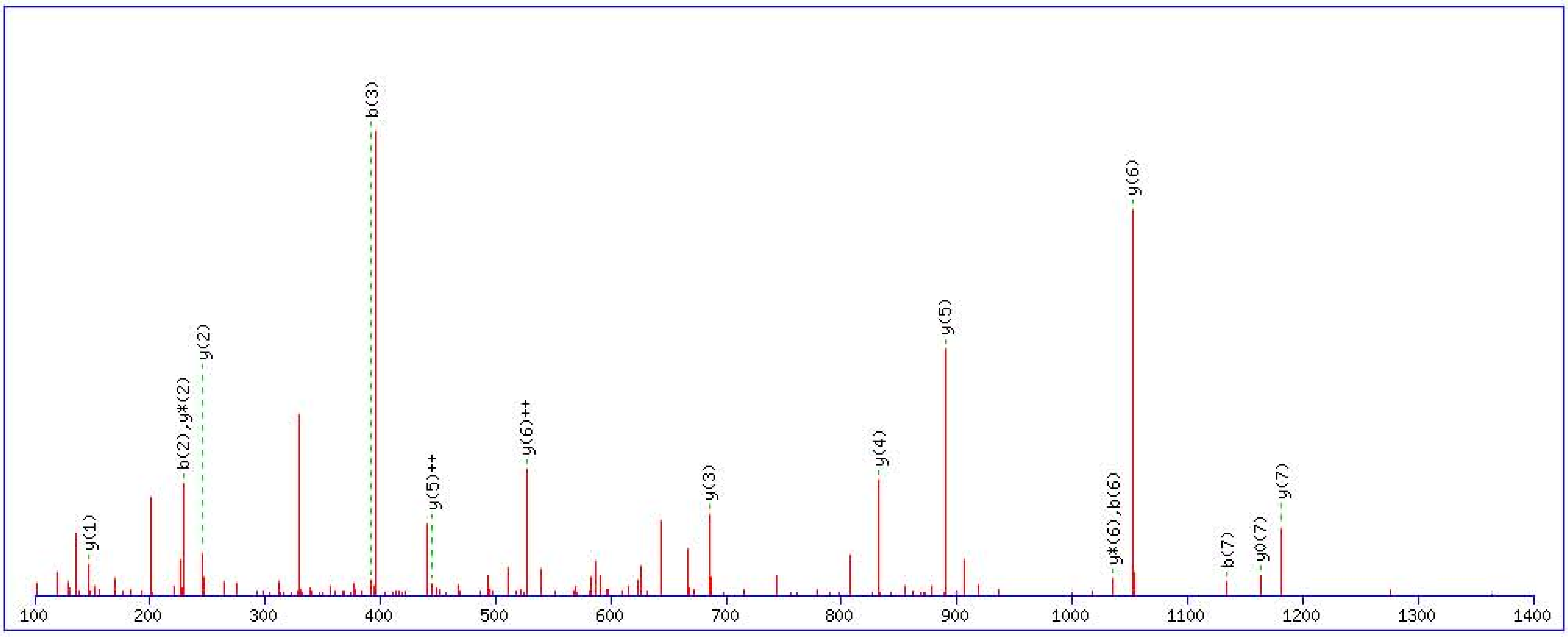
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VEYGFQVK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

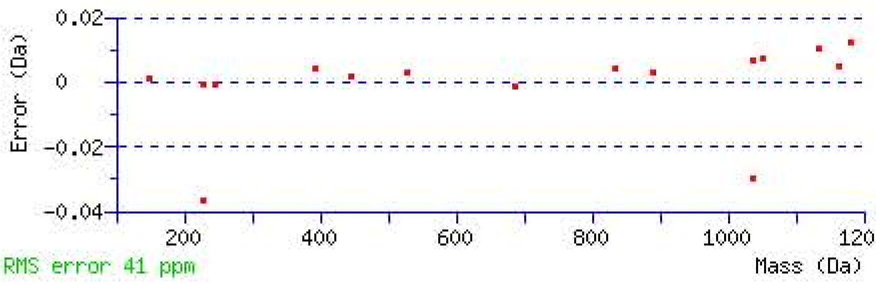
Match to Query 25584: 1279.667348 from(640.840950,2+) rtinseconds(2022) index(53086)
Title: Locus:1.1.1.1319.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

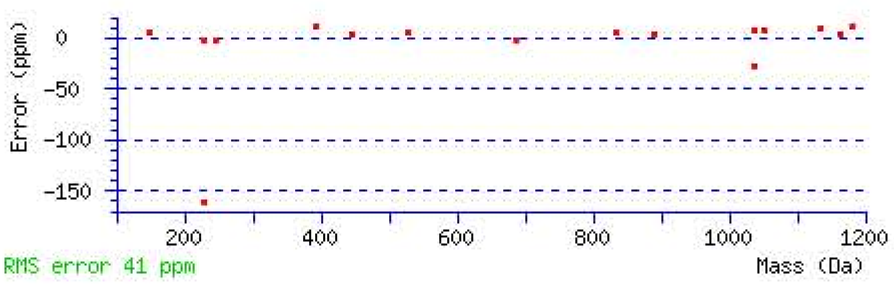
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1279.663483
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 33 **Expect:** 0.0029
**Matches :** 16/60 fragment ions using 34 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | **229.118283** | 115.062780 | | | 211.107718 | 106.057497 | E | ***1181.602344*** | 591.304810 | 1164.575795 | 582.791536 | 1163.591779 | 582.299528 | 7 |
| 3 | **392.181612** | 196.594444 | | | 374.171047 | 187.589162 | Y | ***1052.559751*** | 526.783514 | 1035.533202 | 518.270239 | | | 6 |
| 4 | 449.203076 | 225.105176 | | | 431.192511 | 216.099894 | G | ***889.496422*** | 445.251849 | 872.469873 | 436.738575 | | | 5 |
| 5 | 596.271490 | 298.639383 | | | 578.260925 | 289.634101 | F | ***832.474958*** | 416.741117 | 815.448409 | 408.227843 | | | 4 |
| 6 | **1035.496816** | 518.252046 | 1018.470267 | 509.738772 | 1017.486251 | 509.246764 | Q | ***685.406544*** | 343.206910 | 668.379995 | 334.693636 | | | 3 |
| 7 | **1134.565230** | 567.786253 | 1117.538681 | 559.272979 | 1116.554665 | 558.780971 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VEYGFQVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.1 | 1279.663483 | 0.003865 | VEYGFQVK |
| 5.9 | 1279.681229 | -0.013881 | EVTVKEWYVK |
| 5.9 | 1279.663483 | 0.003865 | QFVGYLDK |
| 5.7 | 1279.659470 | 0.007878 | VCSFGKQVVEK |
| 4.0 | 1279.677216 | -0.009868 | VFKTEDTQGKK |
| 3.8 | 1279.684601 | -0.017253 | MSASAVFILDVK |
| 2.0 | 1279.666824 | 0.000524 | VKEWSLMIMK |

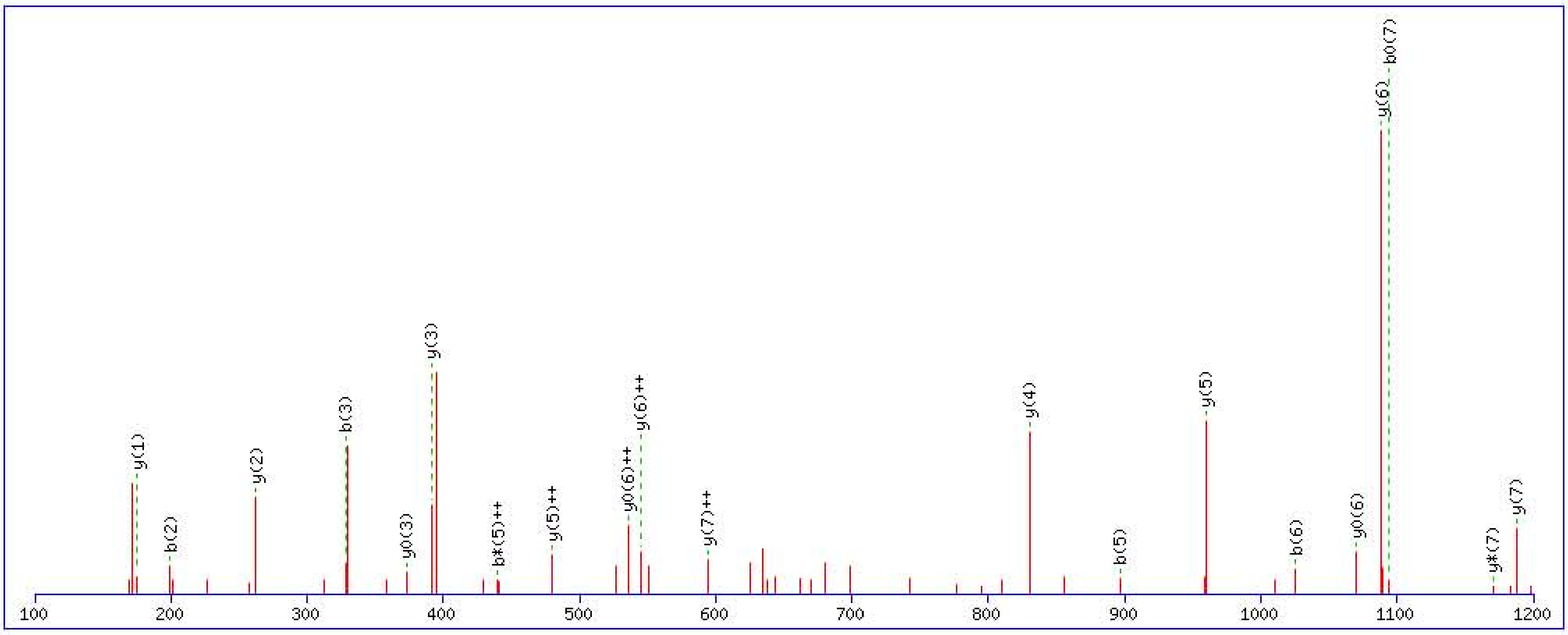
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VVEEQESR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

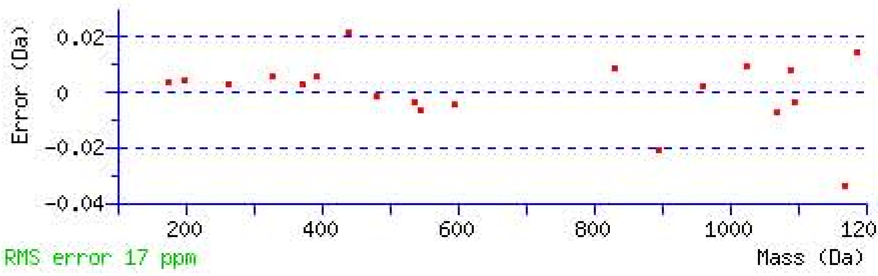
Match to Query 25907: 1285.634328 from(643.824440,2+) rtinseconds(1393) index(48807)
Title: Locus:1.1.1.1100.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

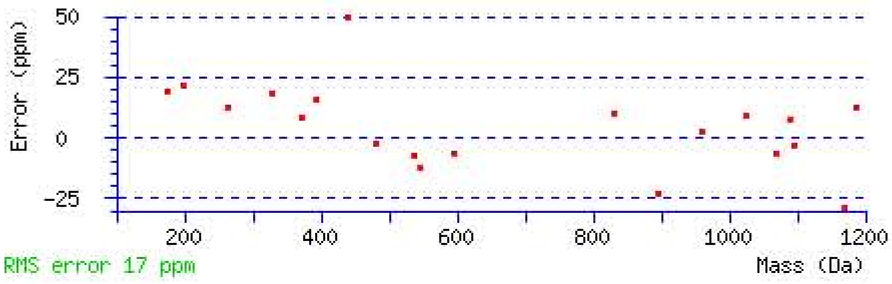
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1285.633621
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.00057
Matches : 20/70 fragment ions using 41 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | **199.144104** | 100.075690 | | | | | V | ***1187.572499*** | 594.289888 | 1170.545950 | 585.776613 | 1169.561934 | 585.284605 | 7 |
| 3 | **328.186697** | 164.596987 | | | 310.176132 | 155.591704 | E | ***1088.504085*** | 544.755681 | 1071.477536 | 536.242406 | 1070.493520 | 535.750398 | 6 |
| 4 | 457.229290 | 229.118283 | | | 439.218725 | 220.113001 | E | ***959.461492*** | 480.234384 | 942.434943 | 471.721110 | 941.450927 | 471.229102 | 5 |
| 5 | **896.454616** | 448.730946 | 879.428067 | 440.217672 | 878.444051 | 439.725664 | Q | ***830.418899*** | 415.713088 | 813.392350 | 407.199813 | 812.408334 | 406.707805 | 4 |
| 6 | **1025.497209** | 513.252243 | 1008.470660 | 504.738968 | 1007.486644 | 504.246960 | E | ***391.193573*** | 196.100425 | 374.167024 | 187.587150 | 373.183008 | 187.095142 | 3 |
| 7 | 1112.529237 | 556.768257 | 1095.502688 | 548.254982 | 1094.518672 | 547.762974 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VVEEQESR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.8 | 1285.633621 | 0.000707 | VVEEQESR |
| 3.2 | 1285.644867 | -0.010539 | DTLHSAMAVVSR |
| 2.3 | 1285.637451 | -0.003123 | TAPASGSAPRESR |

**Mascot:** http://www.matrixscience.com/

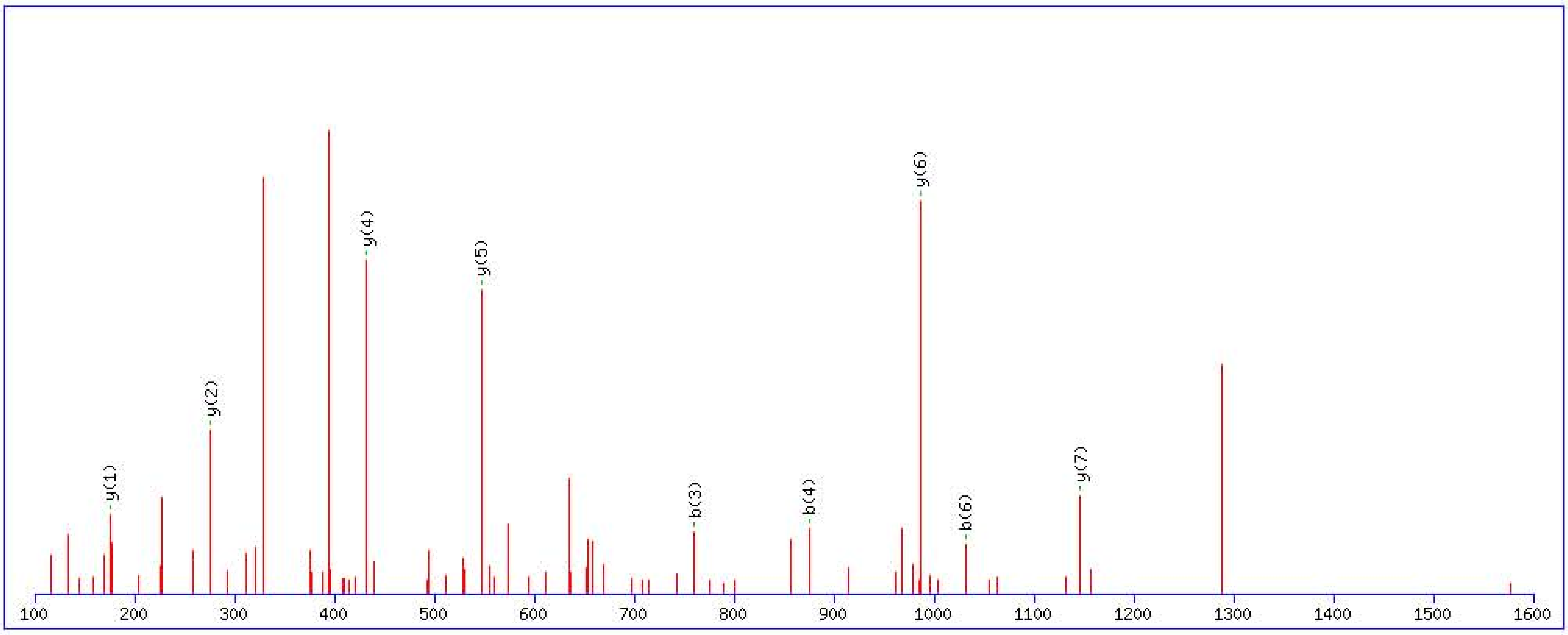
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **CCQDGVTR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

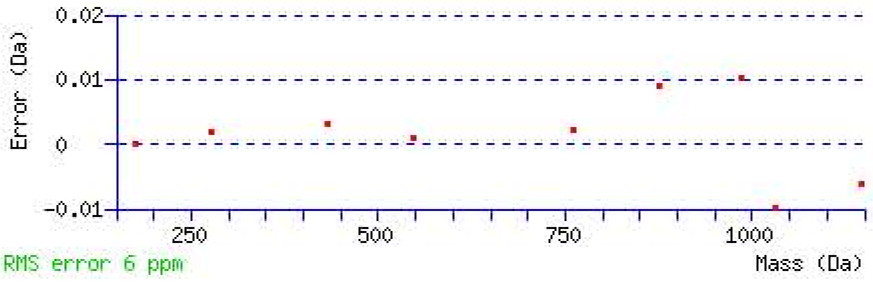
Match to Query 26305: 1305.566628 from(653.790590,2+) rtinseconds(1405) index(48858)
Title: Locus:1.1.1.1104.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

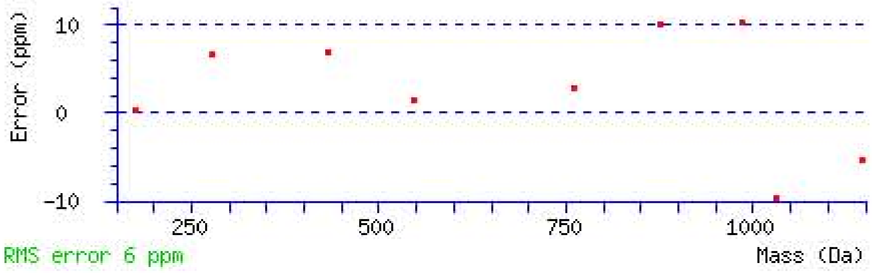
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1305.562820
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 7e-005
Matches : 9/72 fragment ions using 12 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 8 |
| 2 | 321.068574 | 161.037925 | | | | | C | ***1146.539427*** | 573.773352 | 1129.512878 | 565.260077 | 1128.528862 | 564.768069 | 7 |
| 3 | **760.293900** | 380.650588 | 743.267351 | 372.137314 | | | Q | ***986.508778*** | 493.758027 | 969.482229 | 485.244753 | 968.498213 | 484.752745 | 6 |
| 4 | **875.320843** | 438.164060 | 858.294294 | 429.650785 | 857.310278 | 429.158777 | D | ***547.283452*** | 274.145364 | 530.256903 | 265.632090 | 529.272887 | 265.140082 | 5 |
| 5 | 932.342307 | 466.674792 | 915.315758 | 458.161517 | 914.331742 | 457.669509 | G | ***432.256509*** | 216.631893 | 415.229960 | 208.118618 | 414.245944 | 207.626610 | 4 |
| 6 | **1031.410721** | 516.208999 | 1014.384172 | 507.695724 | 1013.400156 | 507.203716 | V | 375.235045 | 188.121161 | 358.208496 | 179.607886 | 357.224480 | 179.115878 | 3 |
| 7 | 1132.458400 | 566.732838 | 1115.431851 | 558.219564 | 1114.447835 | 557.727556 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CCQDGVTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.7 | 1305.562820 | 0.003808 | CCQDGVTR |
| 6.0 | 1305.577194 | -0.010566 | CDAGWLADGSVR |
| 5.7 | 1305.562805 | 0.003823 | CCTSPSQR |
| 0.6 | 1305.583679 | -0.017051 | EQEPDFEEKR |

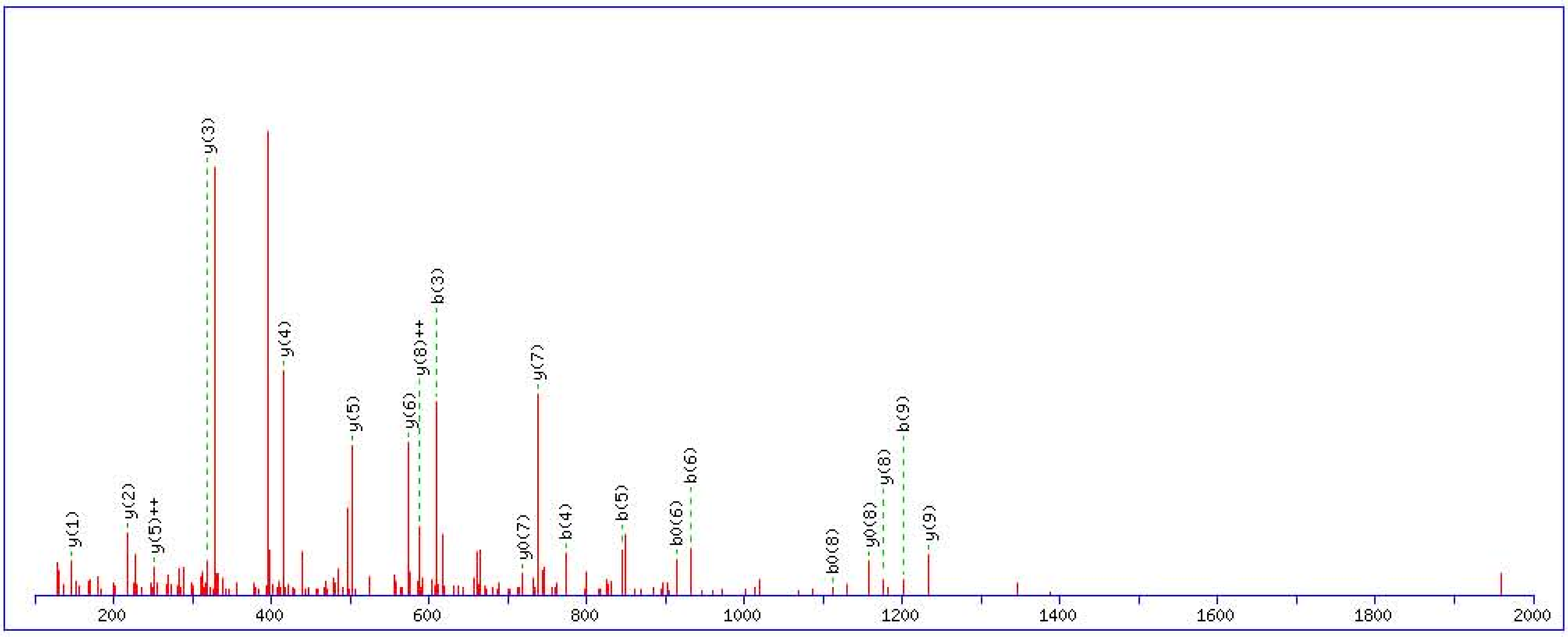
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LGQYASPTAK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

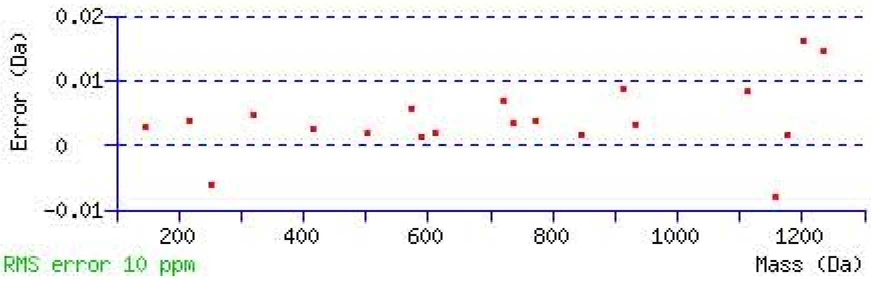
Match to Query 27133: 1345.709368 from(673.861960,2+) rtinseconds(1630) index(50468)
Title: Locus:1.1.1.1183.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

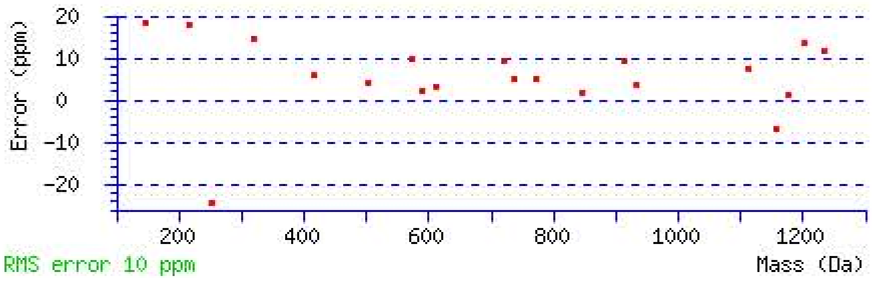
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1345.706390
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 63  Expect: 1.4e-005
Matches : 20/90 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 10 |
| 2 | 171.112804 | 86.060040 | | | | | G | ***1233.629622*** | 617.318449 | 1216.603073 | 608.805175 | 1215.619057 | 608.313167 | 9 |
| 3 | **610.338130** | 305.672703 | 593.311581 | 297.159429 | | | Q | ***1176.608158*** | 588.807717 | 1159.581609 | 580.294443 | 1158.597593 | 579.802435 | 8 |
| 4 | **773.401459** | 387.204368 | 756.374910 | 378.691093 | | | Y | ***737.382832*** | 369.195054 | 720.356283 | 360.681780 | 719.372267 | 360.189772 | 7 |
| 5 | **844.438573** | 422.722925 | 827.412024 | 414.209650 | | | A | ***574.319503*** | 287.663389 | 557.292954 | 279.150115 | 556.308938 | 278.658107 | 6 |
| 6 | **931.470601** | 466.238939 | 914.444052 | 457.725664 | 913.460036 | 457.233656 | S | ***503.282389*** | 252.144832 | 486.255840 | 243.631558 | 485.271824 | 243.139550 | 5 |
| 7 | 1028.523365 | 514.765321 | 1011.496816 | 506.252046 | 1010.512800 | 505.760038 | P | ***416.250361*** | 208.628818 | 399.223812 | 200.115544 | 398.239796 | 199.623536 | 4 |
| 8 | 1129.571044 | 565.289160 | 1112.544495 | 556.775886 | 1111.560479 | 556.283878 | T | ***319.197597*** | 160.102436 | 302.171048 | 151.589162 | 301.187032 | 151.097154 | 3 |
| 9 | **1200.608158** | 600.807717 | 1183.581609 | 592.294443 | 1182.597593 | 591.802435 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LGQYASPTAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.1 | 1345.706390 | 0.002978 | LGQYASPTAK |
| 14.4 | 1345.706390 | 0.002978 | LGQYDQALK |
| 13.1 | 1345.724182 | -0.014814 | LGAVPATSGPTTFK |
| 10.9 | 1345.706406 | 0.002962 | QGLYTPQTK |
| 7.0 | 1345.692474 | 0.016894 | VASCRYPALGPR |
| 6.7 | 1345.717636 | -0.008268 | QMPQPTFTLRK |
| 5.8 | 1345.727509 | -0.018141 | LGLMDNEIKVAK |
| 5.5 | 1345.727509 | -0.018141 | DKLKMEVDQLK |
| 5.4 | 1345.720108 | -0.010740 | KQEEEVSTLRK |
| 3.0 | 1345.706390 | 0.002978 | HEMTLKFPSIK |

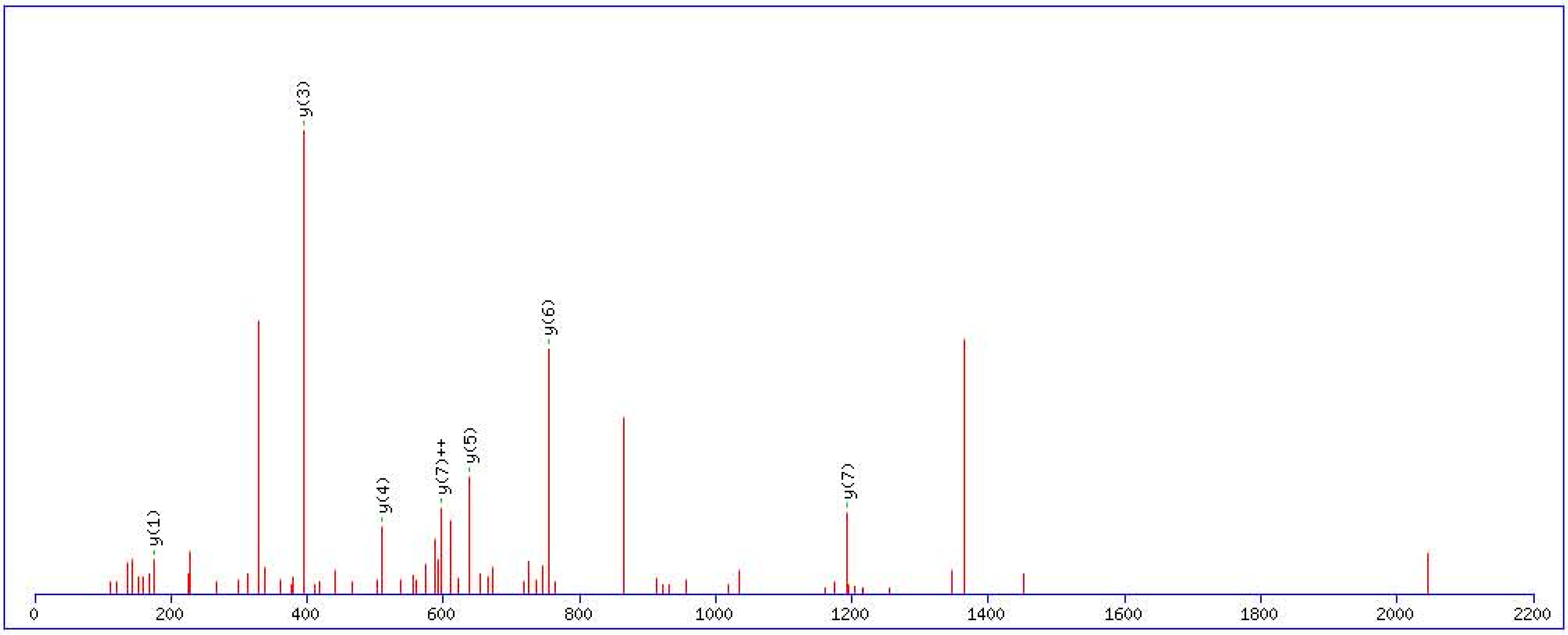
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GLQDEDGYR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

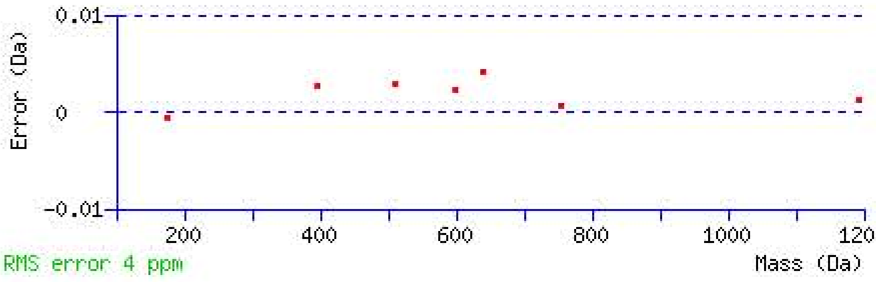
Match to Query 28904: 1362.626348 from(682.320450,2+) rtinseconds(1742) index(51102)
Title: Locus:1.1.1.1222.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

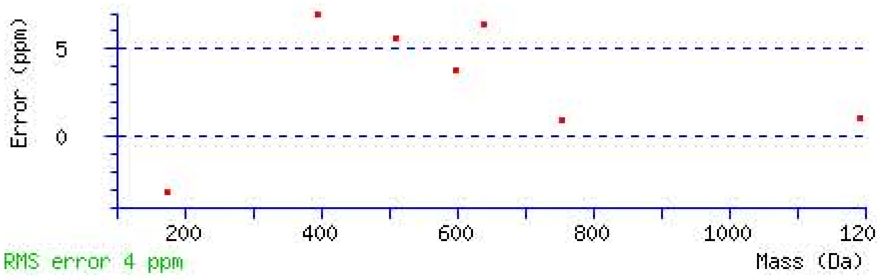
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1362.623795
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.00027
Matches : 7/80 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 9 |
| 2 | 171.112804 | 86.060040 | | | | | L | 1306.609614 | 653.808445 | 1289.583065 | 645.295171 | 1288.599049 | 644.803163 | 8 |
| 3 | 610.338130 | 305.672703 | 593.311581 | 297.159429 | | | Q | ***1193.525550*** | 597.266413 | 1176.499001 | 588.753139 | 1175.514985 | 588.261131 | 7 |
| 4 | 725.365073 | 363.186175 | 708.338524 | 354.672900 | 707.354508 | 354.180892 | D | ***754.300224*** | 377.653750 | 737.273675 | 369.140476 | 736.289659 | 368.648468 | 6 |
| 5 | 854.407666 | 427.707471 | 837.381117 | 419.194197 | 836.397101 | 418.702189 | E | ***639.273281*** | 320.140279 | 622.246732 | 311.627004 | 621.262716 | 311.134996 | 5 |
| 6 | 969.434609 | 485.220943 | 952.408060 | 476.707668 | 951.424044 | 476.215660 | D | ***510.230688*** | 255.618982 | 493.204139 | 247.105707 | 492.220123 | 246.613700 | 4 |
| 7 | 1026.456073 | 513.731675 | 1009.429524 | 505.218400 | 1008.445508 | 504.726392 | G | ***395.203745*** | 198.105511 | 378.177196 | 189.592236 | | | 3 |
| 8 | 1189.519402 | 595.263339 | 1172.492853 | 586.750065 | 1171.508837 | 586.258057 | Y | 338.182281 | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GLQDEDGYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.4 | 1362.623795 | 0.002553 | GLQDEDGYR |
| 2.4 | 1362.613251 | 0.013097 | MGAGATGRAMDGPR |
| 2.2 | 1362.623795 | 0.002553 | TGFLEIDEHMR |

**Mascot:** http://www.matrixscience.com/

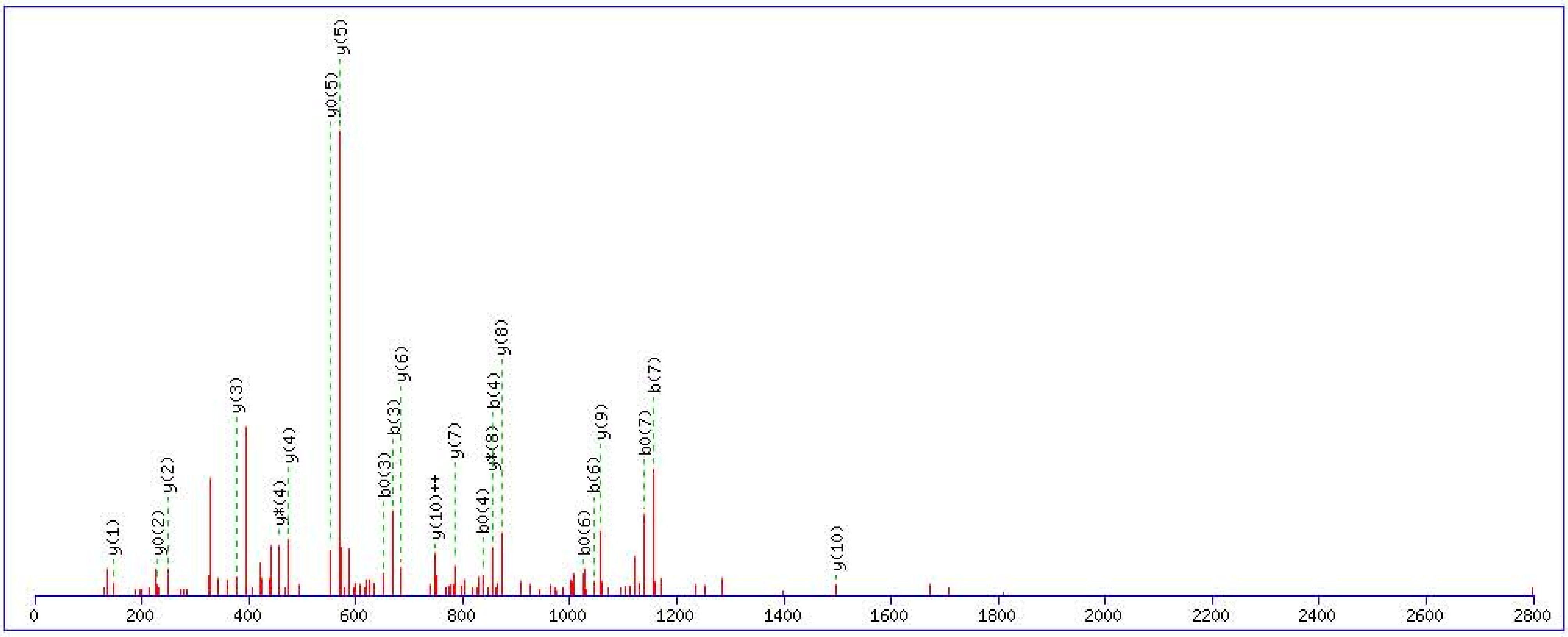
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TEQWSTLPPETK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

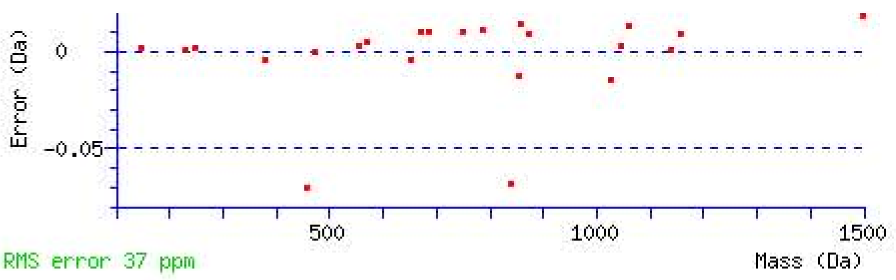
Match to Query 41020: 1726.871328 from(864.442940,2+) rtinseconds(2031) index(53160)
Title: Locus:1.1.1.1322.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

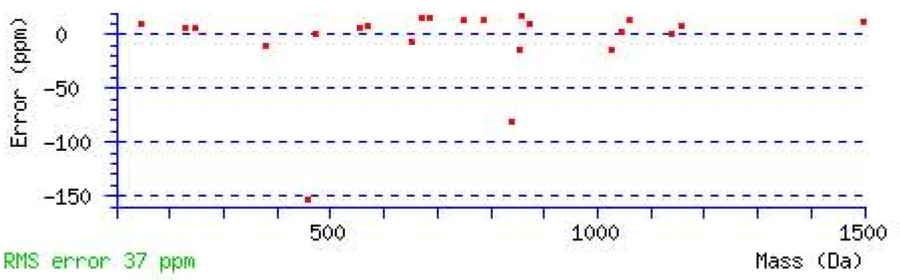
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1726.860001
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 0.00018
Matches : 23/126 fragment ions using 51 most intense peaks   (help)
```

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 12 |
| 2 | 231.097548 | 116.052412 | | | 213.086983 | 107.047130 | E | 1626.819607 | 813.913442 | 1609.793058 | 805.400167 | 1608.809042 | 804.908159 | 11 |
| 3 | **670.322874** | 335.665075 | 653.296325 | 327.151801 | 652.312309 | 326.659793 | Q | ***1497.777014*** | 749.392145 | 1480.750465 | 740.878871 | 1479.766449 | 740.386863 | 10 |
| 4 | **856.402187** | 428.704732 | 839.375638 | 420.191457 | 838.391622 | 419.699449 | W | ***1058.551688*** | 529.779482 | 1041.525139 | 521.266208 | 1040.541123 | 520.774200 | 9 |
| 5 | 943.434215 | 472.220746 | 926.407666 | 463.707471 | 925.423650 | 463.215463 | S | ***872.472375*** | 436.739826 | 855.445826 | 428.226551 | 854.461810 | 427.734543 | 8 |
| 6 | **1044.481894** | 522.744585 | 1027.455345 | 514.231311 | 1026.471329 | 513.739303 | T | ***785.440347*** | 393.223812 | 768.413798 | 384.710537 | 767.429782 | 384.218529 | 7 |
| 7 | **1157.565958** | 579.286617 | 1140.539409 | 570.773343 | 1139.555393 | 570.281334 | L | ***684.392668*** | 342.699972 | 667.366119 | 334.186698 | 666.382103 | 333.694690 | 6 |
| 8 | 1254.618722 | 627.812999 | 1237.592173 | 619.299725 | 1236.608157 | 618.807716 | P | ***571.308604*** | 286.157940 | 554.282055 | 277.644666 | 553.298039 | 277.152658 | 5 |
| 9 | 1351.671486 | 676.339381 | 1334.644937 | 667.826107 | 1333.660921 | 667.334098 | P | ***474.255840*** | 237.631558 | 457.229291 | 229.118284 | 456.245275 | 228.626276 | 4 |
| 10 | 1480.714079 | 740.860678 | 1463.687530 | 732.347403 | 1462.703514 | 731.855395 | E | ***377.203076*** | 189.105176 | 360.176527 | 180.591902 | 359.192511 | 180.099894 | 3 |
| 11 | 1581.761758 | 791.384517 | 1564.735209 | 782.871243 | 1563.751193 | 782.379235 | T | ***248.160483*** | 124.583879 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TEQWSTLPPETK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.1 | 1726.860001 | 0.011327 | TEQWSTLPPETK |
| 9.6 | 1726.849960 | 0.021368 | TERFGQGGAGPVGGQGPR |
| 6.2 | 1726.867188 | 0.004140 | KDHAEMQAVIDAKQK |
| 3.5 | 1726.871216 | 0.000112 | NLNTKLQMYFQSPK |
| 1.9 | 1726.853485 | 0.017843 | MASGHAFQPDLVK |
| 1.1 | 1726.874573 | -0.003245 | VTKNQEMMSQIKYK |

**Mascot:** http://www.matrixscience.com/

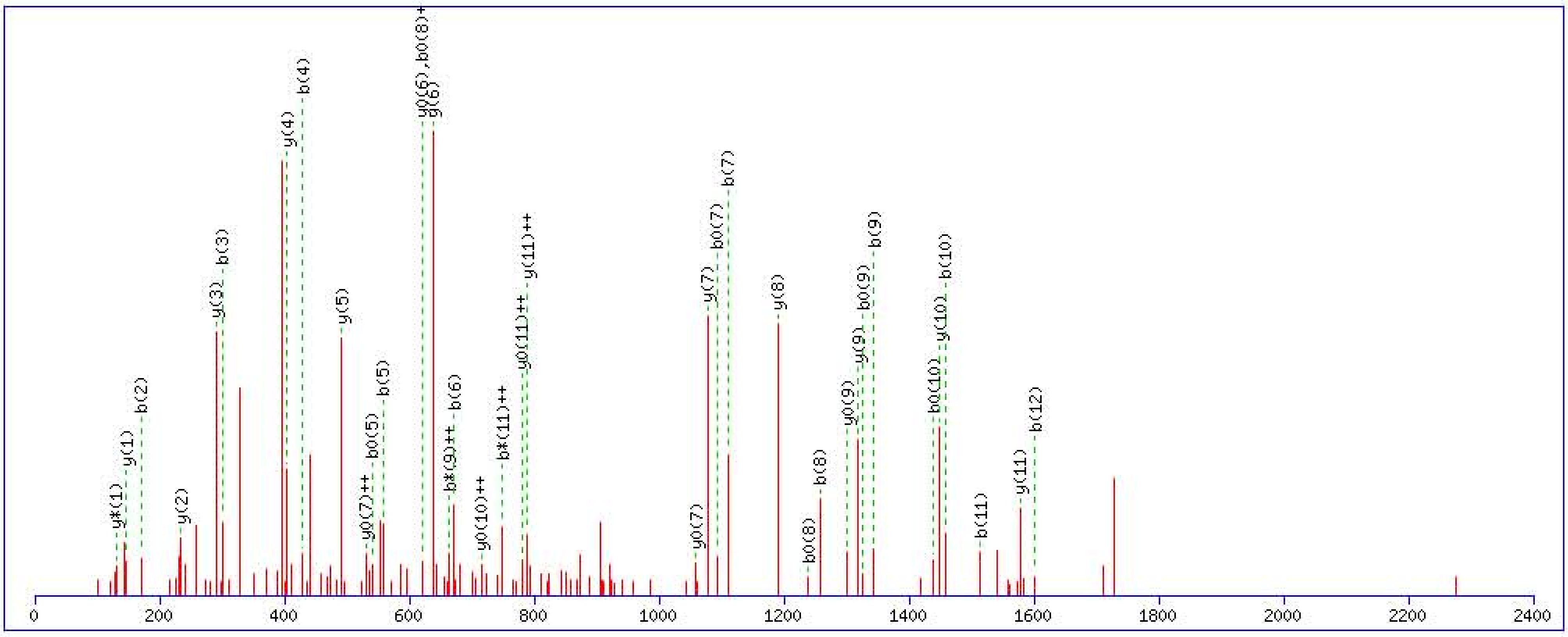
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GLEEELQFSLGSK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

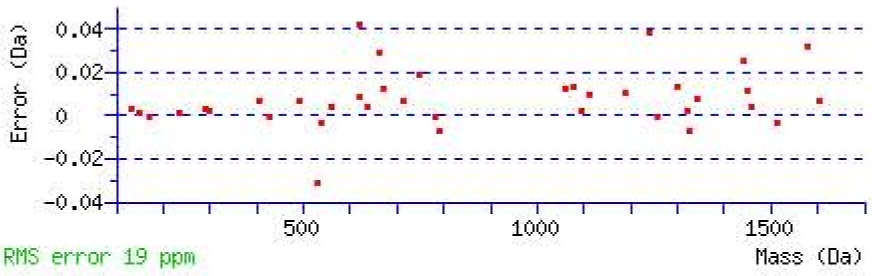
Match to Query 41586: 1746.900028 from(874.457290,2+) rtinseconds(2580) index(56406)
Title: Locus:1.1.1.1513.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●

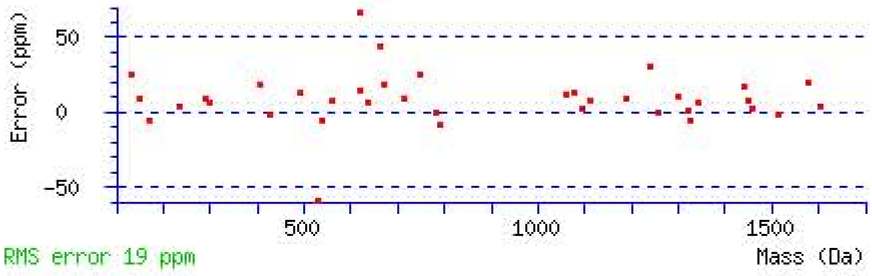


```
Monoisotopic mass of neutral peptide Mr(calc): 1746.886200
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 75  Expect: 1.9e-007
Matches : 38/126 fragment ions using 59 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 13 |
| 2 | ***171.112804*** | 86.060040 | | | | | L | 1690.872035 | 845.939656 | 1673.845486 | 837.426381 | 1672.861470 | 836.934373 | 12 |
| 3 | ***300.155397*** | 150.581336 | | | 282.144832 | 141.576054 | E | **1577.787971** | 789.397624 | 1560.761422 | 780.884349 | 1559.777406 | 780.392341 | 11 |
| 4 | ***429.197990*** | 215.102633 | | | 411.187425 | 206.097351 | E | **1448.745378** | 724.876327 | 1431.718829 | 716.363053 | 1430.734813 | 715.871045 | 10 |
| 5 | ***558.240583*** | 279.623930 | | | 540.230018 | 270.618647 | E | **1319.702785** | 660.355031 | 1302.676236 | 651.841756 | 1301.692220 | 651.349748 | 9 |
| 6 | ***671.324647*** | 336.165962 | | | 653.314082 | 327.160679 | L | **1190.660192** | 595.833734 | 1173.633643 | 587.320460 | 1172.649627 | 586.828452 | 8 |
| 7 | ***1110.549973*** | 555.778624 | 1093.523424 | 547.265350 | 1092.539408 | 546.773342 | Q | **1077.576128** | 539.291702 | 1060.549579 | 530.778428 | 1059.565563 | 530.286419 | 7 |
| 8 | ***1257.618387*** | 629.312832 | 1240.591838 | 620.799557 | 1239.607822 | 620.307549 | F | **638.350802** | 319.679039 | 621.324253 | 311.165765 | 620.340237 | 310.673757 | 6 |
| 9 | ***1344.650415*** | 672.828846 | 1327.623866 | 664.315571 | 1326.639850 | 663.823563 | S | **491.282388** | 246.144832 | 474.255839 | 237.631557 | 473.271823 | 237.139549 | 5 |
| 10 | ***1457.734479*** | 729.370878 | 1440.707930 | 720.857603 | 1439.723914 | 720.365595 | L | **404.250360** | 202.628818 | 387.223811 | 194.115543 | 386.239795 | 193.623535 | 4 |
| 11 | ***1514.755943*** | 757.881609 | 1497.729394 | 749.368335 | 1496.745378 | 748.876327 | G | **291.166296** | 146.086786 | 274.139747 | 137.573512 | 273.155731 | 137.081504 | 3 |
| 12 | ***1601.787971*** | 801.397624 | 1584.761422 | 792.884349 | 1583.777406 | 792.392341 | S | **234.144832** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 13 | | | | | | | K | **147.112804** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 19 ppm



RMS error 19 ppm

NCBI **BLAST** search of GLEEELQFSLGSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 74.7 | 1746.886200 | 0.013828 | GLEEELQFSLGSK |
| 2.9 | 1746.887558 | 0.012470 | AVQSKAFCAGGLAPGWK |
| 1.3 | 1746.918533 | -0.018505 | AKLQMTEAALALSEQK |

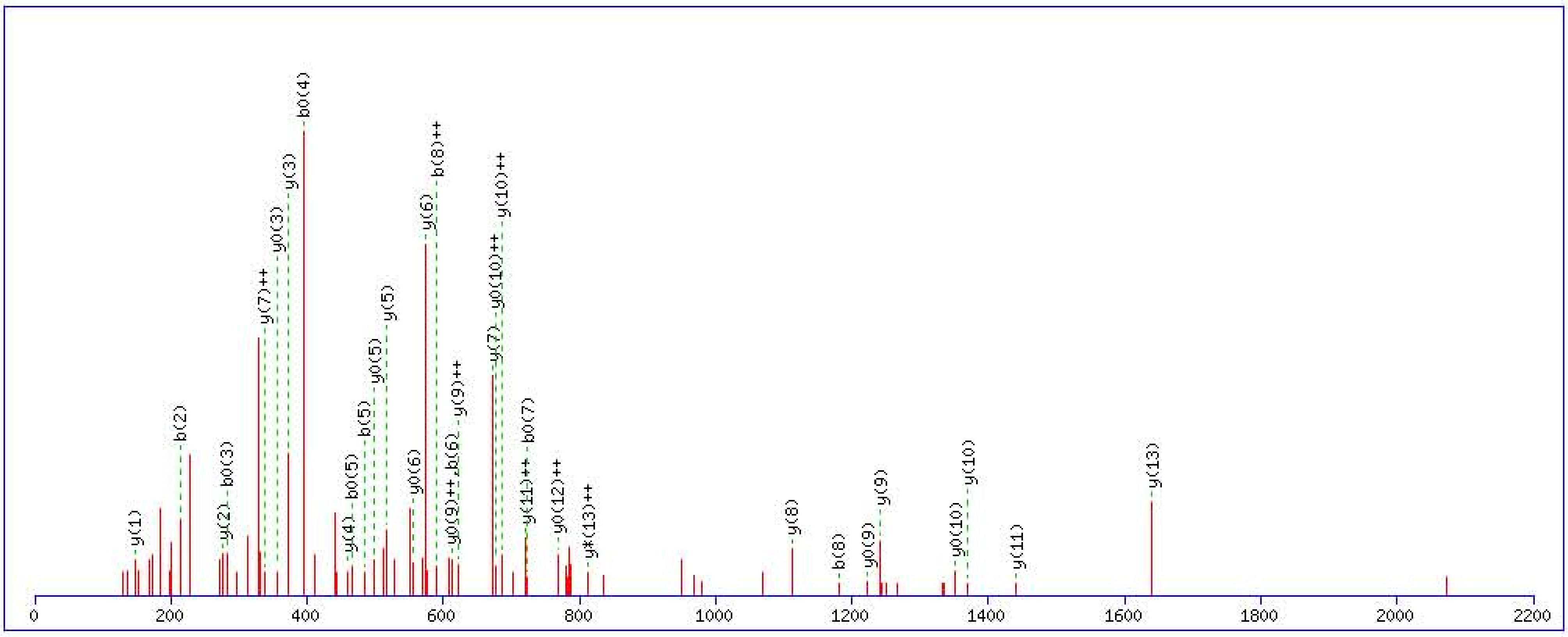
# MATRIX SCIENCE Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VLSLAQEQVGGSPEK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

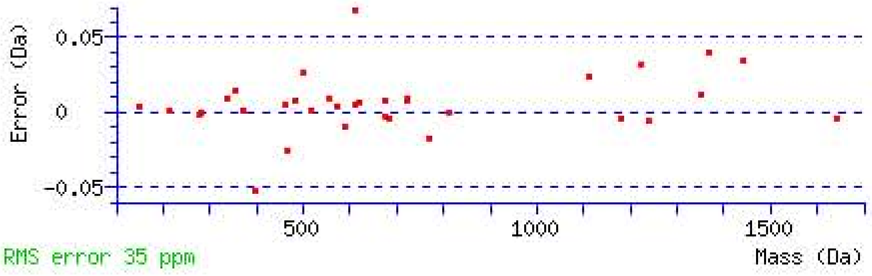
Match to Query 43649: 1851.979932 from(618.333920,3+) rtinseconds(2022) index(53085)
Title: Locus:1.1.1.1319.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

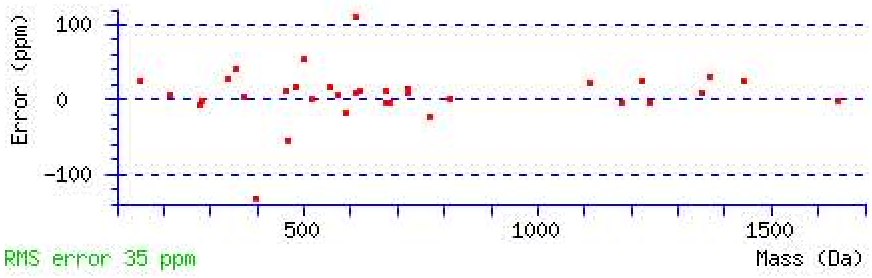
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1851.976425
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 6.2e-006
Matches : 34/152 fragment ions using 68 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 15 |
| 2 | **213.159754** | 107.083515 | | | | | L | 1753.915298 | 877.461287 | 1736.888749 | 868.948013 | 1735.904733 | 868.456004 | 14 |
| 3 | 300.191782 | 150.599529 | | | 282.181217 | 141.594247 | S | ***1640.831234*** | 820.919255 | 1623.804685 | 812.405981 | 1622.820669 | 811.913973 | 13 |
| 4 | 413.275846 | 207.141561 | | | 395.265281 | 198.136279 | L | 1553.799206 | 777.403241 | 1536.772657 | 768.889967 | 1535.788641 | 768.397958 | 12 |
| 5 | **484.312960** | 242.660118 | | | 466.302395 | 233.654836 | A | ***1440.715142*** | 720.861209 | 1423.688593 | 712.347935 | 1422.704577 | 711.855927 | 11 |
| 6 | **612.371538** | 306.689407 | 595.344989 | 298.176133 | 594.360973 | 297.684125 | Q | ***1369.678028*** | 685.342652 | 1352.651479 | 676.829378 | 1351.667463 | 676.337370 | 10 |
| 7 | 741.414131 | 371.210704 | 724.387582 | 362.697429 | 723.403566 | 362.205421 | E | ***1241.619450*** | 621.313363 | 1224.592901 | 612.800089 | 1223.608885 | 612.308080 | 9 |
| 8 | **1180.639457** | 590.823367 | 1163.612908 | 582.310092 | 1162.628892 | 581.818084 | Q | ***1112.576857*** | 556.792066 | 1095.550308 | 548.278792 | 1094.566292 | 547.786784 | 8 |
| 9 | 1279.707871 | 640.357574 | 1262.681322 | 631.844299 | 1261.697306 | 631.352291 | V | ***673.351531*** | 337.179404 | 656.324982 | 328.666129 | 655.340966 | 328.174121 | 7 |
| 10 | 1336.729335 | 668.868306 | 1319.702786 | 660.355031 | 1318.718770 | 659.863023 | G | ***574.283117*** | 287.645197 | 557.256568 | 279.131922 | 556.272552 | 278.639914 | 6 |
| 11 | 1393.750799 | 697.379037 | 1376.724250 | 688.865763 | 1375.740234 | 688.373755 | G | ***517.261653*** | 259.134465 | 500.235104 | 250.621190 | 499.251088 | 250.129182 | 5 |
| 12 | 1480.782827 | 740.895052 | 1463.756278 | 732.381777 | 1462.772262 | 731.889769 | S | ***460.240189*** | 230.623732 | 443.213640 | 222.110458 | 442.229624 | 221.618450 | 4 |
| 13 | 1577.835591 | 789.421434 | 1560.809042 | 780.908159 | 1559.825026 | 780.416151 | P | ***373.208161*** | 187.107718 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 14 | 1706.878184 | 853.942730 | 1689.851635 | 845.429456 | 1688.867619 | 844.937447 | E | ***276.155397*** | 138.581336 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 15 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VLSLAQEQVGGSPEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.0 | 1851.976425 | 0.003507 | VLSLAQEQVGGSPEK |
| 41.9 | 1851.976425 | 0.003507 | VLSLAQEQVGGSPEK |

**Mascot:** http://www.matrixscience.com/

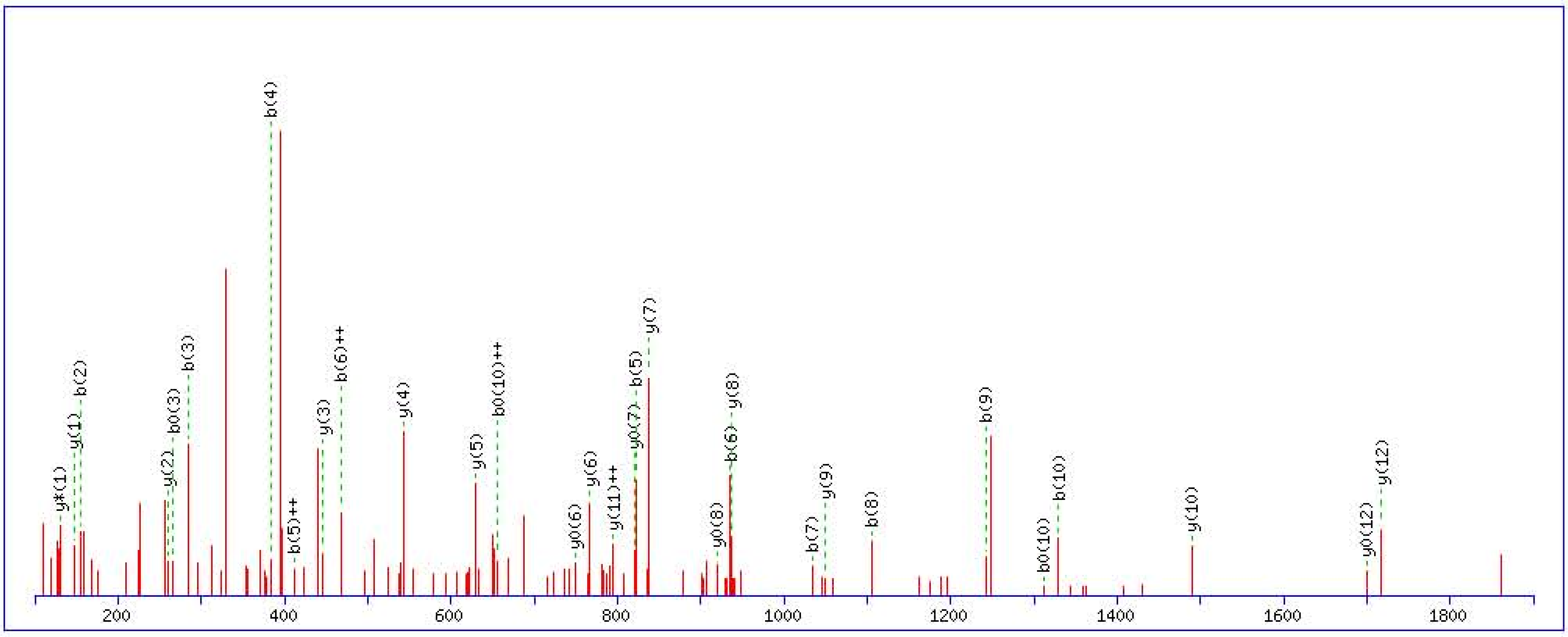
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GPEVQLVAHSPWLK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

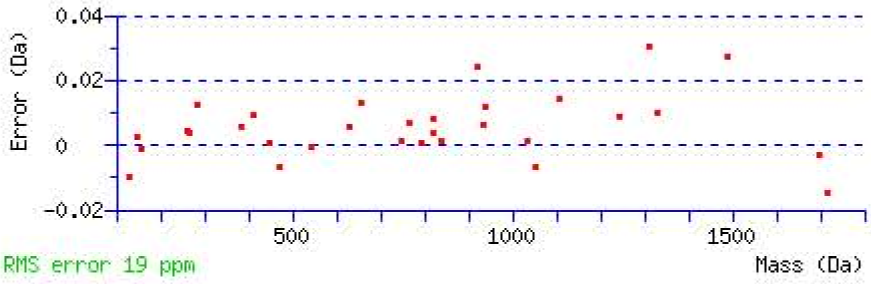
Match to Query 44158: 1871.022582 from(624.681470,3+) rtinseconds(2255) index(54583)
Title: Locus:1.1.1.1400.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●

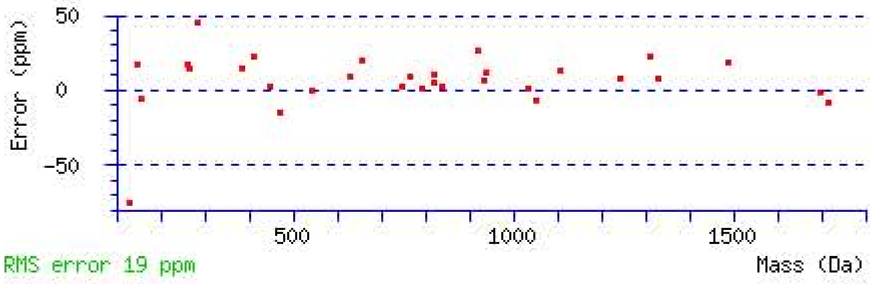


```
Monoisotopic mass of neutral peptide Mr(calc): 1871.012756
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 7.1e-005
Matches : 31/136 fragment ions using 77 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 14 |
| 2 | **155.081504** | 78.044390 | | | | | P | 1814.998574 | 908.002925 | 1797.972025 | 899.489651 | 1796.988009 | 898.997643 | 13 |
| 3 | **284.124097** | 142.565687 | | | 266.113532 | 133.560404 | E | ***1717.945810*** | 859.476543 | 1700.919261 | 850.963269 | 1699.935245 | 850.471261 | 12 |
| 4 | **383.192511** | 192.099894 | | | 365.181946 | 183.094611 | V | 1588.903217 | 794.955247 | 1571.876668 | 786.441972 | 1570.892652 | 785.949964 | 11 |
| 5 | **822.417837** | **411.712557** | 805.391288 | 403.199282 | 804.407272 | 402.707274 | Q | ***1489.834803*** | 745.421040 | 1472.808254 | 736.907765 | 1471.824238 | 736.415757 | 10 |
| 6 | **935.501901** | **468.254589** | 918.475352 | 459.741314 | 917.491336 | 459.249306 | L | ***1050.609477*** | 525.808377 | 1033.582928 | 517.295102 | 1032.598912 | 516.803094 | 9 |
| 7 | **1034.570315** | 517.788796 | 1017.543766 | 509.275521 | 1016.559750 | 508.783513 | V | ***937.525413*** | 469.266345 | 920.498864 | 460.753070 | 919.514848 | 460.261062 | 8 |
| 8 | **1105.607429** | 553.307353 | 1088.580880 | 544.794078 | 1087.596864 | 544.302070 | A | ***838.456999*** | 419.732138 | 821.430450 | 411.218863 | 820.446434 | 410.726855 | 7 |
| 9 | **1242.666341** | 621.836809 | 1225.639792 | 613.323534 | 1224.655776 | 612.831526 | H | ***767.419885*** | 384.213581 | 750.393336 | 375.700306 | 749.409320 | 375.208298 | 6 |
| 10 | **1329.698369** | 665.352823 | 1312.671820 | 656.839548 | 1311.687804 | 656.347540 | S | ***630.360973*** | 315.684125 | 613.334424 | 307.170850 | 612.350408 | 306.678842 | 5 |
| 11 | 1426.751133 | 713.879205 | 1409.724584 | 705.365930 | 1408.740568 | 704.873922 | P | ***543.328945*** | 272.168111 | 526.302396 | 263.654836 | | | 4 |
| 12 | 1612.830446 | 806.918861 | 1595.803897 | 798.405587 | 1594.819881 | 797.913579 | W | ***446.276181*** | 223.641728 | 429.249632 | 215.128454 | | | 3 |
| 13 | 1725.914510 | 863.460893 | 1708.887961 | 854.947619 | 1707.903945 | 854.455611 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 14 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 19 ppm



RMS error 19 ppm

NCBI **BLAST** search of GPEVQLVAHSPWLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.0 | 1871.012756 | 0.009826 | GPEVQLVAHSPWLK |
| 1.8 | 1871.002686 | 0.019896 | QRVLHWDLRGPGGGPAR |
| 1.6 | 1870.994781 | 0.027801 | NVNQAKLSEHRHK |

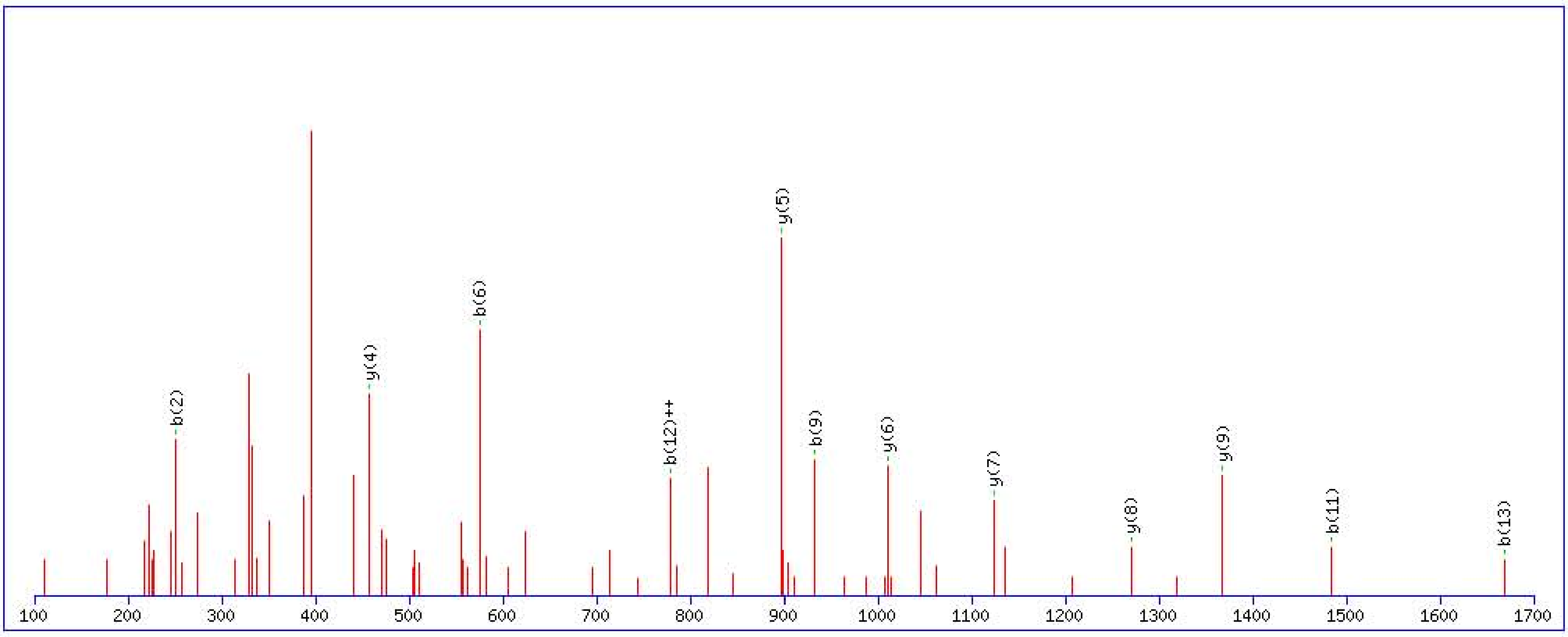
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HLVPGAPFLLQALVR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

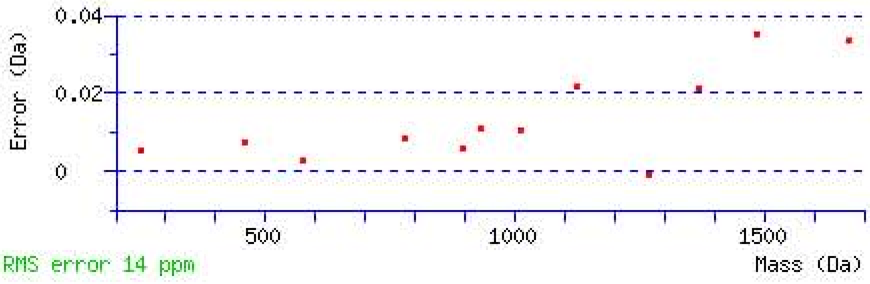
Match to Query 45393: 1941.152712 from(648.058180,3+) rtinseconds(2868) index(58426)
Title: Locus:1.1.1.1612.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

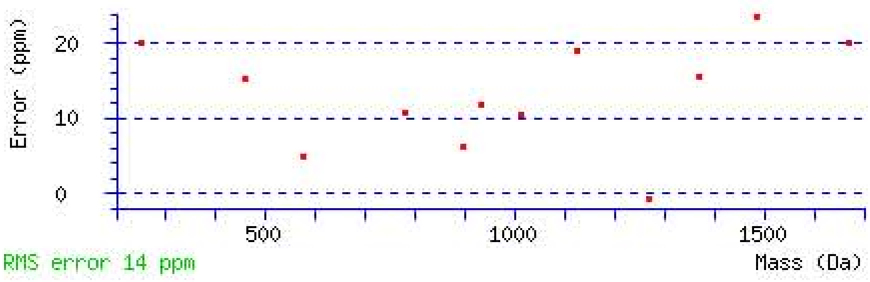
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1700] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1941.138626
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 4.6e-005
Matches : 12/92 fragment ions using 15 most intense peaks    (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | H | | | | | 15 |
| 2 | ***251.150252*** | 126.078764 | | | L | 1805.086996 | 903.047136 | 1788.060447 | 894.533862 | 14 |
| 3 | 350.218666 | 175.612971 | | | V | 1692.002932 | 846.505104 | 1674.976383 | 837.991830 | 13 |
| 4 | 447.271430 | 224.139353 | | | P | 1592.934518 | 796.970897 | 1575.907969 | 788.457623 | 12 |
| 5 | 504.292894 | 252.650085 | | | G | 1495.881754 | 748.444515 | 1478.855205 | 739.931241 | 11 |
| 6 | ***575.330008*** | 288.168642 | | | A | 1438.860290 | 719.933783 | 1421.833741 | 711.420509 | 10 |
| 7 | 672.382772 | 336.695024 | | | P | ***1367.823176*** | 684.415226 | 1350.796627 | 675.901952 | 9 |
| 8 | 819.451186 | 410.229231 | | | F | ***1270.770412*** | 635.888844 | 1253.743863 | 627.375570 | 8 |
| 9 | ***932.535250*** | 466.771263 | | | L | ***1123.701998*** | 562.354637 | 1106.675449 | 553.841363 | 7 |
| 10 | 1045.619314 | 523.313295 | | | L | ***1010.617934*** | 505.812605 | 993.591385 | 497.299331 | 6 |
| 11 | ***1484.844640*** | 742.925958 | 1467.818091 | 734.412684 | Q | ***897.533870*** | 449.270573 | 880.507321 | 440.757298 | 5 |
| 12 | 1555.881754 | 778.444515 | 1538.855205 | 769.931241 | A | ***458.308544*** | 229.657910 | 441.281995 | 221.144635 | 4 |
| 13 | ***1668.965818*** | 834.986547 | 1651.939269 | 826.473273 | L | 387.271430 | 194.139353 | 370.244881 | 185.626078 | 3 |
| 14 | 1768.034232 | 884.520754 | 1751.007683 | 876.007480 | V | 274.187366 | 137.597321 | 257.160817 | 129.084047 | 2 |
| 15 | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | 1 |





NCBI **BLAST** search of HLVPGAPFLLQALVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.9 | 1941.138626 | 0.014086 | HLVPGAPFLLQALVR |

**Mascot:** http://www.matrixscience.com/

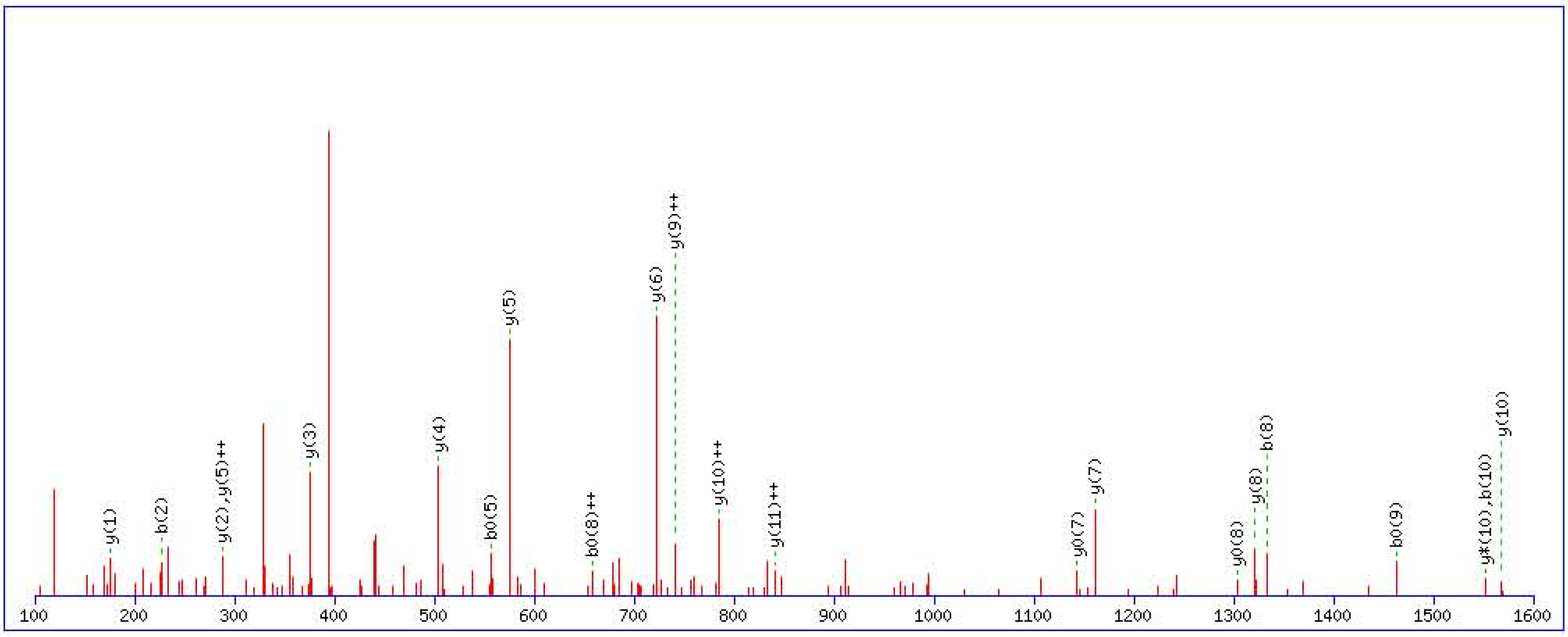
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EPFLSCCQFAESLR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

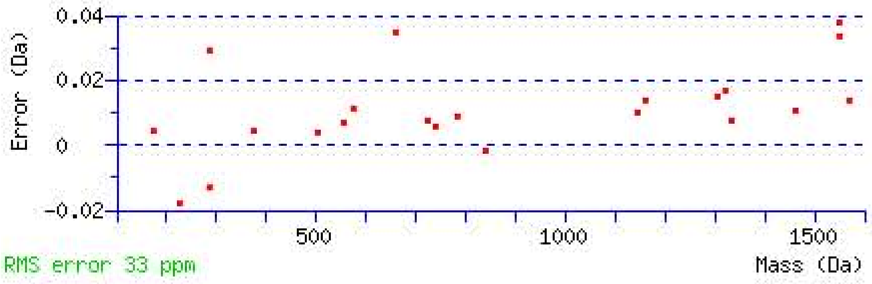
Match to Query 48472: 2053.960542 from(685.660790,3+) rtinseconds(2519) index(56008)
Title: Locus:1.1.1.1492.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

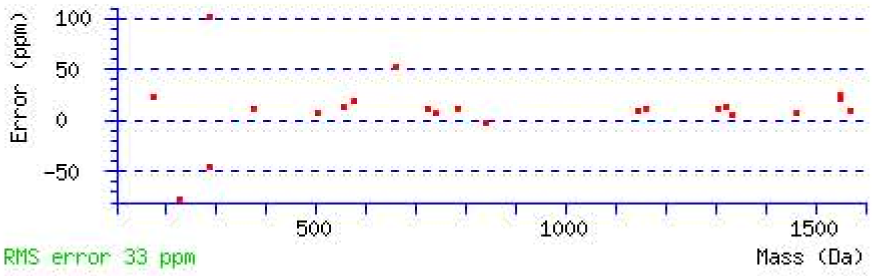
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2053.942368
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.0012
Matches : 22/138 fragment ions using 43 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 14 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 1925.907059 | 963.457168 | 1908.880510 | 954.943893 | 1907.896494 | 954.451885 | 13 |
| 3 | 374.171047 | 187.589161 | | | 356.160482 | 178.583879 | F | 1828.854295 | 914.930786 | 1811.827746 | 906.417511 | 1810.843730 | 905.925503 | 12 |
| 4 | 487.255111 | 244.131193 | | | 469.244546 | 235.125911 | L | 1681.785881 | 841.396579 | 1664.759332 | 832.883304 | 1663.775316 | 832.391296 | 11 |
| 5 | 574.287139 | 287.647208 | | | 556.276574 | 278.641925 | S | ***1568.701817*** | 784.854547 | 1551.675268 | 776.341272 | 1550.691252 | 775.849264 | 10 |
| 6 | 734.317788 | 367.662532 | | | 716.307223 | 358.657250 | C | 1481.669789 | 741.338533 | 1464.643240 | 732.825258 | 1463.659224 | 732.333250 | 9 |
| 7 | 894.348437 | 447.677857 | | | 876.337872 | 438.672574 | C | ***1321.639140*** | 661.323208 | 1304.612591 | 652.809934 | 1303.628575 | 652.317926 | 8 |
| 8 | **1333.573763** | 667.290520 | 1316.547214 | 658.777245 | 1315.563198 | 658.285237 | Q | ***1161.608491*** | 581.307884 | 1144.581942 | 572.794609 | 1143.597926 | 572.302601 | 7 |
| 9 | 1480.642177 | 740.824727 | 1463.615628 | 732.311452 | 1462.631612 | 731.819444 | F | ***722.383165*** | 361.695221 | 705.356616 | 353.181946 | 704.372600 | 352.689938 | 6 |
| 10 | **1551.679291** | 776.343284 | 1534.652742 | 767.830009 | 1533.668726 | 767.338001 | A | ***575.314751*** | 288.161014 | 558.288202 | 279.647739 | 557.304186 | 279.155731 | 5 |
| 11 | 1680.721884 | 840.864580 | 1663.695335 | 832.351306 | 1662.711319 | 831.859298 | E | ***504.277637*** | 252.642457 | 487.251088 | 244.129182 | 486.267072 | 243.637174 | 4 |
| 12 | 1767.753912 | 884.380594 | 1750.727363 | 875.867320 | 1749.743347 | 875.375312 | S | ***375.235044*** | 188.121160 | 358.208495 | 179.607885 | 357.224479 | 179.115877 | 3 |
| 13 | 1880.837976 | 940.922626 | 1863.811427 | 932.409352 | 1862.827411 | 931.917344 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 14 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EPFLSCCQFAESLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.8 | 2053.942368 | 0.018174 | EPFLSCCQFAESLR |

**Mascot:** http://www.matrixscience.com/

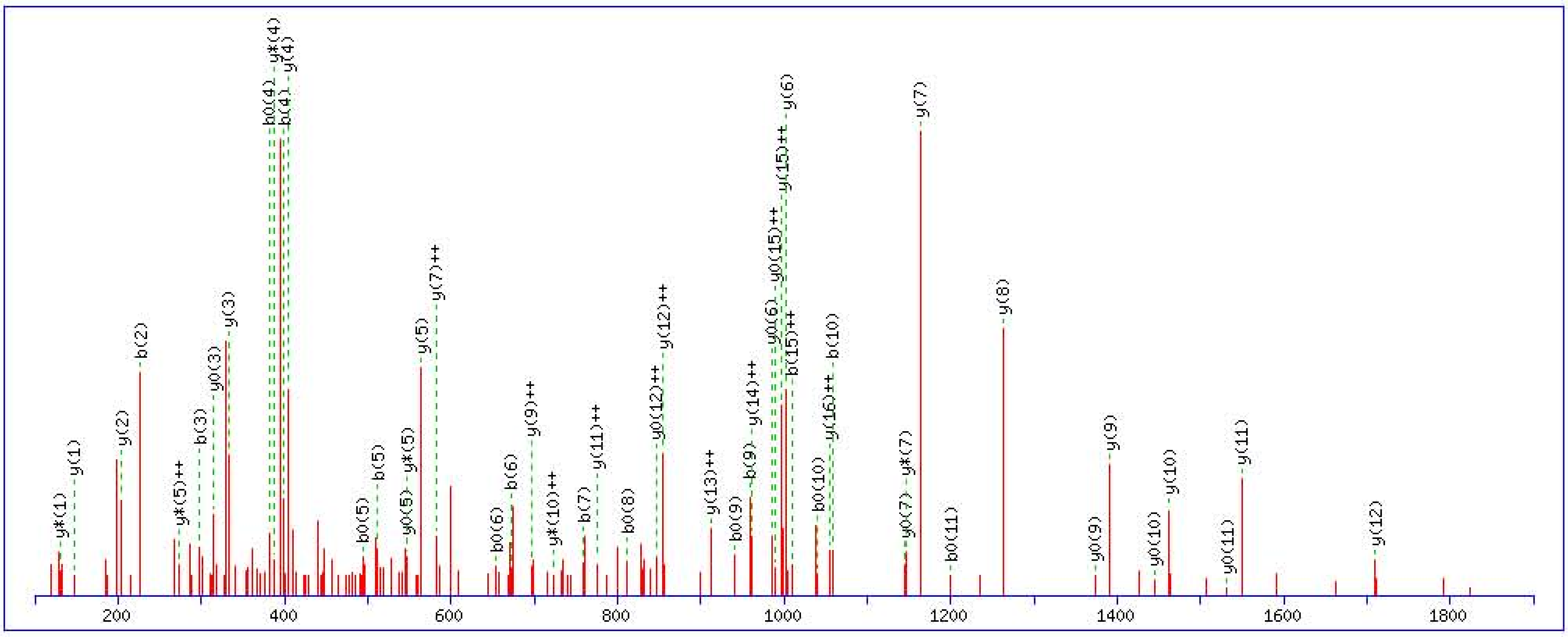
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LLATLCSAEVCQCAEGK**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

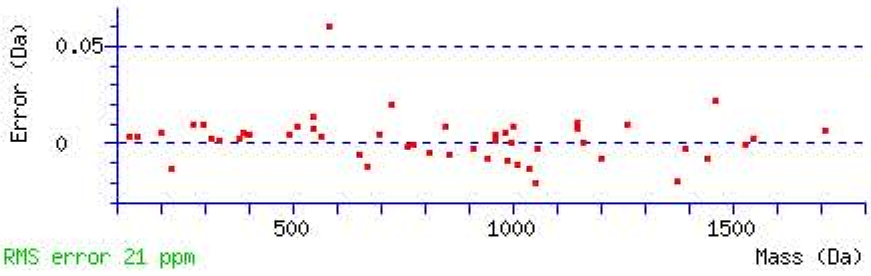
Match to Query 51483: 2220.042522 from(741.021450,3+) rtinseconds(2119) index(69497)
Title: Locus:1.1.1.1675.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

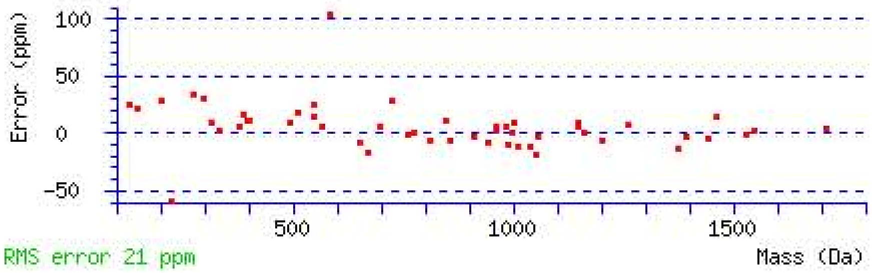
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2220.041092
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q12** : Biotin:Thermo-21345 (Q)
**Ions Score:** 54 **Expect:** 1e-005
**Matches :** 51/160 fragment ions using 110 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 17 |
| 2 | **227.175404** | 114.091340 | | | | | L | 2107.964318 | 1054.485797 | 2090.937769 | 1045.972522 | 2089.953753 | 1045.480514 | 16 |
| 3 | **298.212518** | 149.609897 | | | | | A | 1994.880254 | 997.943765 | 1977.853705 | 989.430491 | 1976.869689 | 988.938483 | 15 |
| 4 | **399.260197** | 200.133737 | | | 381.249632 | 191.128454 | T | 1923.843140 | 962.425208 | 1906.816591 | 953.911934 | 1905.832575 | 953.419926 | 14 |
| 5 | **512.344261** | 256.675769 | | | 494.333696 | 247.670486 | L | 1822.795461 | 911.901369 | 1805.768912 | 903.388094 | 1804.784896 | 902.896086 | 13 |
| 6 | **672.374910** | 336.691093 | | | 654.364345 | 327.685811 | C | ***1709.711397*** | 855.359337 | 1692.684848 | 846.846062 | 1691.700832 | 846.354054 | 12 |
| 7 | **759.406938** | 380.207107 | | | 741.396373 | 371.201825 | S | ***1549.680748*** | 775.344012 | 1532.654199 | 766.830738 | 1531.670183 | 766.338730 | 11 |
| 8 | 830.444052 | 415.725664 | | | 812.433487 | 406.720382 | A | ***1462.648720*** | 731.827998 | 1445.622171 | 723.314724 | 1444.638155 | 722.822716 | 10 |
| 9 | **959.486645** | 480.246961 | | | 941.476080 | 471.241678 | E | ***1391.611606*** | 696.309441 | 1374.585057 | 687.796167 | 1373.601041 | 687.304159 | 9 |
| 10 | **1058.555059** | 529.781168 | | | 1040.544494 | 520.775885 | V | ***1262.569013*** | 631.788145 | 1245.542464 | 623.274870 | 1244.558448 | 622.782862 | 8 |
| 11 | 1218.585708 | 609.796492 | | | 1200.575143 | 600.791210 | C | ***1163.500599*** | 582.253938 | 1146.474050 | 573.740663 | 1145.490034 | 573.248655 | 7 |
| 12 | 1657.811034 | 829.409155 | 1640.784485 | 820.895881 | 1639.800469 | 820.403873 | Q | ***1003.469950*** | 502.238613 | 986.443401 | 493.725339 | 985.459385 | 493.233331 | 6 |
| 13 | 1817.841683 | 909.424480 | 1800.815134 | 900.911205 | 1799.831118 | 900.419197 | C | ***564.244624*** | 282.625950 | 547.218075 | 274.112676 | 546.234059 | 273.620668 | 5 |
| 14 | 1888.878797 | 944.943037 | 1871.852248 | 936.429762 | 1870.868232 | 935.937754 | A | ***404.213975*** | 202.610626 | 387.187426 | 194.097351 | 386.203410 | 193.605343 | 4 |
| 15 | 2017.921390 | 1009.464333 | 2000.894841 | 1000.951059 | 1999.910825 | 1000.459051 | E | ***333.176861*** | 167.092069 | 316.150312 | 158.578794 | 315.166296 | 158.086786 | 3 |
| 16 | 2074.942854 | 1037.975065 | 2057.916305 | 1029.461790 | 2056.932289 | 1028.969782 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 17 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LLATLCSAEVCQCAEGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 53.8 | 2220.041092 | 0.001430 | LLATLCSAEVCQCAEGK |
| 0.5 | 2220.048080 | -0.005558 | EPQEGAELPEATGTTSHR |

**Mascot:** http://www.matrixscience.com/

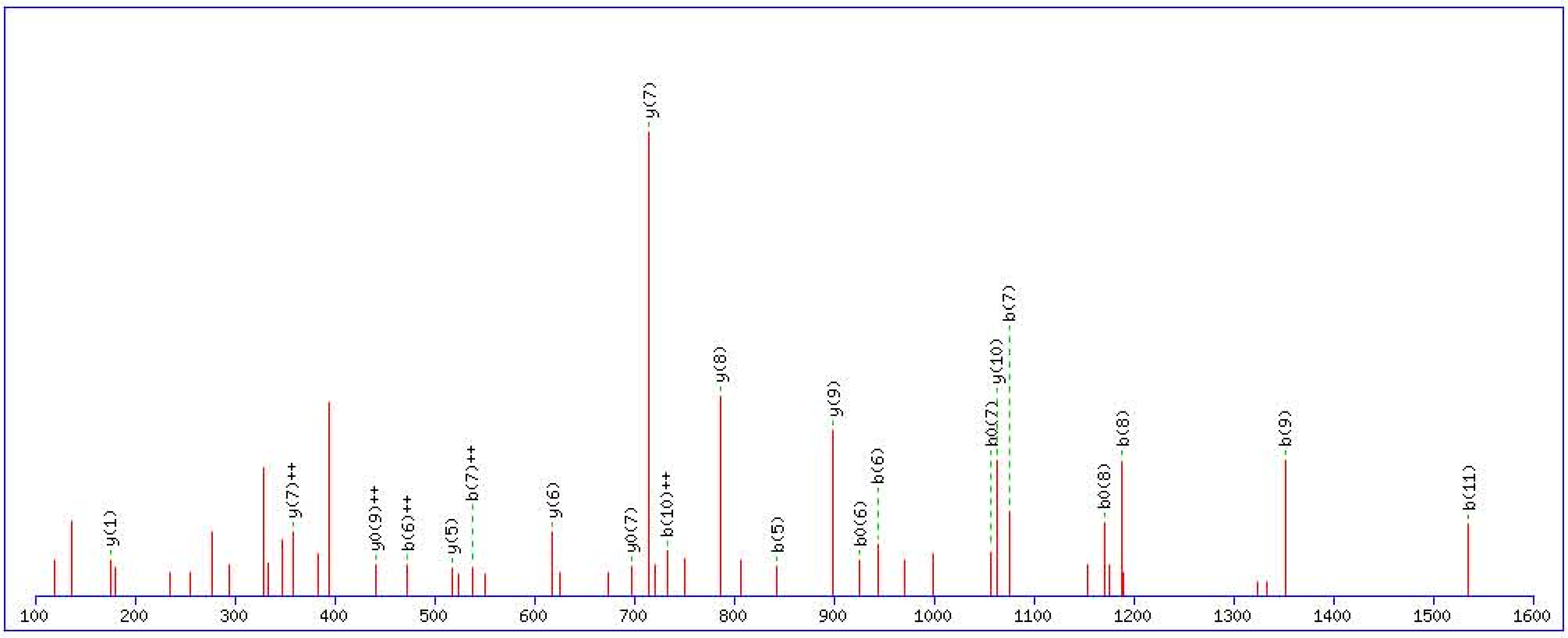
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GCGEQTMIYLAPTLAASR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

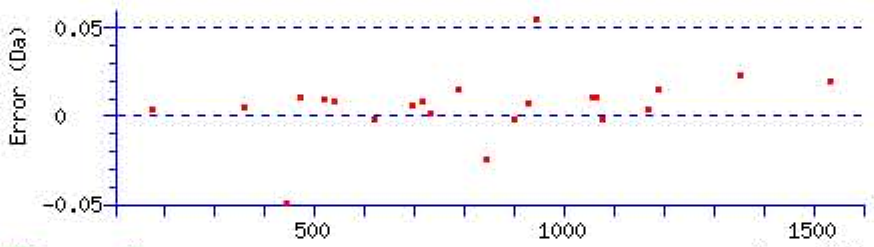
Match to Query 51975: 2249.122692 from(750.714840,3+) rtinseconds(2546) index(56228)
Title: Locus:1.1.1.1501.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●

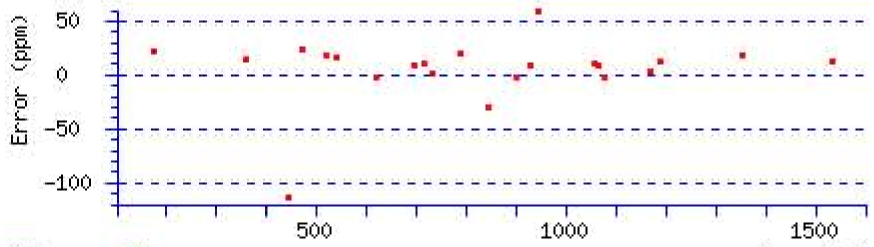


```
Monoisotopic mass of neutral peptide Mr(calc): 2249.100647
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 42  Expect: 0.00086
Matches : 22/188 fragment ions using 36 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 18 |
| 2 | 218.059389 | 109.533333 | | | | | C | 2193.086482 | 1097.046879 | 2176.059933 | 1088.533604 | 2175.075917 | 1088.041596 | 17 |
| 3 | 275.080853 | 138.044064 | | | | | G | 2033.055833 | 1017.031555 | 2016.029284 | 1008.518280 | 2015.045268 | 1008.026272 | 16 |
| 4 | 404.123446 | 202.565361 | | | 386.112881 | 193.560079 | E | 1976.034369 | 988.520822 | 1959.007820 | 980.007548 | 1958.023804 | 979.515540 | 15 |
| 5 | ***843.348772*** | 422.178024 | 826.322223 | 413.664750 | 825.338207 | 413.172742 | Q | 1846.991776 | 923.999526 | 1829.965227 | 915.486251 | 1828.981211 | 914.994243 | 14 |
| 6 | ***944.396451*** | **472.701864** | 927.369902 | 464.188589 | 926.385886 | 463.696581 | T | 1407.766450 | 704.386863 | 1390.739901 | 695.873588 | 1389.755885 | 695.381580 | 13 |
| 7 | ***1075.436936*** | **538.222106** | 1058.410387 | 529.708832 | 1057.426371 | 529.216824 | M | 1306.718771 | 653.863023 | 1289.692222 | 645.349749 | 1288.708206 | 644.857741 | 12 |
| 8 | ***1188.521000*** | 594.764138 | 1171.494451 | 586.250864 | 1170.510435 | 585.758855 | I | 1175.678286 | 588.342781 | 1158.651737 | 579.829506 | 1157.667721 | 579.337498 | 11 |
| 9 | ***1351.584329*** | 676.295803 | 1334.557780 | 667.782528 | 1333.573764 | 667.290520 | Y | ***1062.594222*** | 531.800749 | 1045.567673 | 523.287475 | 1044.583657 | 522.795466 | 10 |
| 10 | 1464.668393 | **732.837834** | 1447.641844 | 724.324560 | 1446.657828 | 723.832552 | L | ***899.530893*** | 450.269084 | 882.504344 | 441.755810 | 881.520328 | 441.263802 | 9 |
| 11 | ***1535.705507*** | 768.356391 | 1518.678958 | 759.843117 | 1517.694942 | 759.351109 | A | ***786.446829*** | 393.727053 | 769.420280 | 385.213778 | 768.436264 | 384.721770 | 8 |
| 12 | 1632.758271 | 816.882773 | 1615.731722 | 808.369499 | 1614.747706 | 807.877491 | P | ***715.409715*** | 358.208496 | 698.383166 | 349.695221 | 697.399150 | 349.203213 | 7 |
| 13 | 1733.805950 | 867.406613 | 1716.779401 | 858.893339 | 1715.795385 | 858.401330 | T | ***618.356951*** | 309.682114 | 601.330402 | 301.168839 | 600.346386 | 300.676831 | 6 |
| 14 | 1846.890014 | 923.948645 | 1829.863465 | 915.435370 | 1828.879449 | 914.943362 | L | ***517.309272*** | 259.158274 | 500.282723 | 250.644999 | 499.298707 | 250.152991 | 5 |
| 15 | 1917.927128 | 959.467202 | 1900.900579 | 950.953927 | 1899.916563 | 950.461919 | A | 404.225208 | 202.616242 | 387.198659 | 194.102967 | 386.214643 | 193.610959 | 4 |
| 16 | 1988.964242 | 994.985759 | 1971.937693 | 986.472484 | 1970.953677 | 985.980476 | A | 333.188094 | 167.097685 | 316.161545 | 158.584410 | 315.177529 | 158.092402 | 3 |
| 17 | 2075.996270 | 1038.501773 | 2058.969721 | 1029.988498 | 2057.985705 | 1029.496490 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 30 ppm



RMS error 30 ppm

NCBI **BLAST** search of GCGEQTMIYLAPTLAASR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.7 | 2249.100647 | 0.022045 | GCGEQTMIYLAPTLAASR |
| 8.5 | 2249.115051 | 0.007641 | YSTSLYASPSMVHEGVAVVPR |
| 4.1 | 2249.104492 | 0.018200 | AQLQQHNLEMVGEGTRQ |
| 1.0 | 2249.143570 | -0.020878 | TPPPQPPLISSMDSISQK |
| 0.8 | 2249.089874 | 0.032818 | EMIDIYSTREPQLAFHQR |
| 0.6 | 2249.150742 | -0.028050 | LRSIMMSQDLENVTSKEIR |
| 0.5 | 2249.137527 | -0.014835 | QKFERPICVSWSTDVKGGR |

**Mascot:** http://www.matrixscience.com/

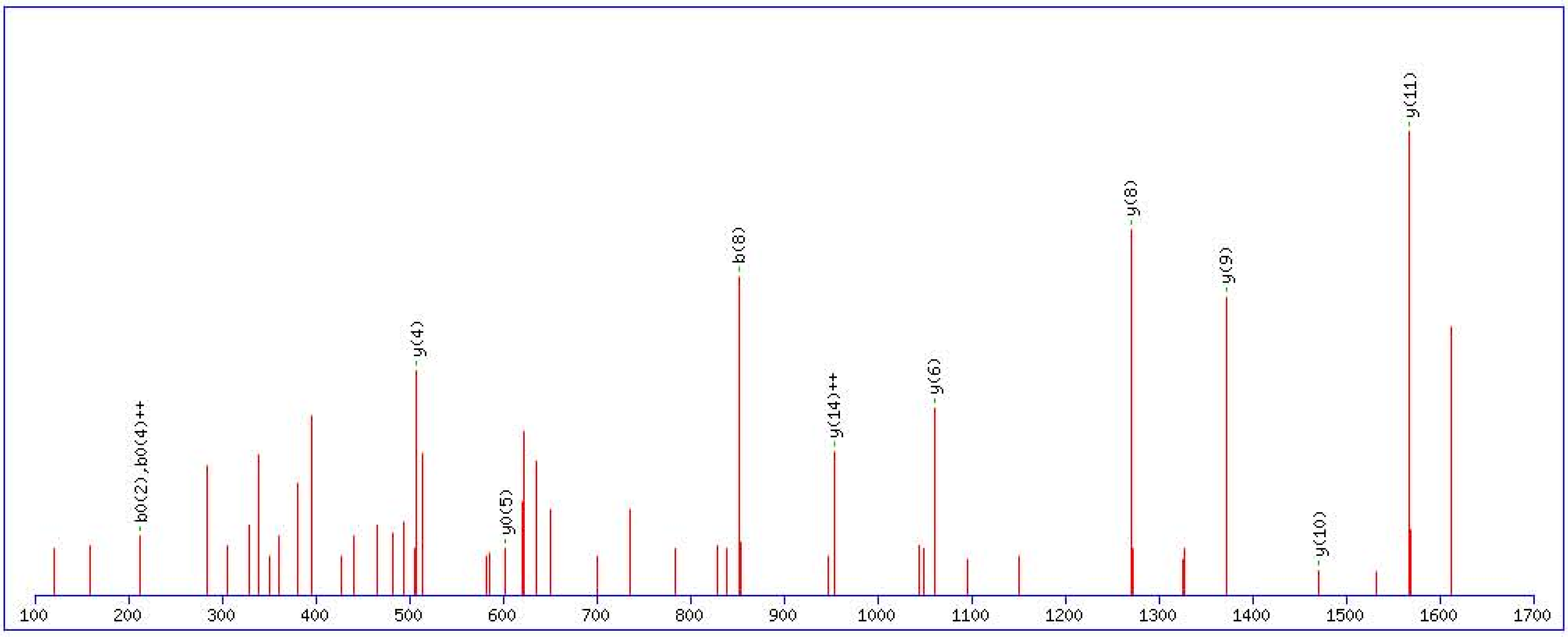
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DDPDAPLQPVTPLQLFEGR**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

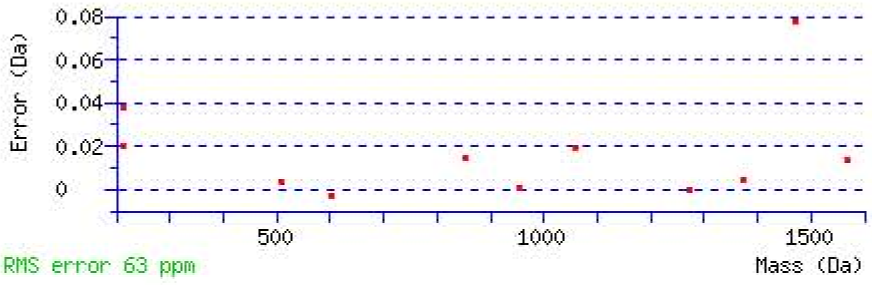
Match to Query 54809: 2418.243612 from(807.088480,3+) rtinseconds(3020) index(59691)
Title: Locus:1.1.1.1663.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

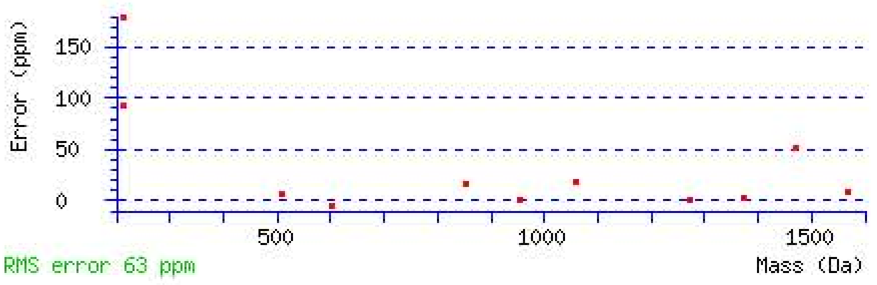
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2418.225342
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.051
Matches : 11/198 fragment ions using 15 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 19 |
| 2 | 231.061162 | 116.034219 | | | 213.050597 | 107.028936 | D | 2304.205668 | 1152.606472 | 2287.179119 | 1144.093197 | 2286.195103 | 1143.601189 | 18 |
| 3 | 328.113926 | 164.560601 | | | 310.103361 | 155.555319 | P | 2189.178725 | 1095.093000 | 2172.152176 | 1086.579726 | 2171.168160 | 1086.087718 | 17 |
| 4 | 443.140869 | 222.074073 | | | 425.130304 | 213.068790 | D | 2092.125961 | 1046.566618 | 2075.099412 | 1038.053344 | 2074.115396 | 1037.561336 | 16 |
| 5 | 514.177983 | 257.592630 | | | 496.167418 | 248.587347 | A | 1977.099018 | 989.053147 | 1960.072469 | 980.539873 | 1959.088453 | 980.047865 | 15 |
| 6 | 611.230747 | 306.119012 | | | 593.220182 | 297.113729 | P | 1906.061904 | 953.534590 | 1889.035355 | 945.021316 | 1888.051339 | 944.529308 | 14 |
| 7 | 724.314811 | 362.661044 | | | 706.304246 | 353.655761 | L | 1809.009140 | 905.008208 | 1791.982591 | 896.494934 | 1790.998575 | 896.002926 | 13 |
| 8 | 852.373389 | 426.690333 | 835.346840 | 418.177058 | 834.362824 | 417.685050 | Q | 1695.925076 | 848.466176 | 1678.898527 | 839.952902 | 1677.914511 | 839.460894 | 12 |
| 9 | 949.426153 | 475.216715 | 932.399604 | 466.703440 | 931.415588 | 466.211432 | P | ***1567.866498*** | 784.436887 | 1550.839949 | 775.923613 | 1549.855933 | 775.431605 | 11 |
| 10 | 1048.494567 | 524.750922 | 1031.468018 | 516.237647 | 1030.484002 | 515.745639 | V | ***1470.813734*** | 735.910505 | 1453.787185 | 727.397231 | 1452.803169 | 726.905223 | 10 |
| 11 | 1149.542246 | 575.274761 | 1132.515697 | 566.761487 | 1131.531681 | 566.269479 | T | ***1371.745320*** | 686.376298 | 1354.718771 | 677.863024 | 1353.734755 | 677.371016 | 9 |
| 12 | 1246.595010 | 623.801143 | 1229.568461 | 615.287869 | 1228.584445 | 614.795861 | P | ***1270.697641*** | 635.852459 | 1253.671092 | 627.339184 | 1252.687076 | 626.847176 | 8 |
| 13 | 1359.679074 | 680.343175 | 1342.652525 | 671.829901 | 1341.668509 | 671.337893 | L | 1173.644877 | 587.326077 | 1156.618328 | 578.812802 | 1155.634312 | 578.320794 | 7 |
| 14 | 1798.904400 | 899.955838 | 1781.877851 | 891.442564 | 1780.893835 | 890.950556 | Q | ***1060.560813*** | 530.784045 | 1043.534264 | 522.270770 | 1042.550248 | 521.778762 | 6 |
| 15 | 1911.988464 | 956.497870 | 1894.961915 | 947.984596 | 1893.977899 | 947.492588 | L | 621.335487 | 311.171382 | 604.308938 | 302.658107 | 603.324922 | 302.166099 | 5 |
| 16 | 2059.056878 | 1030.032077 | 2042.030329 | 1021.518803 | 2041.046313 | 1021.026794 | F | ***508.251423*** | 254.629350 | 491.224874 | 246.116075 | 490.240858 | 245.624067 | 4 |
| 17 | 2188.099471 | 1094.553373 | 2171.072922 | 1086.040099 | 2170.088906 | 1085.548091 | E | 361.183009 | 181.095142 | 344.156460 | 172.581868 | 343.172444 | 172.089860 | 3 |
| 18 | 2245.120935 | 1123.064105 | 2228.094386 | 1114.550831 | 2227.110370 | 1114.058823 | G | 232.140416 | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 19 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DDPDAPLQPVTPLQLFEGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.1 | 2418.225342 | 0.018270 | DDPDAPLQPVTPLQLFEGR |

**Mascot:** http://www.matrixscience.com/

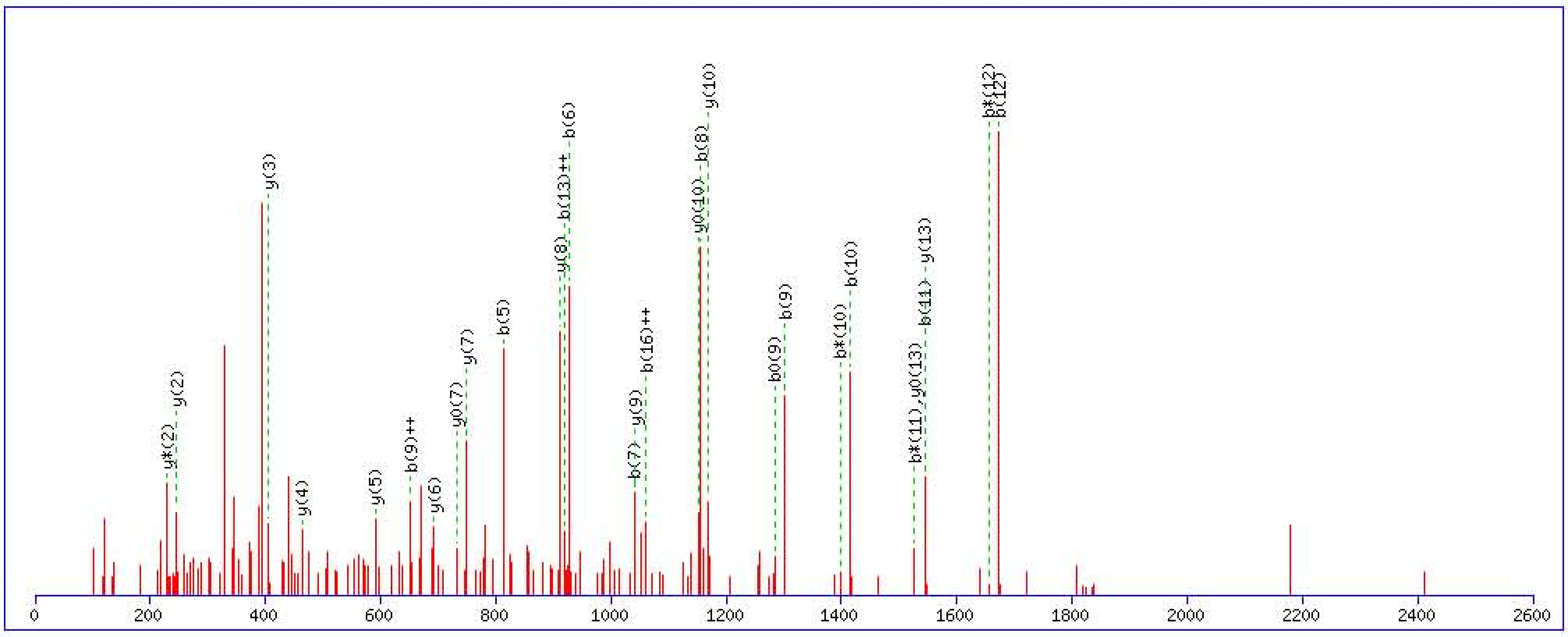
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AACAQLNDFLQEYGTQGCQV**
Found in **CO4A_HUMAN**, Complement C4-A OS=Homo sapiens GN=C4A PE=1 SV=2

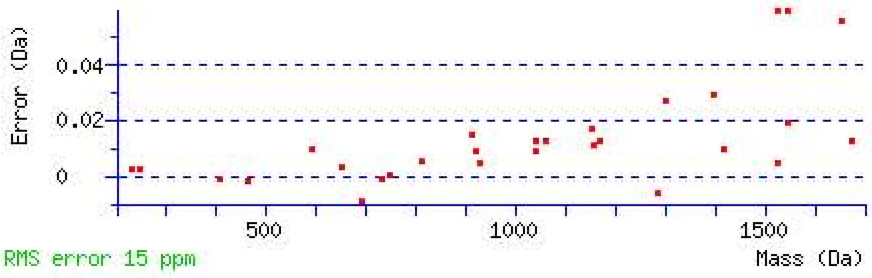
Match to Query 57447: 2583.179442 from(862.067090,3+) rtinseconds(2758) index(57495)
Title: Locus:1.1.1.1574.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

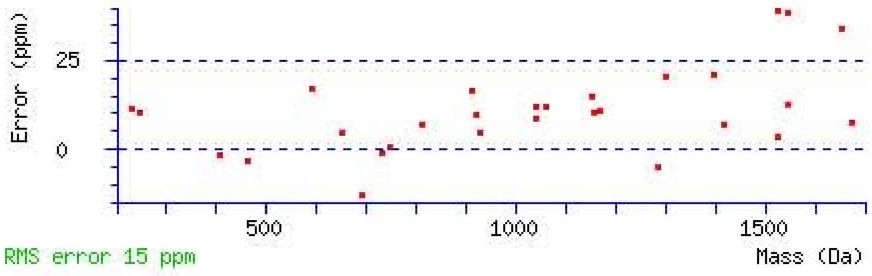
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2583.155624
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 4.4e-005
Matches : 29/194 fragment ions using 54 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 20 |
| 2 | 143.081504 | 72.044390 | | | | | A | 2513.125782 | 1257.066529 | 2496.099233 | 1248.553254 | 2495.115217 | 1248.061246 | 19 |
| 3 | 303.112153 | 152.059714 | | | | | C | 2442.088668 | 1221.547972 | 2425.062119 | 1213.034697 | 2424.078103 | 1212.542689 | 18 |
| 4 | 374.149267 | 187.578271 | | | | | A | 2282.058019 | 1141.532647 | 2265.031470 | 1133.019373 | 2264.047454 | 1132.527365 | 17 |
| 5 | ***813.374593*** | 407.190935 | 796.348044 | 398.677660 | | | Q | 2211.020905 | 1106.014090 | 2193.994356 | 1097.500816 | 2193.010340 | 1097.008808 | 16 |
| 6 | ***926.458657*** | 463.732967 | 909.432108 | 455.219692 | | | L | 1771.795579 | 886.401428 | 1754.769030 | 877.888153 | 1753.785014 | 877.396145 | 15 |
| 7 | ***1040.501584*** | 520.754430 | 1023.475035 | 512.241155 | | | N | 1658.711515 | 829.859396 | 1641.684966 | 821.346121 | 1640.700950 | 820.854113 | 14 |
| 8 | ***1155.528527*** | 578.267902 | 1138.501978 | 569.754627 | 1137.517962 | 569.262619 | D | ***1544.668588*** | 772.837932 | 1527.642039 | 764.324658 | 1526.658023 | 763.832650 | 13 |
| 9 | ***1302.596941*** | **651.802109** | 1285.570392 | 643.288834 | 1284.586376 | 642.796826 | F | 1429.641645 | 715.324460 | 1412.615096 | 706.811186 | 1411.631080 | 706.319178 | 12 |
| 10 | ***1415.681005*** | 708.344141 | 1398.654456 | 699.830866 | 1397.670440 | 699.338858 | L | 1282.573231 | 641.790253 | 1265.546682 | 633.276979 | 1264.562666 | 632.784971 | 11 |
| 11 | ***1543.739583*** | 772.373430 | 1526.713034 | 763.860155 | 1525.729018 | 763.368147 | Q | ***1169.489167*** | 585.248222 | 1152.462618 | 576.734947 | 1151.478602 | 576.242939 | 10 |
| 12 | ***1672.782176*** | 836.894726 | 1655.755627 | 828.381452 | 1654.771611 | 827.889444 | E | ***1041.430589*** | 521.218932 | 1024.404040 | 512.705658 | 1023.420024 | 512.213650 | 9 |
| 13 | 1835.845505 | **918.426391** | 1818.818956 | 909.913116 | 1817.834940 | 909.421108 | Y | ***912.387996*** | 456.697636 | 895.361447 | 448.184361 | 894.377431 | 447.692353 | 8 |
| 14 | 1892.866969 | 946.937123 | 1875.840420 | 938.423848 | 1874.856404 | 937.931840 | G | ***749.324667*** | 375.165971 | 732.298118 | 366.652697 | 731.314102 | 366.160689 | 7 |
| 15 | 1993.914648 | 997.460962 | 1976.888099 | 988.947688 | 1975.904083 | 988.455680 | T | ***692.303203*** | 346.655239 | 675.276654 | 338.141965 | 674.292638 | 337.649957 | 6 |
| 16 | 2121.973226 | **1061.490251** | 2104.946677 | 1052.976976 | 2103.962661 | 1052.484968 | Q | ***591.255524*** | 296.131400 | 574.228975 | 287.618125 | | | 5 |
| 17 | 2178.994690 | 1090.000983 | 2161.968141 | 1081.487708 | 2160.984125 | 1080.995700 | G | ***463.196946*** | 232.102111 | 446.170397 | 223.588836 | | | 4 |
| 18 | 2339.025339 | 1170.016307 | 2321.998790 | 1161.503033 | 2321.014774 | 1161.011025 | C | ***406.175482*** | 203.591379 | 389.148933 | 195.078104 | | | 3 |
| 19 | 2467.083917 | 1234.045596 | 2450.057368 | 1225.532322 | 2449.073352 | 1225.040314 | Q | ***246.144833*** | 123.576054 | 229.118284 | 115.062780 | | | 2 |
| 20 | | | | | | | V | 118.086255 | 59.546765 | | | | | 1 |





NCBI **BLAST** search of AACAQLNDFLQEYGTQGCQV
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.1 | 2583.155624 | 0.023818 | AACAQLNDFLQEYGTQGCQV |
| 16.9 | 2583.155624 | 0.023818 | AACAQLNDFLQEYGTQGCQV |

**Mascot:** http://www.matrixscience.com/

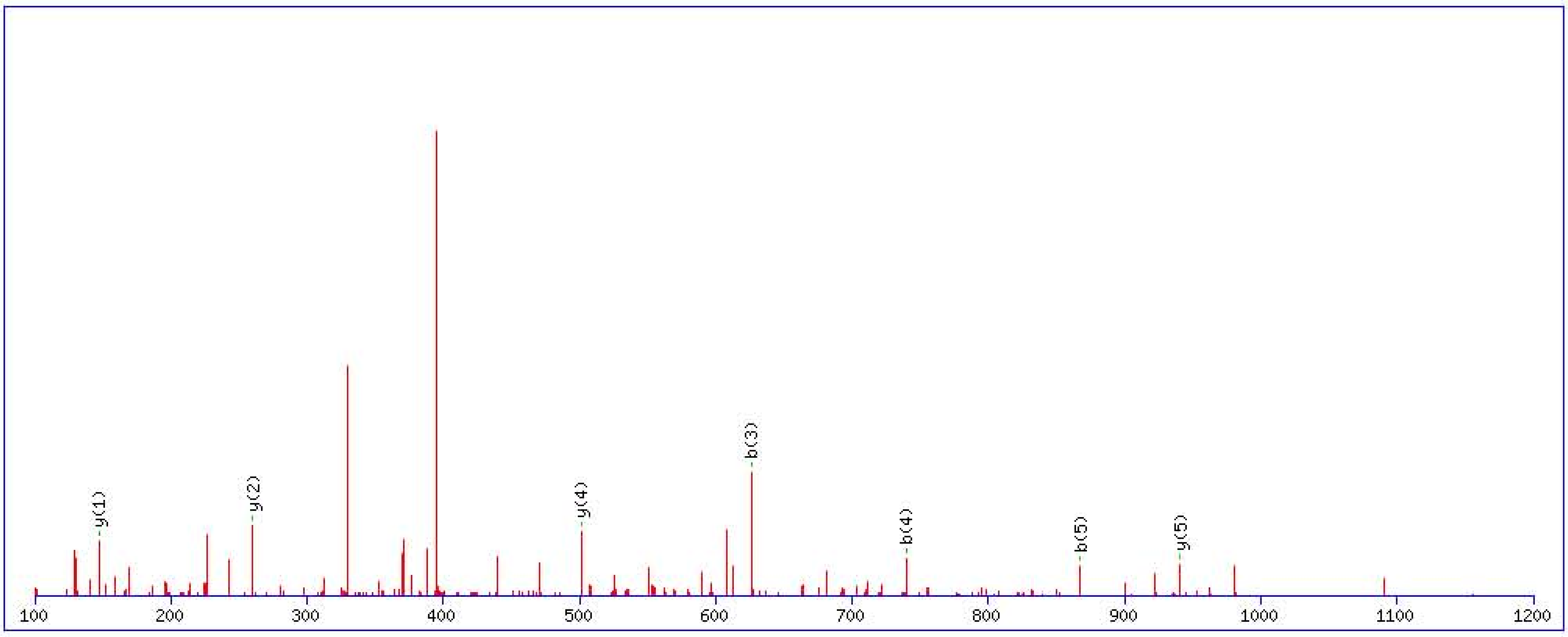
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GEQIQLK**
Found in **CO5_HUMAN**, Complement C5 OS=Homo sapiens GN=C5 PE=1 SV=4

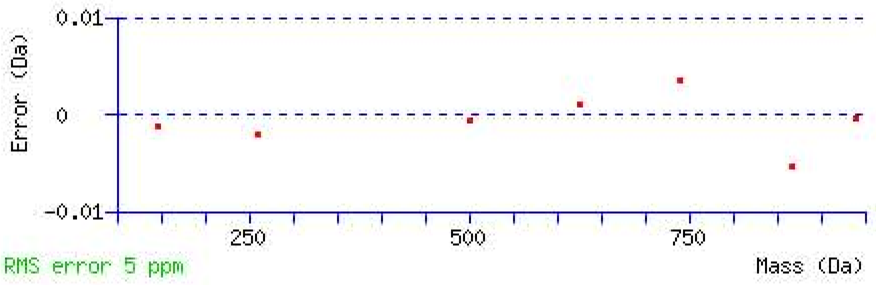
Match to Query 20103: 1125.617288 from(563.815920,2+) rtinseconds(1728) index(34604)
Title: Locus:1.1.1.3021.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

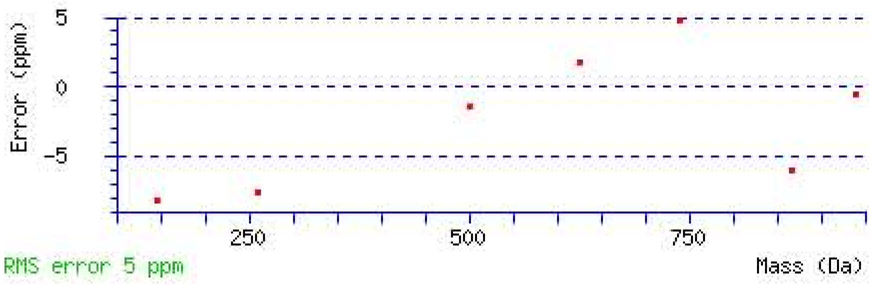
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1125.621597
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.036
Matches : 7/56 fragment ions using 10 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 7 |
| 2 | 187.071333 | 94.039305 | | | 169.060768 | 85.034022 | E | 1069.607429 | 535.307353 | 1052.580880 | 526.794078 | 1051.596864 | 526.302070 | 6 |
| 3 | ***626.296659*** | 313.651968 | 609.270110 | 305.138693 | 608.286094 | 304.646685 | Q | ***940.564836*** | 470.786056 | 923.538287 | 462.272782 | | | 5 |
| 4 | ***739.380723*** | 370.194000 | 722.354174 | 361.680725 | 721.370158 | 361.188717 | I | ***501.339510*** | 251.173393 | 484.312961 | 242.660119 | | | 4 |
| 5 | ***867.439301*** | 434.223289 | 850.412752 | 425.710014 | 849.428736 | 425.218006 | Q | 388.255446 | 194.631361 | 371.228897 | 186.118087 | | | 3 |
| 6 | 980.523365 | 490.765321 | 963.496816 | 482.252046 | 962.512800 | 481.760038 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 7 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546766 | | | 1 |





NCBI **BLAST** search of GEQIQLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.9 | 1125.621597 | -0.004309 | GEQIQLK |
| 16.1 | 1125.607666 | 0.009622 | QMDRHAKIK |
| 12.5 | 1125.632828 | -0.015540 | KLCLSHLQK |
| 7.6 | 1125.621597 | -0.004309 | EQVAQLK |
| 6.6 | 1125.606979 | 0.010309 | LKEAFDYIK |
| 6.5 | 1125.621597 | -0.004309 | GEQIQLK |
| 6.5 | 1125.633499 | -0.016211 | VSHFLPWIK |
| 6.3 | 1125.629486 | -0.012198 | RVDGWPVGLK |
| 4.6 | 1125.602966 | 0.014322 | VSISKSTYNK |
| 4.5 | 1125.632813 | -0.015525 | EQAARLK |

**Mascot:** http://www.matrixscience.com/

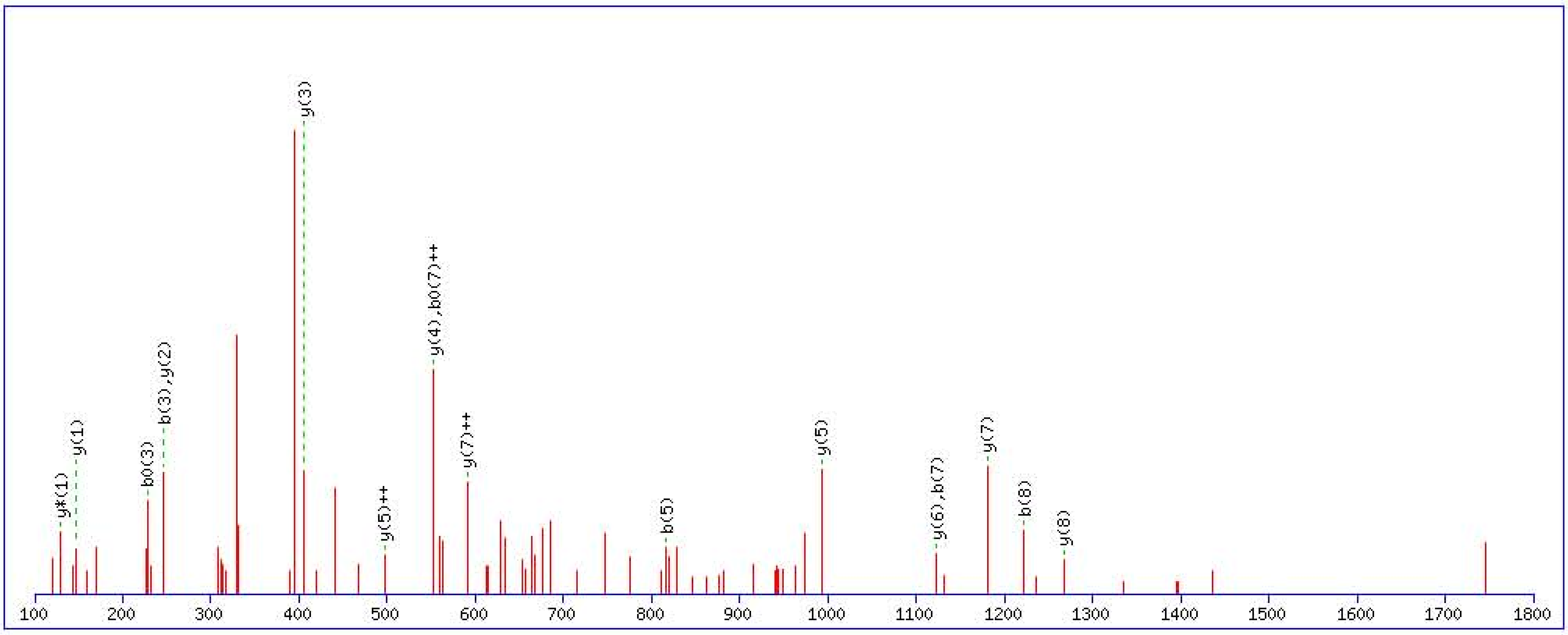
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TSGMQFCVK**
Found in **CO5_HUMAN**, Complement C5 OS=Homo sapiens GN=C5 PE=1 SV=4

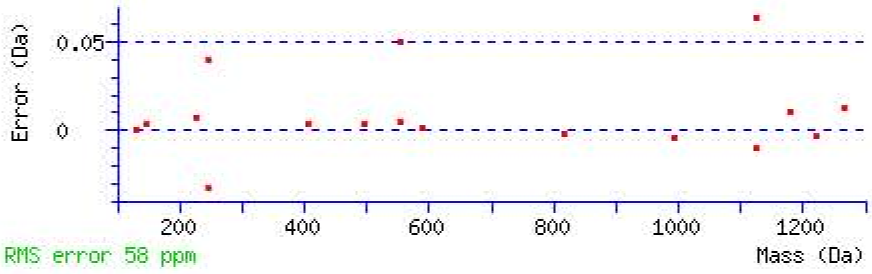
Match to Query 29128: 1367.639588 from(684.827070,2+) rtinseconds(1921) index(35844)
Title: Locus:1.1.1.3088.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

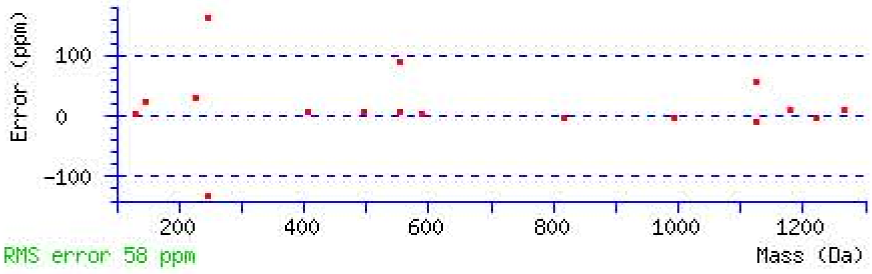
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1367.639999
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5     : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.00023
Matches : 17/74 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 9 |
| 2 | 189.086983 | 95.047129 | | | 171.076418 | 86.041847 | S | ***1267.599584*** | 634.303430 | 1250.573035 | 625.790156 | 1249.589019 | 625.298148 | 8 |
| 3 | **246.108447** | 123.557861 | | | 228.097882 | 114.552579 | G | ***1180.567556*** | 590.787416 | 1163.541007 | 582.274142 | | | 7 |
| 4 | 377.148932 | 189.078104 | | | 359.138367 | 180.072822 | M | ***1123.546092*** | 562.276684 | 1106.519543 | 553.763410 | | | 6 |
| 5 | **816.374258** | 408.690767 | 799.347709 | 400.177493 | 798.363693 | 399.685485 | Q | ***992.505607*** | 496.756442 | 975.479058 | 488.243167 | | | 5 |
| 6 | 963.442672 | 482.224974 | 946.416123 | 473.711700 | 945.432107 | 473.219692 | F | ***553.280281*** | 277.143779 | 536.253732 | 268.630504 | | | 4 |
| 7 | **1123.473321** | 562.240298 | 1106.446772 | 553.727024 | 1105.462756 | 553.235016 | C | ***406.211867*** | 203.609571 | 389.185318 | 195.096297 | | | 3 |
| 8 | **1222.541735** | 611.774506 | 1205.515186 | 603.261231 | 1204.531170 | 602.769223 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TSGMQFCVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.4 | 1367.639999 | -0.000411 | TSGMQFCVK |
| 2.6 | 1367.650314 | -0.010726 | TLQGERMENYK |

**Mascot:** http://www.matrixscience.com/

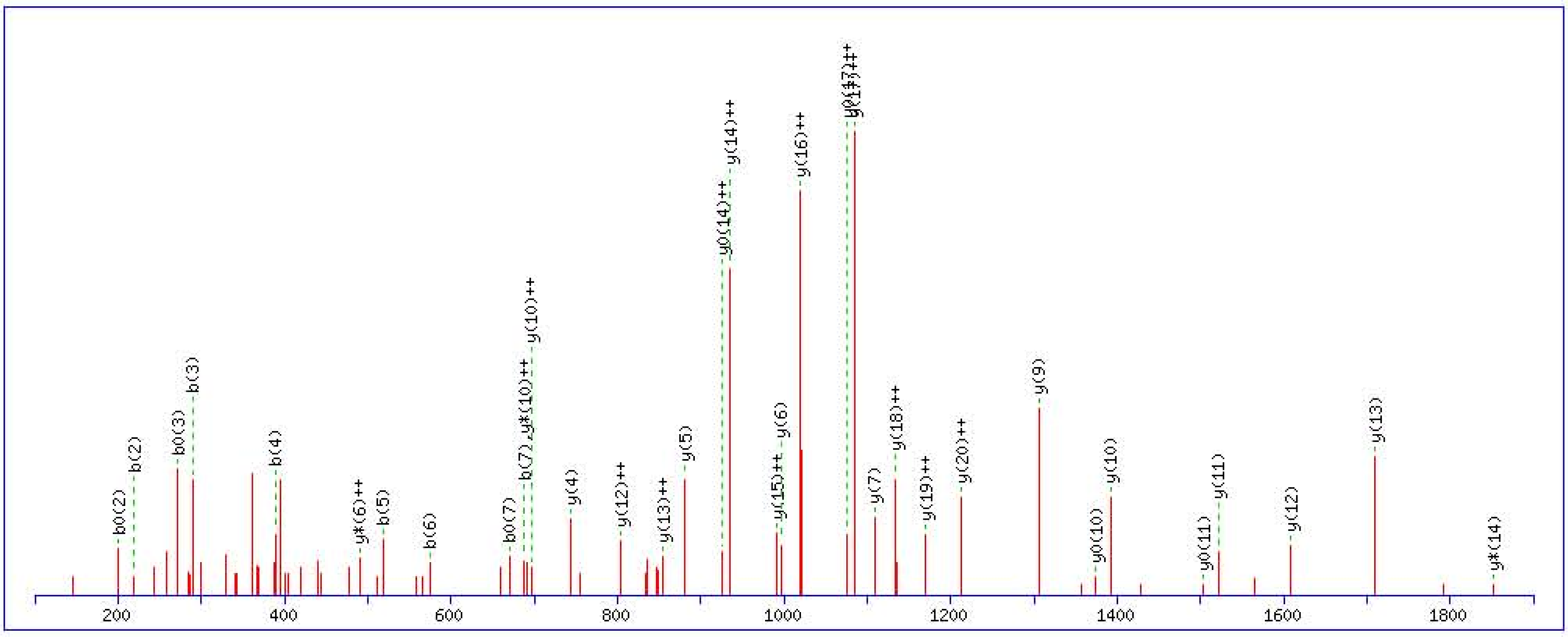
# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **MSAVEGICTSESPVIDHQGTK**
Found in **CO5_HUMAN**, Complement C5 OS=Homo sapiens GN=C5 PE=1 SV=4

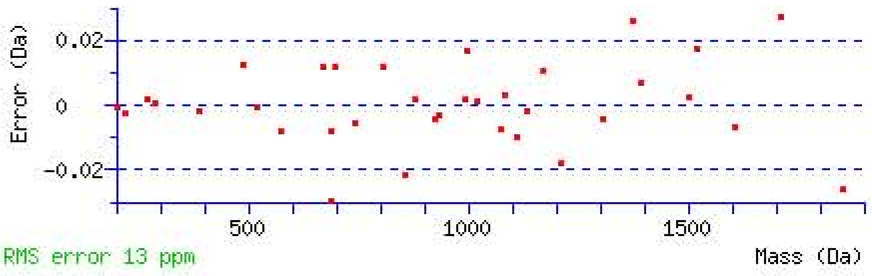
Match to Query 57242: 2556.205902 from(853.075910,3+) rtinseconds(1939) index(35998)
Title: Locus:1.1.1.3094.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●

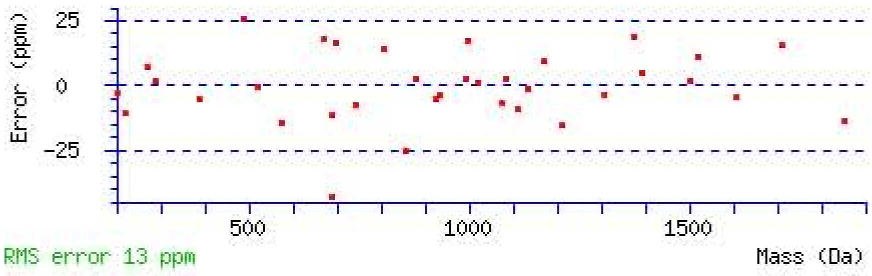


```
Monoisotopic mass of neutral peptide Mr(calc): 2556.202240
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18     : Biotin:Thermo-21345 (Q)
Ions Score: 68  Expect: 3.1e-006
Matches : 35/202 fragment ions using 60 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 21 |
| 2 | **219.079789** | 110.043532 | | | 201.069224 | 101.038250 | S | 2426.169024 | 1213.588150 | 2409.142475 | 1205.074875 | 2408.158459 | 1204.582867 | 20 |
| 3 | **290.116903** | 145.562089 | | | 272.106338 | 136.556807 | A | 2339.136996 | 1170.072136 | 2322.110447 | 1161.558861 | 2321.126431 | 1161.066853 | 19 |
| 4 | **389.185317** | 195.096296 | | | 371.174752 | 186.091014 | V | 2268.099882 | 1134.553579 | 2251.073333 | 1126.040304 | 2250.089317 | 1125.548296 | 18 |
| 5 | **518.227910** | 259.617593 | | | 500.217345 | 250.612311 | E | 2169.031468 | 1085.019372 | 2152.004919 | 1076.506097 | 2151.020903 | 1076.014089 | 17 |
| 6 | **575.249374** | 288.128325 | | | 557.238809 | 279.123043 | G | 2039.988875 | 1020.498076 | 2022.962326 | 1011.984801 | 2021.978310 | 1011.492793 | 16 |
| 7 | **688.333438** | 344.670357 | | | 670.322873 | 335.665075 | I | 1982.967411 | 991.987343 | 1965.940862 | 983.474069 | 1964.956846 | 982.982061 | 15 |
| 8 | 848.364087 | 424.685682 | | | 830.353522 | 415.680399 | C | 1869.883347 | 935.445312 | 1852.856798 | 926.932037 | 1851.872782 | 926.440029 | 14 |
| 9 | 949.411766 | 475.209521 | | | 931.401201 | 466.204239 | T | ***1709.852698*** | 855.429987 | 1692.826149 | 846.916713 | 1691.842133 | 846.424704 | 13 |
| 10 | 1036.443794 | 518.725535 | | | 1018.433229 | 509.720253 | S | ***1608.805019*** | 804.906147 | 1591.778470 | 796.392873 | 1590.794454 | 795.900865 | 12 |
| 11 | 1165.486387 | 583.246832 | | | 1147.475822 | 574.241549 | E | ***1521.772991*** | 761.390133 | 1504.746442 | 752.876859 | 1503.762426 | 752.384851 | 11 |
| 12 | 1252.518415 | 626.762846 | | | 1234.507850 | 617.757563 | S | ***1392.730398*** | 696.868837 | 1375.703849 | 688.355563 | 1374.719833 | 687.863554 | 10 |
| 13 | 1349.571179 | 675.289228 | | | 1331.560614 | 666.283945 | P | ***1305.698370*** | 653.352823 | 1288.671821 | 644.839548 | 1287.687805 | 644.347540 | 9 |
| 14 | 1448.639593 | 724.823435 | | | 1430.629028 | 715.818152 | V | 1208.645606 | 604.826441 | 1191.619057 | 596.313166 | 1190.635041 | 595.821158 | 8 |
| 15 | 1561.723657 | 781.365467 | | | 1543.713092 | 772.360184 | I | ***1109.577192*** | 555.292234 | 1092.550643 | 546.778959 | 1091.566627 | 546.286951 | 7 |
| 16 | 1676.750600 | 838.878938 | | | 1658.740035 | 829.873656 | D | ***996.493128*** | 498.750202 | 979.466579 | 490.236927 | 978.482563 | 489.744919 | 6 |
| 17 | 1813.809512 | 907.408394 | | | 1795.798947 | 898.403112 | H | ***881.466185*** | 441.236730 | 864.439636 | 432.723456 | 863.455620 | 432.231448 | 5 |
| 18 | 2253.034838 | 1127.021057 | 2236.008289 | 1118.507782 | 2235.024273 | 1118.015774 | Q | ***744.407273*** | 372.707274 | 727.380724 | 364.194000 | 726.396708 | 363.701992 | 4 |
| 19 | 2310.056302 | 1155.531789 | 2293.029753 | 1147.018514 | 2292.045737 | 1146.526506 | G | 305.181947 | 153.094611 | 288.155398 | 144.581337 | 287.171382 | 144.089329 | 3 |
| 20 | 2411.103981 | 1206.055628 | 2394.077432 | 1197.542354 | 2393.093416 | 1197.050346 | T | 248.160483 | 124.583879 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 21 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 13 ppm



RMS error 13 ppm

NCBI **BLAST** search of MSAVEGICTSESPVIDHQGTK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 68.0 | 2556.202240 | 0.003662 | MSAVEGICTSESPVIDHQGTK |

**Mascot:** http://www.matrixscience.com/

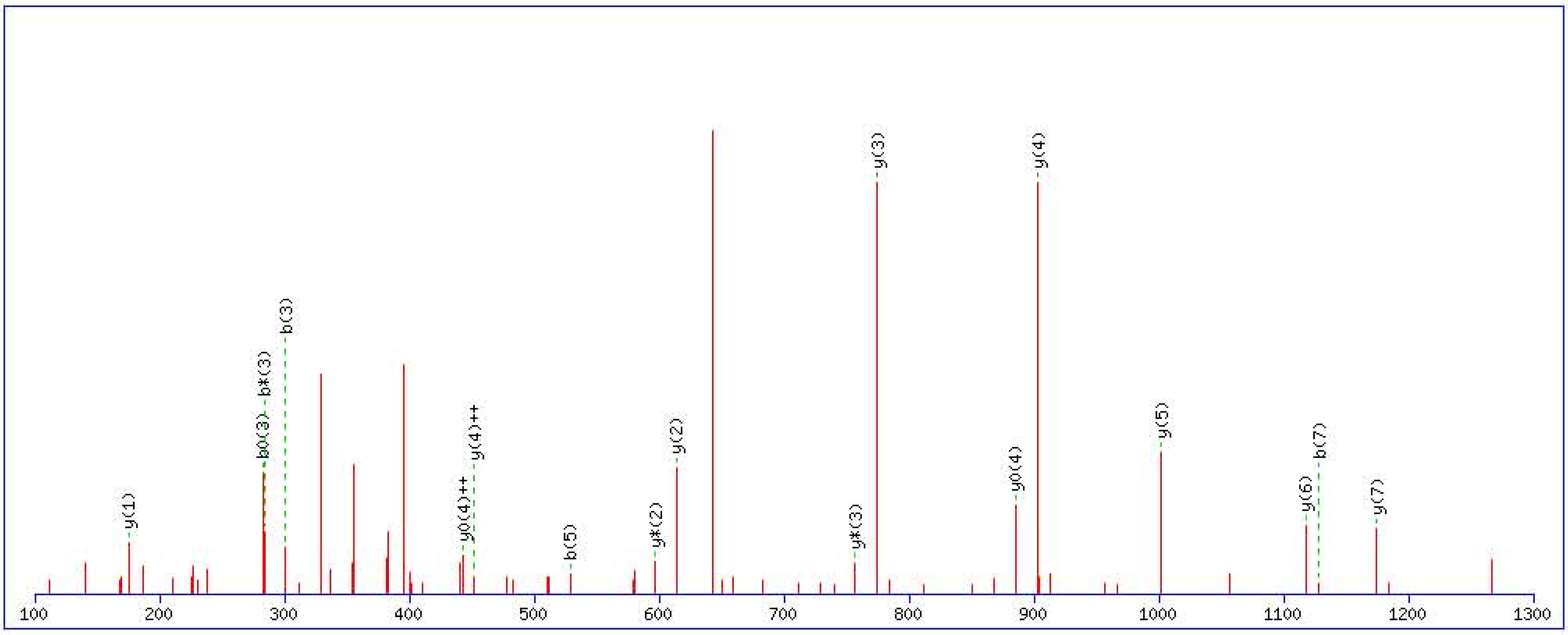
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QGDVECQR**
Found in **CO6_HUMAN**, Complement component C6 OS=Homo sapiens GN=C6 PE=1 SV=3

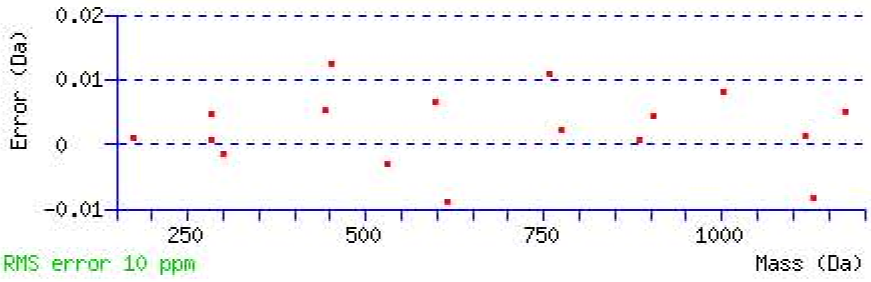
Match to Query 26249: 1301.584428 from(651.799490,2+) rtinseconds(1341) index(17305)
Title: Locus:1.1.1.469.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

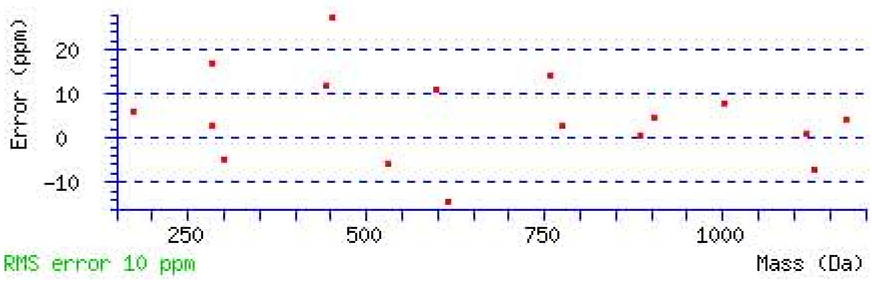
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1301.585648
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 0.00017
Matches : 17/74 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.065854 | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 8 |
| 2 | 186.087318 | 93.547297 | 169.060769 | 85.034023 | | | G | *1174.534341* | 587.770809 | 1157.507792 | 579.257534 | 1156.523776 | 578.765526 | 7 |
| 3 | **301.114261** | 151.060768 | 284.087712 | 142.547494 | 283.103696 | 142.055486 | D | *1117.512877* | 559.260077 | 1100.486328 | 550.746802 | 1099.502312 | 550.254794 | 6 |
| 4 | 400.182675 | 200.594976 | 383.156126 | 192.081701 | 382.172110 | 191.589693 | V | *1002.485934* | 501.746605 | 985.459385 | 493.233331 | 984.475369 | 492.741323 | 5 |
| 5 | **529.225268** | 265.116272 | 512.198719 | 256.602998 | 511.214703 | 256.110990 | E | *903.417520* | 452.212398 | 886.390971 | 443.699124 | 885.406955 | 443.207116 | 4 |
| 6 | 689.255917 | 345.131597 | 672.229368 | 336.618322 | 671.245352 | 336.126314 | C | *774.374927* | 387.691102 | 757.348378 | 379.177827 | | | 3 |
| 7 | **1128.481243** | 564.744260 | 1111.454694 | 556.230985 | 1110.470678 | 555.738977 | Q | *614.344278* | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 8 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QGDVECQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

## All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.6 | 1301.585648 | -0.001220 | QGDVECQR |
| 10.6 | 1301.584763 | -0.000335 | KATEDAEGGDGPR |
| 3.6 | 1301.584747 | -0.000319 | ESENLASGDQPR |
| 2.2 | 1301.584747 | -0.000319 | QESPSQENIDR |

**Mascot:** http://www.matrixscience.com/

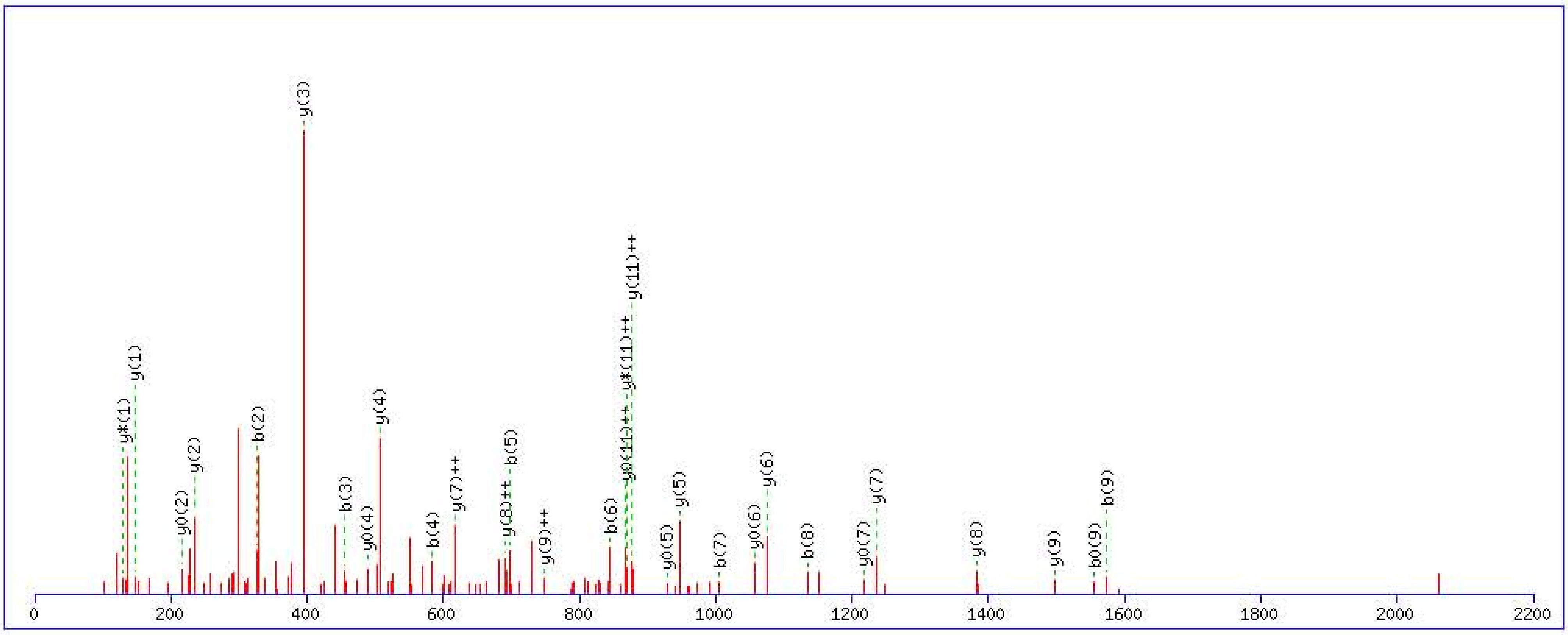
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YYQENFCEQICSK**
Found in **CO6_HUMAN**, Complement component C6 OS=Homo sapiens GN=C6 PE=1 SV=3

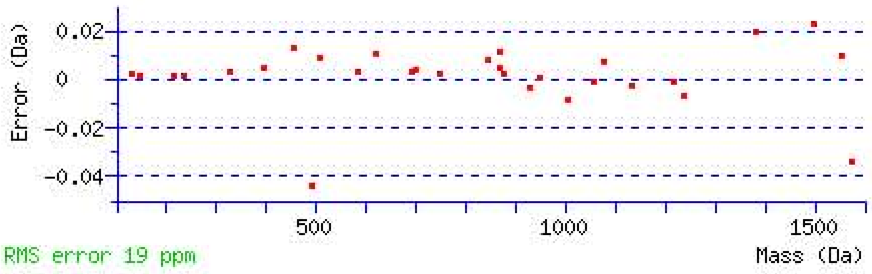
Match to Query 48853: 2078.896032 from(693.972620,3+) rtinseconds(2021) index(21814)
Title: Locus:1.1.1.706.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

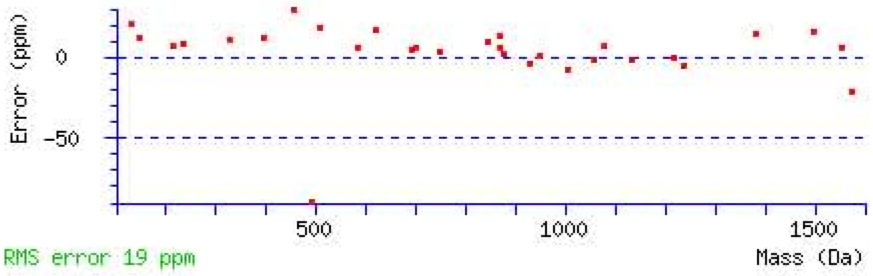
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2078.889984
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q9** : Biotin:Thermo-21345 (Q)
**Ions Score:** 51 **Expect:** 3.1e-005
**Matches :** 30/132 fragment ions using 52 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 13 |
| 2 | ***327.133934*** | 164.070605 | | | | | Y | 1916.833954 | 958.920615 | 1899.807405 | 950.407341 | 1898.823389 | 949.915333 | 12 |
| 3 | ***455.192512*** | 228.099894 | 438.165963 | 219.586620 | | | Q | 1753.770625 | 877.388951 | 1736.744076 | 868.875676 | 1735.760060 | 868.383668 | 11 |
| 4 | ***584.235105*** | 292.621191 | 567.208556 | 284.107916 | 566.224540 | 283.615908 | E | 1625.712047 | 813.359662 | 1608.685498 | 804.846387 | 1607.701482 | 804.354379 | 10 |
| 5 | ***698.278032*** | 349.642654 | 681.251483 | 341.129380 | 680.267467 | 340.637372 | N | ***1496.669454*** | 748.838365 | 1479.642905 | 740.325091 | 1478.658889 | 739.833083 | 9 |
| 6 | ***845.346446*** | 423.176861 | 828.319897 | 414.663587 | 827.335881 | 414.171579 | F | ***1382.626527*** | 691.816902 | 1365.599978 | 683.303627 | 1364.615962 | 682.811619 | 8 |
| 7 | ***1005.377095*** | 503.192186 | 988.350546 | 494.678911 | 987.366530 | 494.186903 | C | ***1235.558113*** | 618.282695 | 1218.531564 | 609.769420 | 1217.547548 | 609.277412 | 7 |
| 8 | ***1134.419688*** | 567.713482 | 1117.393139 | 559.200208 | 1116.409123 | 558.708200 | E | ***1075.527464*** | 538.267370 | 1058.500915 | 529.754096 | 1057.516899 | 529.262088 | 6 |
| 9 | ***1573.645014*** | 787.326145 | 1556.618465 | 778.812871 | 1555.634449 | 778.320863 | Q | ***946.484871*** | 473.746074 | 929.458322 | 465.232799 | 928.474306 | 464.740791 | 5 |
| 10 | 1686.729078 | 843.868177 | 1669.702529 | 835.354903 | 1668.718513 | 834.862895 | I | ***507.259545*** | 254.133411 | 490.232996 | 245.620136 | 489.248980 | 245.128128 | 4 |
| 11 | 1846.759727 | 923.883502 | 1829.733178 | 915.370227 | 1828.749162 | 914.878219 | C | ***394.175481*** | 197.591379 | 377.148932 | 189.078104 | 376.164916 | 188.586096 | 3 |
| 12 | 1933.791755 | 967.399516 | 1916.765206 | 958.886241 | 1915.781190 | 958.394233 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of YYQENFCEQICSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.9 | 2078.889984 | 0.006048 | YYQENFCEQICSK |

**Mascot:** http://www.matrixscience.com/

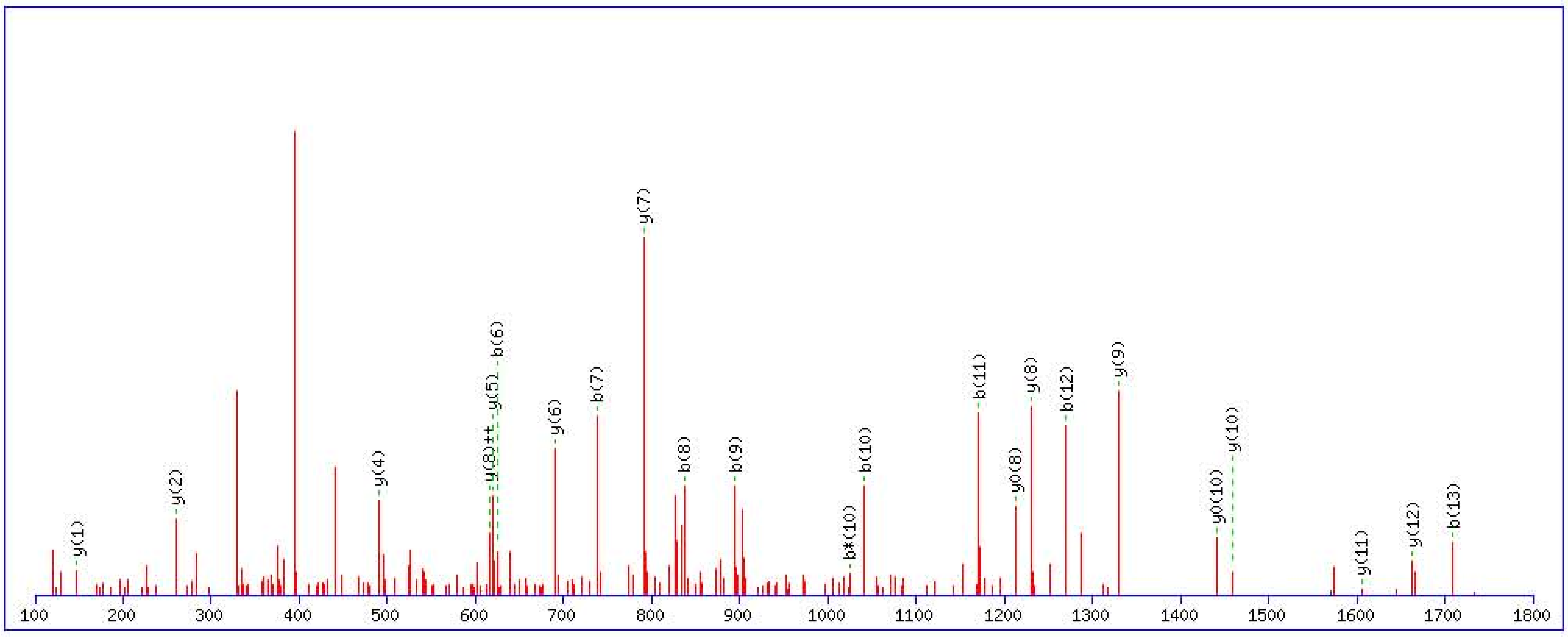
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VPANLENVGFEVQTAEDDLK**
Found in **CO6_HUMAN**, Complement component C6 OS=Homo sapiens GN=C6 PE=1 SV=3

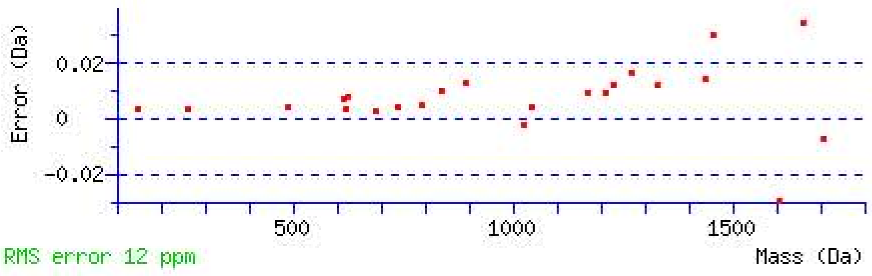
Match to Query 56675: 2498.245212 from(833.755680,3+) rtinseconds(2635) index(25329)
Title: Locus:1.1.1.919.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

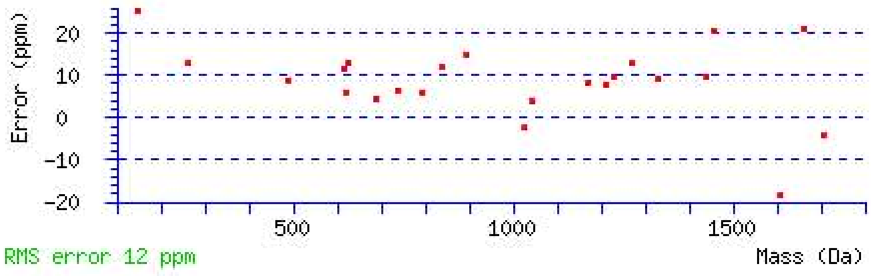
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2498.236282
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13    : Biotin:Thermo-21345 (Q)
Ions Score: 76  Expect: 6.7e-007
Matches : 23/208 fragment ions using 32 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 20 |
| 2 | 197.128454 | 99.067865 | | | | | P | 2400.175154 | 1200.591215 | 2383.148605 | 1192.077940 | 2382.164589 | 1191.585932 | 19 |
| 3 | 268.165568 | 134.586422 | | | | | A | 2303.122390 | 1152.064833 | 2286.095841 | 1143.551558 | 2285.111825 | 1143.059550 | 18 |
| 4 | 382.208495 | 191.607885 | 365.181946 | 183.094611 | | | N | 2232.085276 | 1116.546276 | 2215.058727 | 1108.033001 | 2214.074711 | 1107.540993 | 17 |
| 5 | 495.292559 | 248.149917 | 478.266010 | 239.636643 | | | L | 2118.042349 | 1059.524812 | 2101.015800 | 1051.011538 | 2100.031784 | 1050.519530 | 16 |
| 6 | ***624.335152*** | 312.671214 | 607.308603 | 304.157940 | 606.324587 | 303.665932 | E | 2004.958285 | 1002.982781 | 1987.931736 | 994.469506 | 1986.947720 | 993.977498 | 15 |
| 7 | ***738.378079*** | 369.692678 | 721.351530 | 361.179403 | 720.367514 | 360.687395 | N | 1875.915692 | 938.461484 | 1858.889143 | 929.948210 | 1857.905127 | 929.456202 | 14 |
| 8 | ***837.446493*** | 419.226885 | 820.419944 | 410.713610 | 819.435928 | 410.221602 | V | 1761.872765 | 881.440021 | 1744.846216 | 872.926746 | 1743.862200 | 872.434738 | 13 |
| 9 | ***894.467957*** | 447.737617 | 877.441408 | 439.224342 | 876.457392 | 438.732334 | G | ***1662.804351*** | 831.905814 | 1645.777802 | 823.392539 | 1644.793786 | 822.900531 | 12 |
| 10 | ***1041.536371*** | 521.271824 | 1024.509822 | 512.758549 | 1023.525806 | 512.266541 | F | ***1605.782887*** | 803.395082 | 1588.756338 | 794.881807 | 1587.772322 | 794.389799 | 11 |
| 11 | ***1170.578964*** | 585.793120 | 1153.552415 | 577.279846 | 1152.568399 | 576.787838 | E | ***1458.714473*** | 729.860875 | 1441.687924 | 721.347600 | 1440.703908 | 720.855592 | 10 |
| 12 | ***1269.647378*** | 635.327327 | 1252.620829 | 626.814053 | 1251.636813 | 626.322045 | V | ***1329.671880*** | 665.339578 | 1312.645331 | 656.826304 | 1311.661315 | 656.334296 | 9 |
| 13 | ***1708.872704*** | 854.939990 | 1691.846155 | 846.426716 | 1690.862139 | 845.934708 | Q | ***1230.603466*** | 615.805371 | 1213.576917 | 607.292097 | 1212.592901 | 606.800089 | 8 |
| 14 | 1809.920383 | 905.463830 | 1792.893834 | 896.950555 | 1791.909818 | 896.458547 | T | ***791.378140*** | 396.192708 | 774.351591 | 387.679434 | 773.367575 | 387.187426 | 7 |
| 15 | 1880.957497 | 940.982387 | 1863.930948 | 932.469112 | 1862.946932 | 931.977104 | A | ***690.330461*** | 345.668869 | 673.303912 | 337.155594 | 672.319896 | 336.663586 | 6 |
| 16 | 2010.000090 | 1005.503683 | 1992.973541 | 996.990409 | 1991.989525 | 996.498401 | E | ***619.293347*** | 310.150312 | 602.266798 | 301.637037 | 601.282782 | 301.145029 | 5 |
| 17 | 2125.027033 | 1063.017154 | 2108.000484 | 1054.503880 | 2107.016468 | 1054.011872 | D | ***490.250754*** | 245.629015 | 473.224205 | 237.115740 | 472.240189 | 236.623732 | 4 |
| 18 | 2240.053976 | 1120.530626 | 2223.027427 | 1112.017351 | 2222.043411 | 1111.525343 | D | 375.223811 | 188.115543 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 19 | 2353.138040 | 1177.072658 | 2336.111491 | 1168.559383 | 2335.127475 | 1168.067375 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 20 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VPANLENVGFEVQTAEDDLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 76.5 | 2498.236282 | 0.008930 | VPANLENVGFEVQTAEDDLK |

**Mascot:** http://www.matrixscience.com/

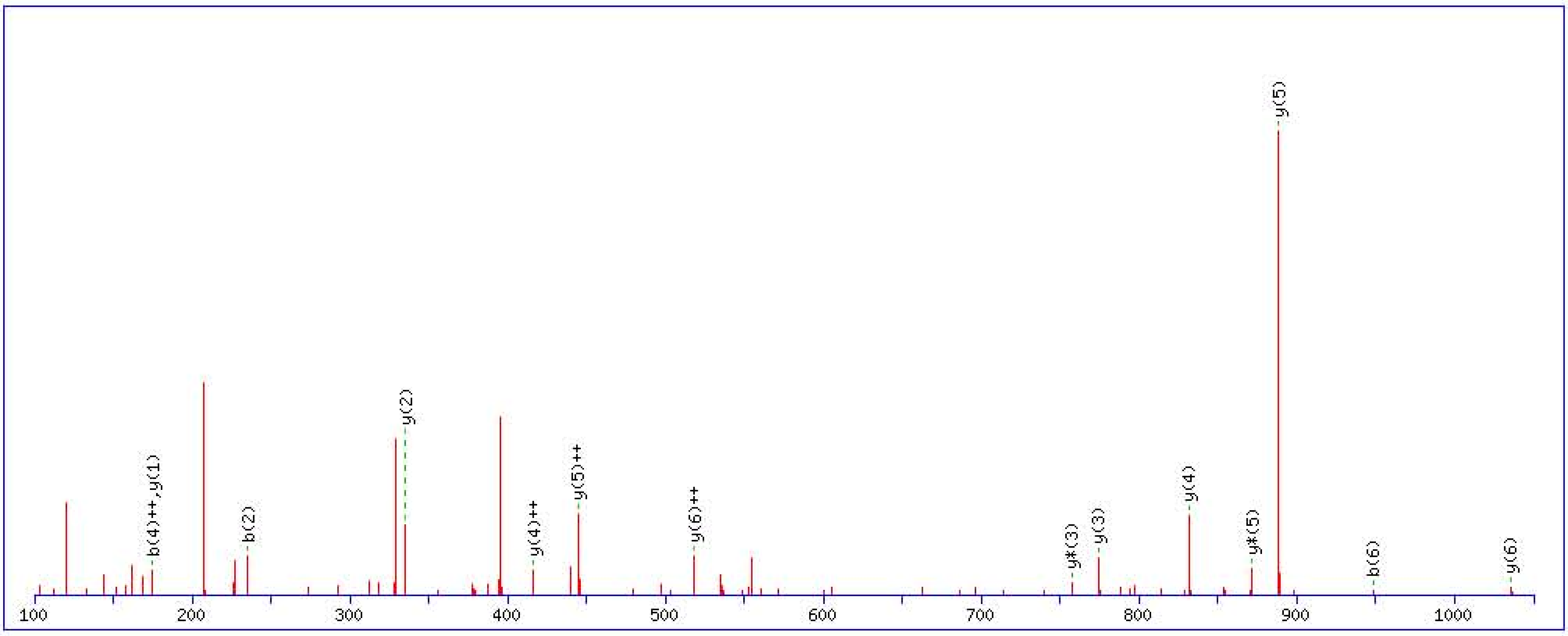
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SFGGQCR**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

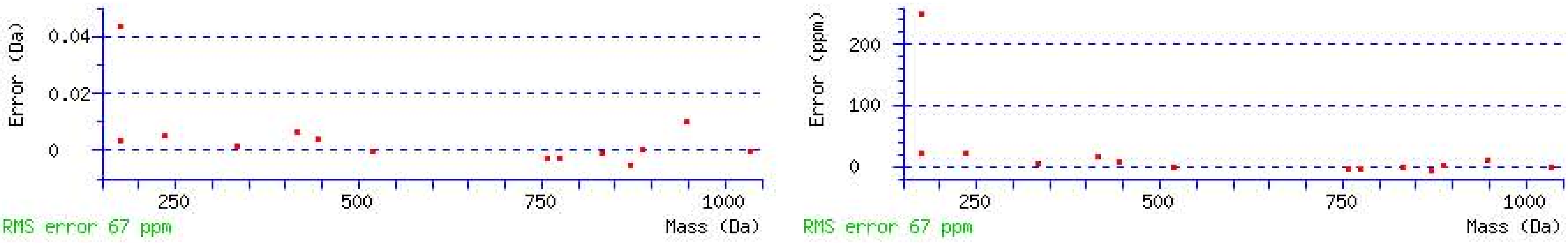
Match to Query 20008: 1121.506508 from(561.760530,2+) rtinseconds(1531) index(3100)
Title: Locus:1.1.1.1342.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1121.511032
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5     : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.0035
Matches : 14/52 fragment ions using 27 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | 7 |
| 2 | **235.107718** | 118.057497 | | | 217.097153 | 109.052214 | F | ***1035.486269*** | 518.246773 | 1018.459720 | 509.733498 | 6 |
| 3 | 292.129182 | 146.568229 | | | 274.118617 | 137.562946 | G | ***888.417855*** | 444.712566 | 871.391306 | 436.199291 | 5 |
| 4 | 349.150646 | 175.078961 | | | 331.140081 | 166.073678 | G | ***831.396391*** | 416.201834 | 814.369842 | 407.688559 | 4 |
| 5 | 788.375972 | 394.691624 | 771.349423 | 386.178350 | 770.365407 | 385.686342 | Q | ***774.374927*** | 387.691102 | 757.348378 | 379.177827 | 3 |
| 6 | **948.406621** | 474.706949 | 931.380072 | 466.193674 | 930.396056 | 465.701666 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | 1 |



NCBI **BLAST** search of SFGGQCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.4 | 1121.511032 | -0.004524 | SFGGQCR |
| 5.0 | 1121.500259 | 0.006249 | HPGFHQEDR |
| 1.9 | 1121.502274 | 0.004234 | MSVEEQIDR |
| 1.9 | 1121.494873 | 0.011635 | SANTSPESSSR |
| 0.9 | 1121.513535 | -0.007027 | MGSGGDSLLGGR |

**Mascot:** http://www.matrixscience.com/

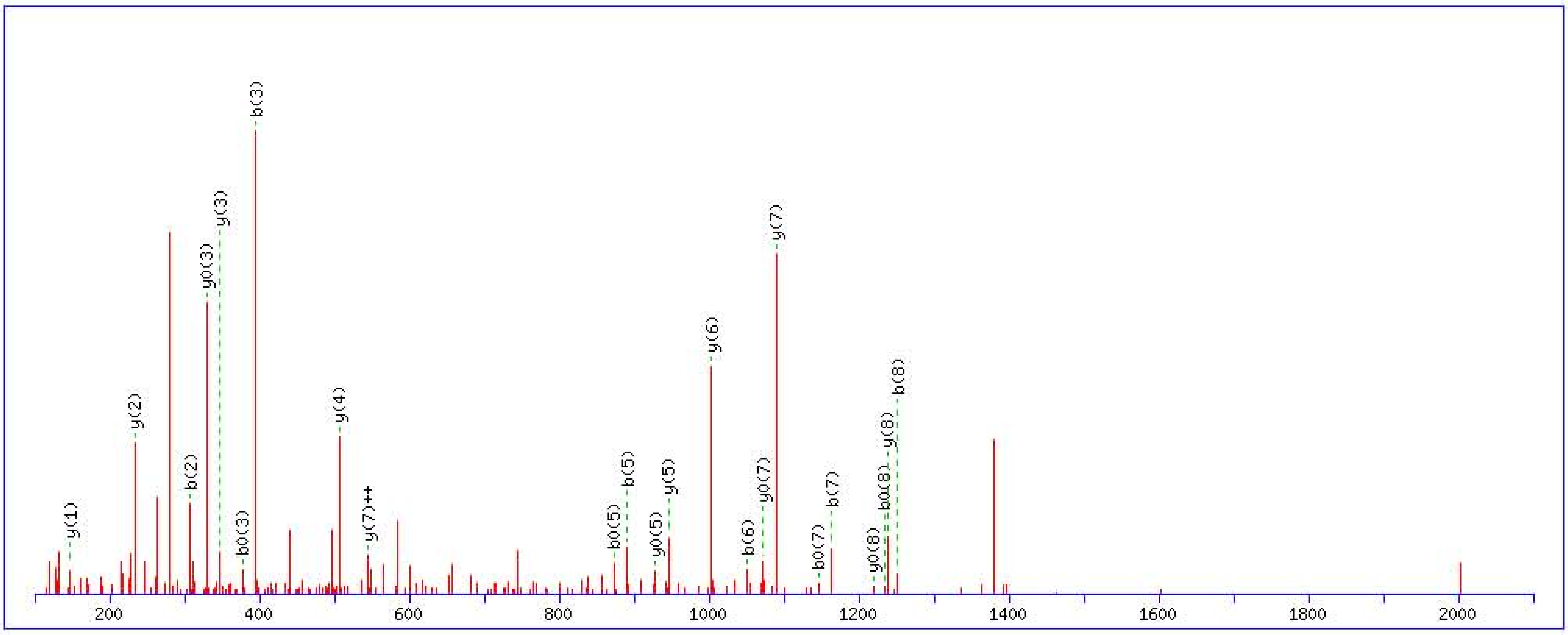
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of CFSGQCISK
Found in CO7_HUMAN, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

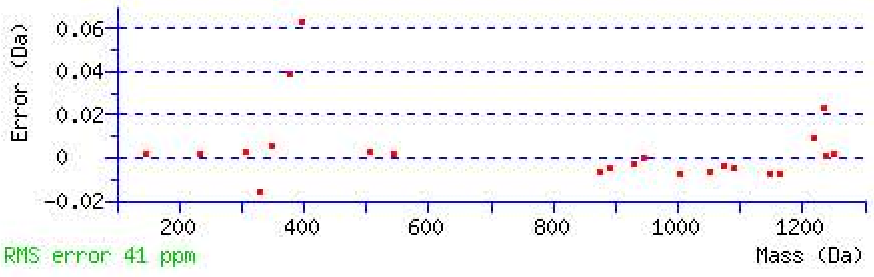
Match to Query 30058: 1396.624348 from(699.319450,2+) rtinseconds(1635) index(3725)
Title: Locus:1.1.1.1378.5 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

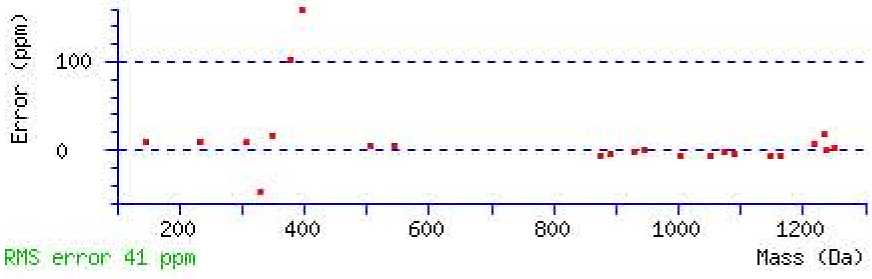
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1396.630157
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 42  Expect: 0.0016
Matches : 23/82 fragment ions using 52 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 9 |
| 2 | **308.106339** | 154.556807 | | | | | F | ***1237.606777*** | 619.307027 | 1220.580228 | 610.793752 | 1219.596212 | 610.301744 | 8 |
| 3 | **395.138367** | 198.072821 | | | 377.127802 | 189.067539 | S | ***1090.538363*** | 545.772819 | 1073.511814 | 537.259545 | 1072.527798 | 536.767537 | 7 |
| 4 | 452.159831 | 226.583553 | | | 434.149266 | 217.578271 | G | ***1003.506335*** | 502.256806 | 986.479786 | 493.743531 | 985.495770 | 493.251523 | 6 |
| 5 | **891.385157** | 446.196217 | 874.358608 | 437.682942 | 873.374592 | 437.190934 | Q | ***946.484871*** | 473.746074 | 929.458322 | 465.232799 | 928.474306 | 464.740791 | 5 |
| 6 | **1051.415806** | 526.211541 | 1034.389257 | 517.698267 | 1033.405241 | 517.206258 | C | ***507.259545*** | 254.133410 | 490.232996 | 245.620136 | 489.248980 | 245.128128 | 4 |
| 7 | **1164.499870** | 582.753573 | 1147.473321 | 574.240298 | 1146.489305 | 573.748290 | I | ***347.228896*** | 174.118086 | 330.202347 | 165.604811 | 329.218331 | 165.112803 | 3 |
| 8 | **1251.531898** | 626.269587 | 1234.505349 | 617.756313 | 1233.521333 | 617.264304 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of CFSGQCISK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.7 | 1396.630157 | -0.005809 | CFSGQCISK |
| 11.2 | 1396.629272 | -0.004924 | QLSQAEATDFCK |
| 1.2 | 1396.629257 | -0.004909 | FDNLMNQKEDK |

**Mascot:** http://www.matrixscience.com/

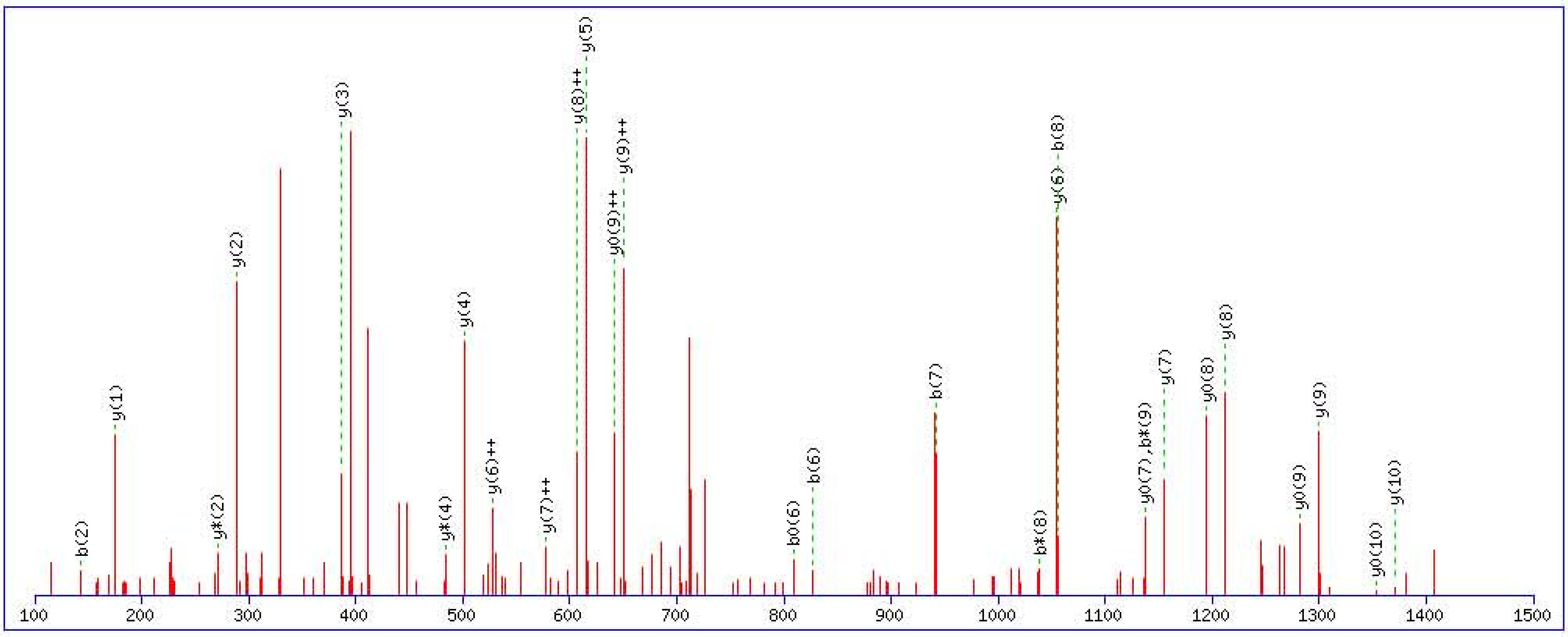
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AASGTQNNVLR**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

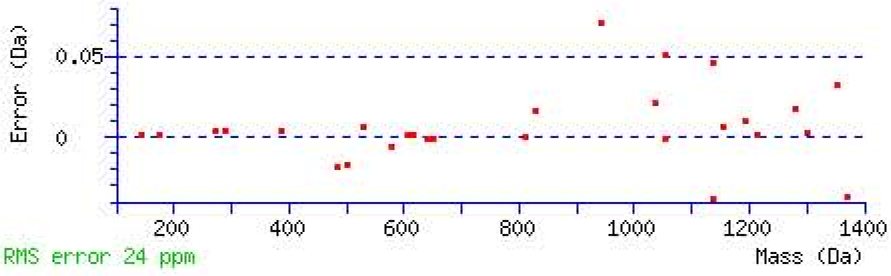
Match to Query 32220: 1440.747668 from(721.381110,2+) rtinseconds(1571) index(3347)
Title: Locus:1.1.1.1356.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

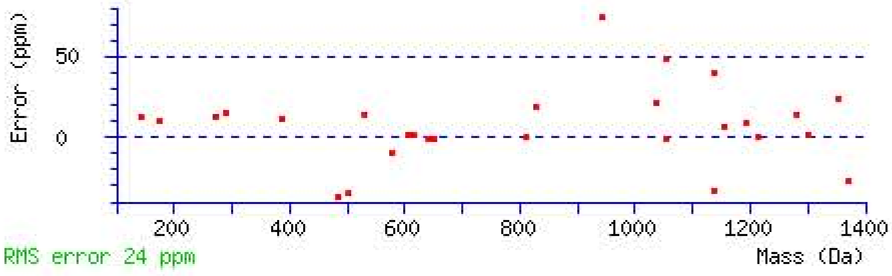
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1440.750717
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 1.9e-006
Matches : 28/94 fragment ions using 52 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 11 |
| 2 | **143.081504** | 72.044390 | | | | | A | ***1370.720895*** | 685.864086 | 1353.694346 | 677.350811 | 1352.710330 | 676.858803 | 10 |
| 3 | 230.113532 | 115.560404 | | | 212.102967 | 106.555121 | S | ***1299.683781*** | 650.345529 | 1282.657232 | 641.832254 | 1281.673216 | 641.340246 | 9 |
| 4 | 287.134996 | 144.071136 | | | 269.124431 | 135.065854 | G | ***1212.651753*** | 606.829515 | 1195.625204 | 598.316240 | 1194.641188 | 597.824232 | 8 |
| 5 | 388.182675 | 194.594976 | | | 370.172110 | 185.589693 | T | ***1155.630289*** | 578.318783 | 1138.603740 | 569.805508 | 1137.619724 | 569.313500 | 7 |
| 6 | **827.408001** | 414.207639 | 810.381452 | 405.694364 | 809.397436 | 405.202356 | Q | ***1054.582610*** | 527.794943 | 1037.556061 | 519.281669 | | | 6 |
| 7 | **941.450928** | 471.229102 | 924.424379 | 462.715828 | 923.440363 | 462.223820 | N | ***615.357284*** | 308.182280 | 598.330735 | 299.669006 | | | 5 |
| 8 | **1055.493855** | 528.250566 | 1038.467306 | 519.737291 | 1037.483290 | 519.245283 | N | ***501.314357*** | 251.160816 | 484.287808 | 242.647542 | | | 4 |
| 9 | 1154.562269 | 577.784773 | 1137.535720 | 569.271498 | 1136.551704 | 568.779490 | V | ***387.271430*** | 194.139353 | 370.244881 | 185.626078 | | | 3 |
| 10 | 1267.646333 | 634.326805 | 1250.619784 | 625.813530 | 1249.635768 | 625.321522 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AASGTQNNVLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.7 | 1440.750717 | -0.003049 | AASGTQNNVLR |
| 4.5 | 1440.743515 | 0.004153 | FIQLLTEFQMR |
| 3.0 | 1440.736099 | 0.011569 | AAGSLAAAEPFSPPR |
| 2.8 | 1440.739487 | 0.008181 | AAVTGQDEAIR |
| 2.6 | 1440.732086 | 0.015582 | GEENDVPSLRGLR |
| 2.3 | 1440.736115 | 0.011553 | ETFEGPKHEVLR |
| 2.2 | 1440.756073 | -0.008405 | WKHYLRVHMR |
| 1.6 | 1440.732071 | 0.015597 | ASEASKVHNEITR |
| 1.4 | 1440.750748 | -0.003080 | MDVLPTGGGRPGLR |
| 1.3 | 1440.739471 | 0.008197 | EEKCPLGTAPALR |

**Mascot:** http://www.matrixscience.com/

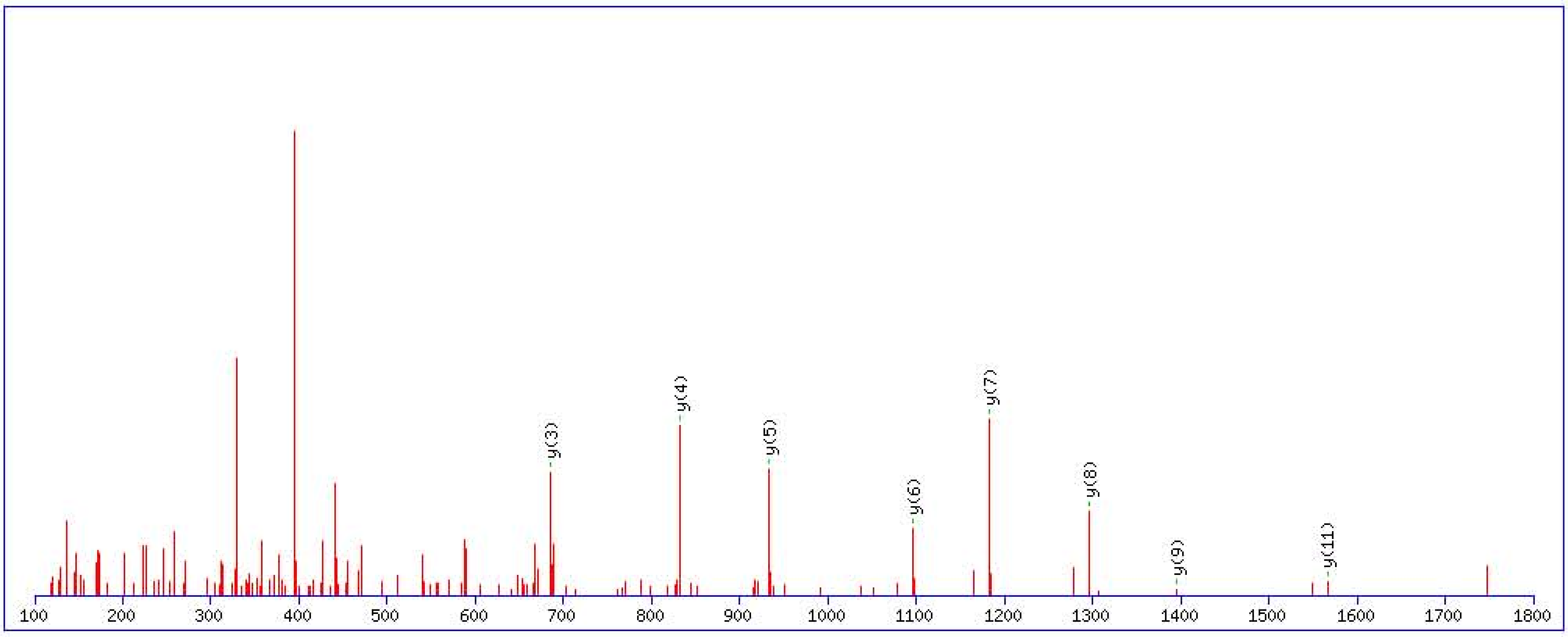
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LSGNVLSYTFQVK**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

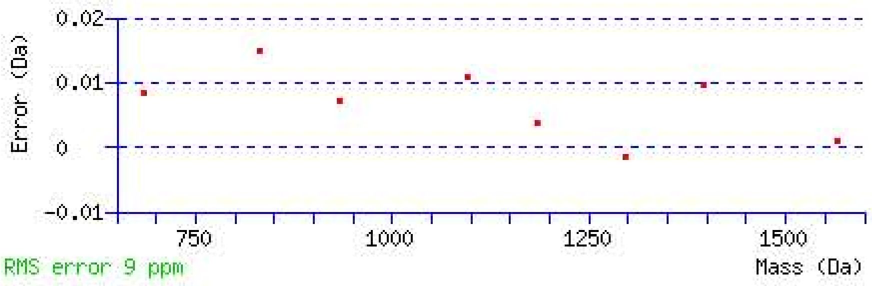
Match to Query 41989: 1765.952862 from(589.658230,3+) rtinseconds(2466) index(8422)
Title: Locus:1.1.1.1668.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

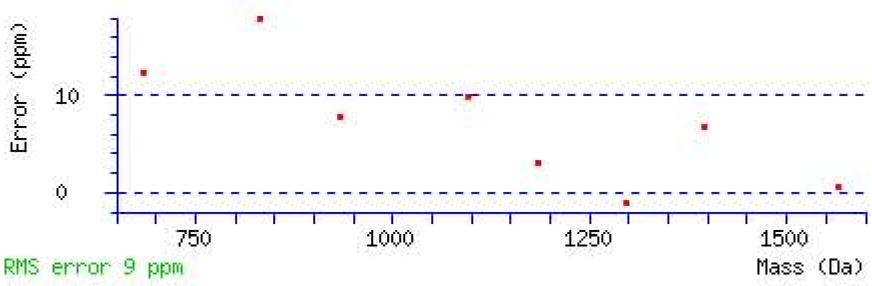
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1765.943680
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 49  Expect: 4.3e-005
Matches : 8/128 fragment ions using 15 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 13 |
| 2 | 201.123368 | 101.065322 | | | 183.112803 | 92.060039 | S | 1653.866891 | 827.437084 | 1636.840342 | 818.923809 | 1635.856326 | 818.431801 | 12 |
| 3 | 258.144832 | 129.576054 | | | 240.134267 | 120.570771 | G | ***1566.834863*** | 783.921070 | 1549.808314 | 775.407795 | 1548.824298 | 774.915787 | 11 |
| 4 | 372.187759 | 186.597517 | 355.161210 | 178.084243 | 354.177194 | 177.592235 | N | 1509.813399 | 755.410338 | 1492.786850 | 746.897063 | 1491.802834 | 746.405055 | 10 |
| 5 | 471.256173 | 236.131724 | 454.229624 | 227.618450 | 453.245608 | 227.126442 | V | ***1395.770472*** | 698.388874 | 1378.743923 | 689.875600 | 1377.759907 | 689.383592 | 9 |
| 6 | 584.340237 | 292.673757 | 567.313688 | 284.160482 | 566.329672 | 283.668474 | L | ***1296.702058*** | 648.854667 | 1279.675509 | 640.341393 | 1278.691493 | 639.849385 | 8 |
| 7 | 671.372265 | 336.189771 | 654.345716 | 327.676496 | 653.361700 | 327.184488 | S | ***1183.617994*** | 592.312635 | 1166.591445 | 583.799361 | 1165.607429 | 583.307353 | 7 |
| 8 | 834.435594 | 417.721435 | 817.409045 | 409.208161 | 816.425029 | 408.716153 | Y | ***1096.585966*** | 548.796621 | 1079.559417 | 540.283347 | 1078.575401 | 539.791339 | 6 |
| 9 | 935.483273 | 468.245275 | 918.456724 | 459.732000 | 917.472708 | 459.239992 | T | ***933.522637*** | 467.264957 | 916.496088 | 458.751682 | 915.512072 | 458.259674 | 5 |
| 10 | 1082.551687 | 541.779482 | 1065.525138 | 533.266207 | 1064.541122 | 532.774199 | F | ***832.474958*** | 416.741117 | 815.448409 | 408.227843 | | | 4 |
| 11 | 1521.777013 | 761.392145 | 1504.750464 | 752.878870 | 1503.766448 | 752.386862 | Q | ***685.406544*** | 343.206910 | 668.379995 | 334.693636 | | | 3 |
| 12 | 1620.845427 | 810.926352 | 1603.818878 | 802.413077 | 1602.834862 | 801.921069 | V | 246.181218 | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LSGNVLSYTFQVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 49.2 | 1765.943680 | 0.009182 | LSGNVLSYTFQVK |
| 2.7 | 1765.950882 | 0.001980 | VTGNVSKKTNYLVMGR |

**Mascot:** http://www.matrixscience.com/

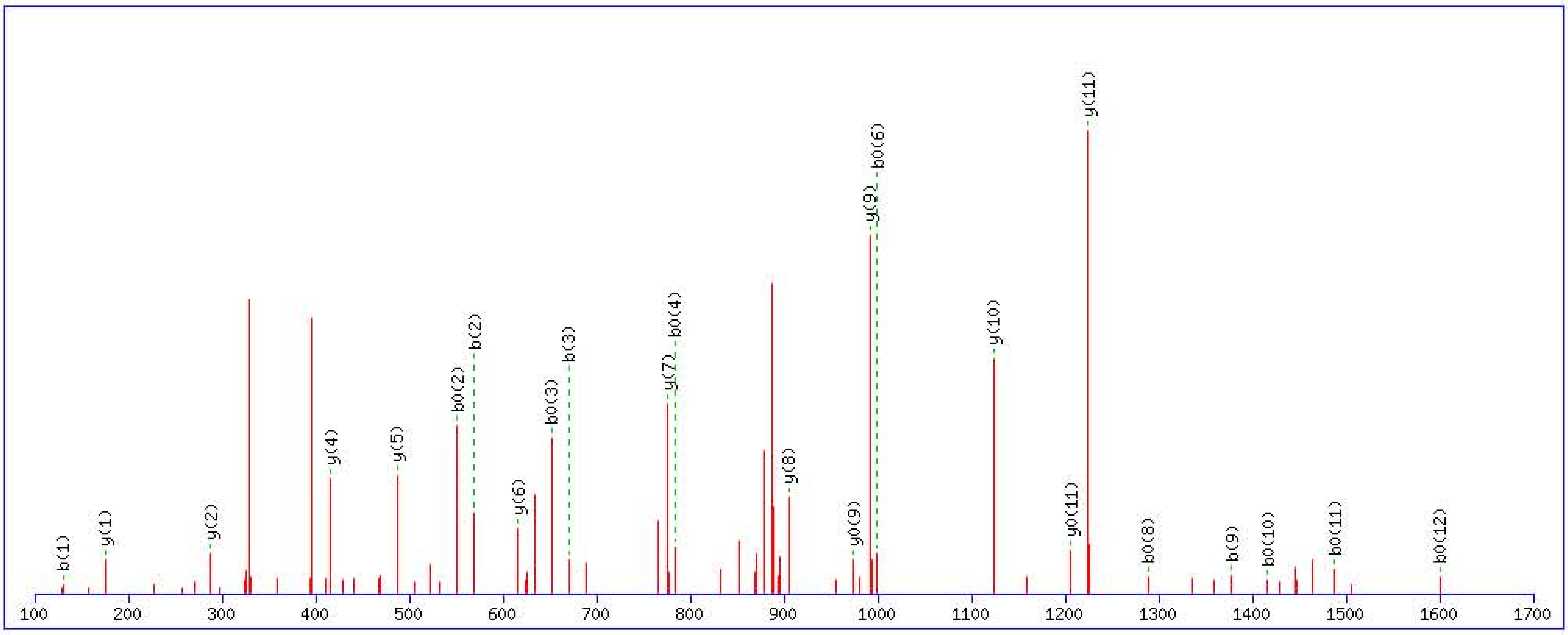
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EQTMSECEAGALR**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

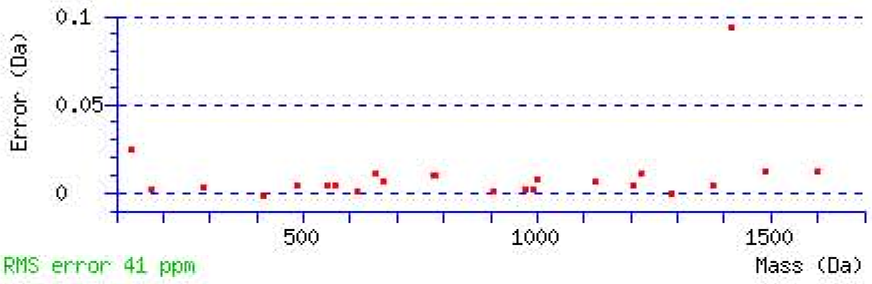
Match to Query 42575: 1791.808588 from(896.911570,2+) rtinseconds(1744) index(4356)
Title: Locus:1.1.1.1416.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

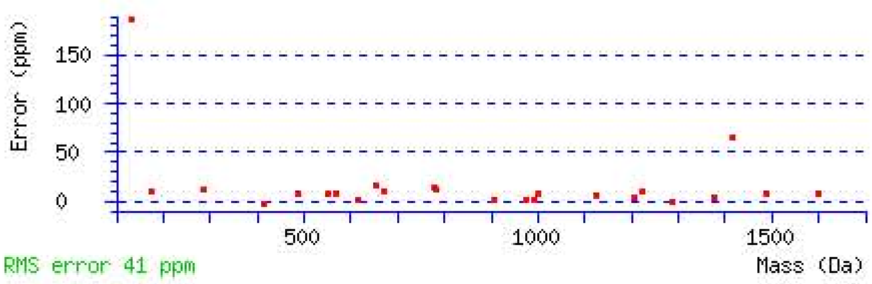
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1791.795349
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 70  Expect: 9.9e-007
Matches : 24/132 fragment ions using 39 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **130.049869** | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 13 |
| 2 | **569.275195** | 285.141236 | 552.248646 | 276.627961 | 551.264630 | 276.135953 | Q | 1663.760061 | 832.383668 | 1646.733512 | 823.870394 | 1645.749496 | 823.378386 | 12 |
| 3 | **670.322874** | 335.665075 | 653.296325 | 327.151801 | 652.312309 | 326.659793 | T | ***1224.534735*** | 612.771005 | 1207.508186 | 604.257731 | 1206.524170 | 603.765723 | 11 |
| 4 | 801.363359 | 401.185318 | 784.336810 | 392.672043 | 783.352794 | 392.180035 | M | ***1123.487056*** | 562.247166 | 1106.460507 | 553.733891 | 1105.476491 | 553.241883 | 10 |
| 5 | 888.395387 | 444.701332 | 871.368838 | 436.188057 | 870.384822 | 435.696049 | S | ***992.446571*** | 496.726923 | 975.420022 | 488.213649 | 974.436006 | 487.721641 | 9 |
| 6 | 1017.437980 | 509.222628 | 1000.411431 | 500.709354 | 999.427415 | 500.217346 | E | ***905.414543*** | 453.210909 | 888.387994 | 444.697635 | 887.403978 | 444.205627 | 8 |
| 7 | 1177.468629 | 589.237953 | 1160.442080 | 580.724678 | 1159.458064 | 580.232670 | C | ***776.371950*** | 388.689613 | 759.345401 | 380.176338 | 758.361385 | 379.684330 | 7 |
| 8 | 1306.511222 | 653.759249 | 1289.484673 | 645.245974 | 1288.500657 | 644.753966 | E | ***616.341301*** | 308.674288 | 599.314752 | 300.161014 | 598.330736 | 299.669006 | 6 |
| 9 | **1377.548336** | 689.277806 | 1360.521787 | 680.764531 | 1359.537771 | 680.272523 | A | ***487.298708*** | 244.152992 | 470.272159 | 235.639717 | | | 5 |
| 10 | 1434.569800 | 717.788538 | 1417.543251 | 709.275263 | 1416.559235 | 708.783255 | G | ***416.261594*** | 208.634435 | 399.235045 | 200.121160 | | | 4 |
| 11 | 1505.606914 | 753.307095 | 1488.580365 | 744.793820 | 1487.596349 | 744.301812 | A | 359.240130 | 180.123703 | 342.213581 | 171.610428 | | | 3 |
| 12 | 1618.690978 | 809.849127 | 1601.664429 | 801.335852 | 1600.680413 | 800.843844 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 13 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EQTMSECEAGALR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 70.1 | 1791.795349 | 0.013239 | EQTMSECEAGALR |

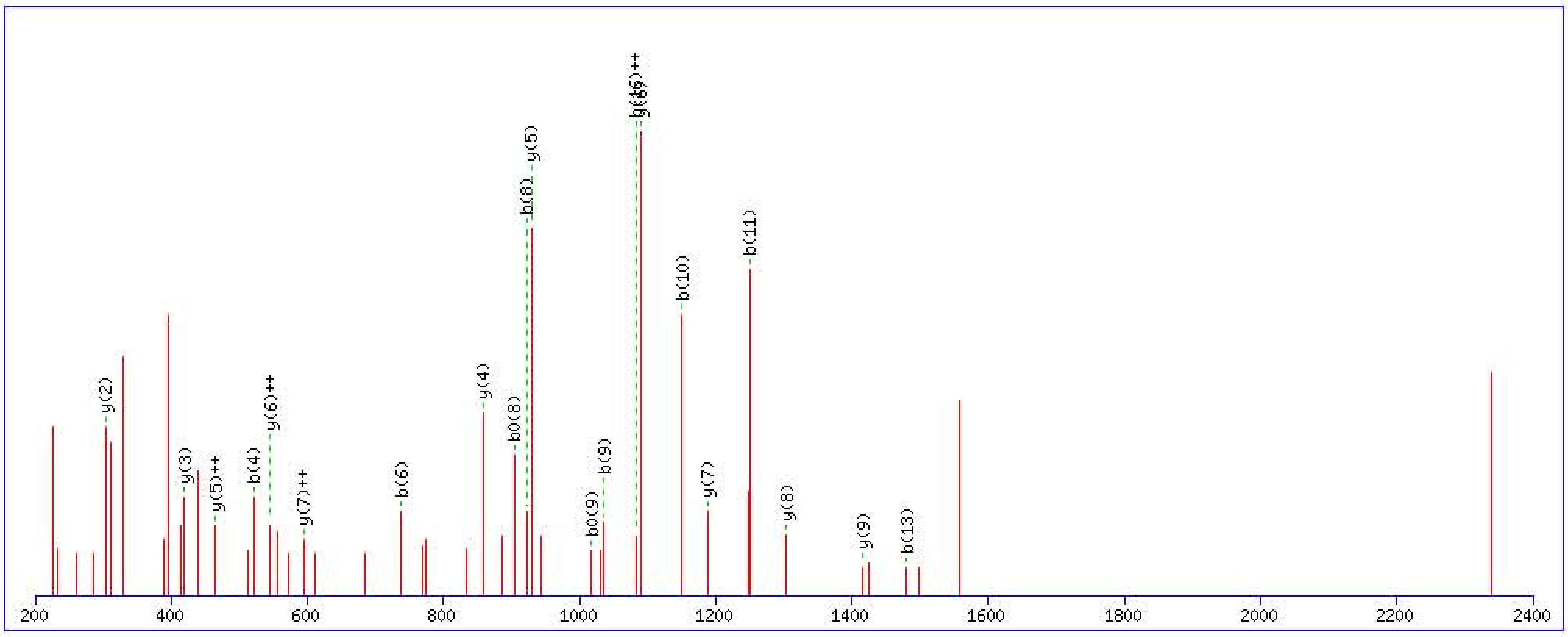
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **MPYECGPSLDVCAQDER**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

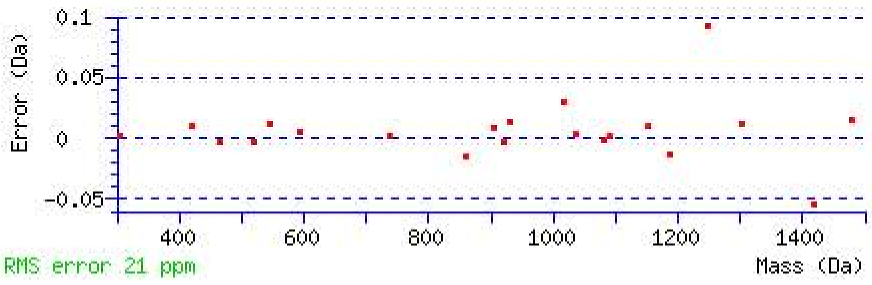
Match to Query 53638: 2336.992182 from(780.004670,3+) rtinseconds(2109) index(6493)
Title: Locus:1.1.1.1543.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

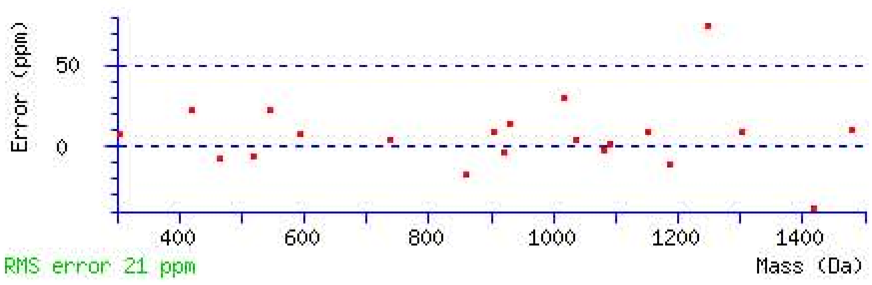
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 200 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2336.989792
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 7.5e-005
Matches : 21/158 fragment ions using 35 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 17 |
| 2 | 229.100525 | 115.053900 | | | | | P | 2206.956589 | 1103.981932 | 2189.930040 | 1095.468658 | 2188.946024 | 1094.976650 | 16 |
| 3 | 392.163854 | 196.585565 | | | | | Y | 2109.903825 | 1055.455550 | 2092.877276 | 1046.942276 | 2091.893260 | 1046.450268 | 15 |
| 4 | ***521.206447*** | 261.106862 | | | 503.195882 | 252.101579 | E | 1946.840496 | 973.923886 | 1929.813947 | 965.410612 | 1928.829931 | 964.918604 | 14 |
| 5 | 681.237096 | 341.122186 | | | 663.226531 | 332.116904 | C | 1817.797903 | 909.402590 | 1800.771354 | 900.889315 | 1799.787338 | 900.397307 | 13 |
| 6 | ***738.258560*** | 369.632918 | | | 720.247995 | 360.627636 | G | 1657.767254 | 829.387265 | 1640.740705 | 820.873991 | 1639.756689 | 820.381983 | 12 |
| 7 | 835.311324 | 418.159300 | | | 817.300759 | 409.154018 | P | 1600.745790 | 800.876533 | 1583.719241 | 792.363259 | 1582.735225 | 791.871251 | 11 |
| 8 | ***922.343352*** | 461.675314 | | | 904.332787 | 452.670032 | S | 1503.693026 | 752.350151 | 1486.666477 | 743.836877 | 1485.682461 | 743.344869 | 10 |
| 9 | ***1035.427416*** | 518.217346 | | | 1017.416851 | 509.212064 | L | ***1416.660998*** | 708.834137 | 1399.634449 | 700.320863 | 1398.650433 | 699.828855 | 9 |
| 10 | ***1150.454359*** | 575.730818 | | | 1132.443794 | 566.725535 | D | ***1303.576934*** | 652.292105 | 1286.550385 | 643.778831 | 1285.566369 | 643.286823 | 8 |
| 11 | ***1249.522773*** | 625.265025 | | | 1231.512208 | 616.259742 | V | ***1188.549991*** | 594.778634 | 1171.523442 | 586.265359 | 1170.539426 | 585.773351 | 7 |
| 12 | 1409.553422 | 705.280349 | | | 1391.542857 | 696.275067 | C | ***1089.481577*** | 545.244427 | 1072.455028 | 536.731152 | 1071.471012 | 536.239144 | 6 |
| 13 | ***1480.590536*** | 740.798906 | | | 1462.579971 | 731.793624 | A | ***929.450928*** | 465.229102 | 912.424379 | 456.715827 | 911.440363 | 456.223819 | 5 |
| 14 | 1919.815862 | 960.411569 | 1902.789313 | 951.898295 | 1901.805297 | 951.406287 | Q | ***858.413814*** | 429.710545 | 841.387265 | 421.197271 | 840.403249 | 420.705263 | 4 |
| 15 | 2034.842805 | 1017.925041 | 2017.816256 | 1009.411766 | 2016.832240 | 1008.919758 | D | ***419.188488*** | 210.097882 | 402.161939 | 201.584607 | 401.177923 | 201.092599 | 3 |
| 16 | 2163.885398 | 1082.446337 | 2146.858849 | 1073.933062 | 2145.874833 | 1073.441054 | E | ***304.161545*** | 152.584410 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 17 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MPYECGPSLDVCAQDER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.6 | 2336.989792 | 0.002390 | MPYECGPSLDVCAQDER |

**Mascot:** http://www.matrixscience.com/

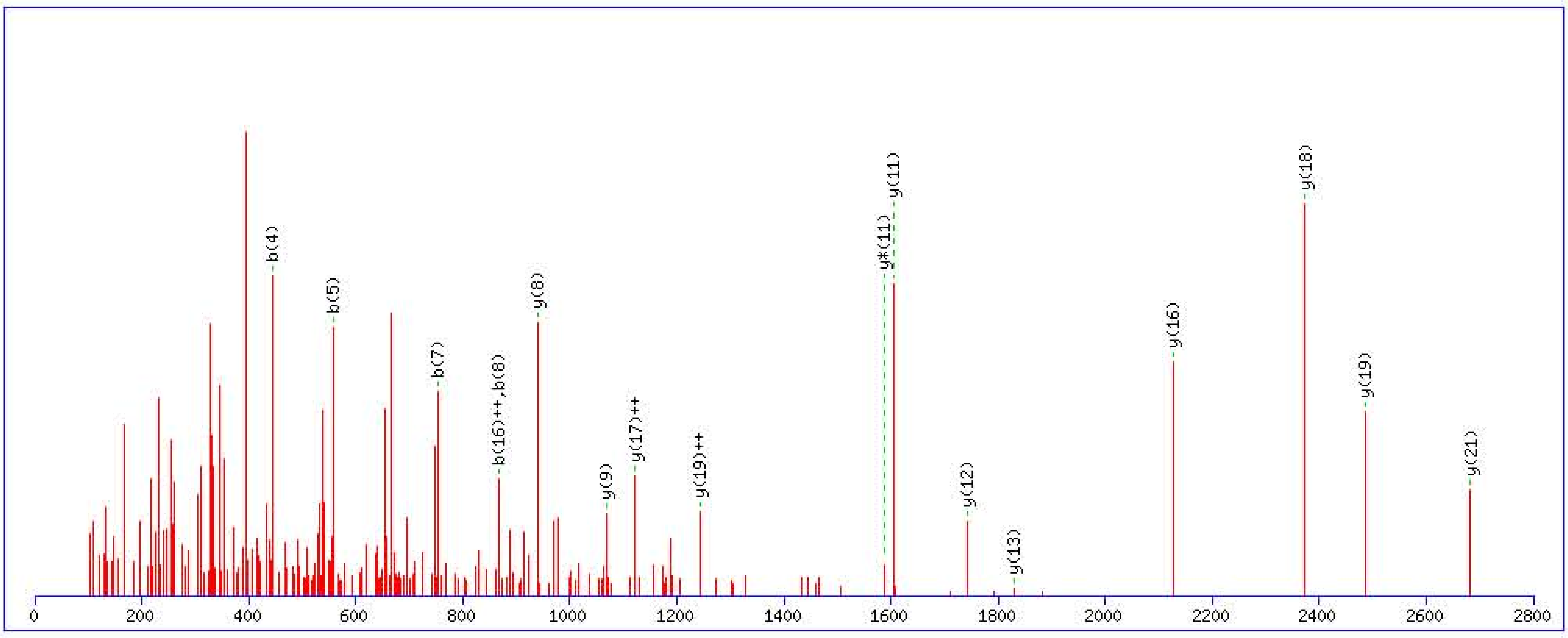
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IACVLPVLMDGIQSHPQKPFYTVGEK**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

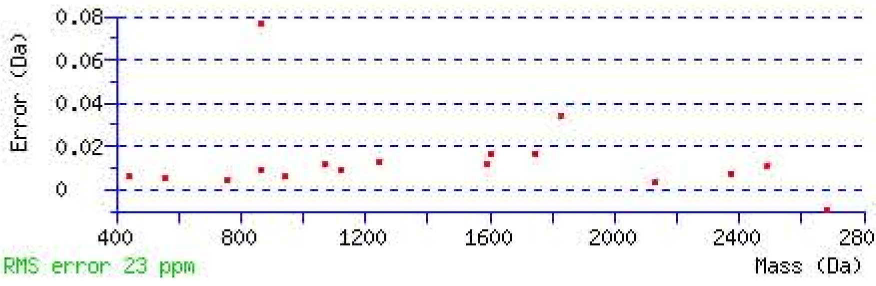
Match to Query 64467: 3237.697020 from(648.546680,5+) rtinseconds(2566) index(8899)
Title: Locus:1.1.1.1703.5 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

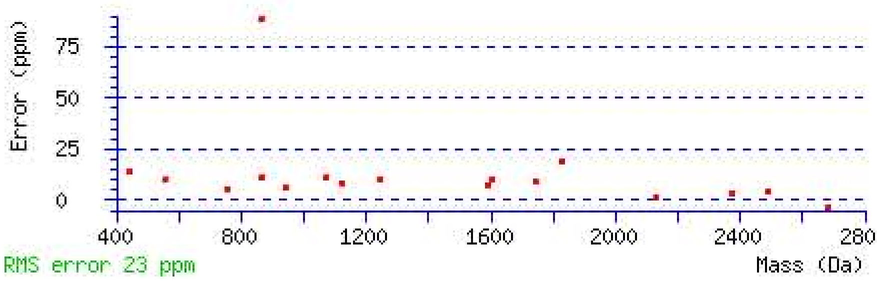
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3237.675262
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q17    : Biotin:Thermo-21345 (Q)
Ions Score: 55  Expect: 7.3e-005
Matches : 17/256 fragment ions using 22 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 26 |
| 2 | 185.128454 | 93.067865 | | | | | A | 3125.598471 | 1563.302873 | 3108.571922 | 1554.789599 | 3107.587906 | 1554.297591 | 25 |
| 3 | 345.159103 | 173.083190 | | | | | C | 3054.561357 | 1527.784316 | 3037.534808 | 1519.271042 | 3036.550792 | 1518.779034 | 24 |
| 4 | **444.227517** | 222.617397 | | | | | V | 2894.530708 | 1447.768992 | 2877.504159 | 1439.255717 | 2876.520143 | 1438.763709 | 23 |
| 5 | **557.311581** | 279.159429 | | | | | L | 2795.462294 | 1398.234785 | 2778.435745 | 1389.721510 | 2777.451729 | 1389.229502 | 22 |
| 6 | 654.364345 | 327.685811 | | | | | P | ***2682.378230*** | 1341.692753 | 2665.351681 | 1333.179478 | 2664.367665 | 1332.687470 | 21 |
| 7 | **753.432759** | 377.220018 | | | | | V | 2585.325466 | 1293.166371 | 2568.298917 | 1284.653096 | 2567.314901 | 1284.161088 | 20 |
| 8 | **866.516823** | 433.762050 | | | | | L | ***2486.257052*** | 1243.632164 | 2469.230503 | 1235.118889 | 2468.246487 | 1234.626881 | 19 |
| 9 | 997.557308 | 499.282292 | | | | | M | ***2373.172988*** | 1187.090132 | 2356.146439 | 1178.576857 | 2355.162423 | 1178.084849 | 18 |
| 10 | 1112.584251 | 556.795764 | | | 1094.573686 | 547.790481 | D | 2242.132503 | 1121.569889 | 2225.105954 | 1113.056615 | 2224.121938 | 1112.564607 | 17 |
| 11 | 1169.605715 | 585.306495 | | | 1151.595150 | 576.301213 | G | ***2127.105560*** | 1064.056418 | 2110.079011 | 1055.543143 | 2109.094995 | 1055.051135 | 16 |
| 12 | 1282.689779 | 641.848527 | | | 1264.679214 | 632.843245 | I | 2070.084096 | 1035.545686 | 2053.057547 | 1027.032411 | 2052.073531 | 1026.540403 | 15 |
| 13 | 1410.748357 | 705.877816 | 1393.721808 | 697.364542 | 1392.737792 | 696.872534 | Q | 1957.000032 | 979.003654 | 1939.973483 | 970.490380 | 1938.989467 | 969.998371 | 14 |
| 14 | 1497.780385 | 749.393830 | 1480.753836 | 740.880556 | 1479.769820 | 740.388548 | S | ***1828.941454*** | 914.974365 | 1811.914905 | 906.461091 | 1810.930889 | 905.969083 | 13 |
| 15 | 1634.839297 | 817.923286 | 1617.812748 | 809.410012 | 1616.828732 | 808.918004 | H | ***1741.909426*** | 871.458351 | 1724.882877 | 862.945077 | 1723.898861 | 862.453068 | 12 |
| 16 | 1731.892061 | 866.449668 | 1714.865512 | 857.936394 | 1713.881496 | 857.444386 | P | ***1604.850514*** | 802.928895 | 1587.823965 | 794.415621 | 1586.839949 | 793.923612 | 11 |
| 17 | 2171.117387 | 1086.062331 | 2154.090838 | 1077.549057 | 2153.106822 | 1077.057049 | Q | 1507.797750 | 754.402513 | 1490.771201 | 745.889239 | 1489.787185 | 745.397230 | 10 |
| 18 | 2299.212350 | 1150.109813 | 2282.185801 | 1141.596538 | 2281.201785 | 1141.104530 | K | ***1068.572424*** | 534.789850 | 1051.545875 | 526.276575 | 1050.561859 | 525.784567 | 9 |
| 19 | 2396.265114 | 1198.636195 | 2379.238565 | 1190.122920 | 2378.254549 | 1189.630912 | P | ***940.477461*** | 470.742368 | 923.450912 | 462.229094 | 922.466896 | 461.737086 | 8 |
| 20 | 2543.333528 | 1272.170402 | 2526.306979 | 1263.657127 | 2525.322963 | 1263.165119 | F | 843.424697 | 422.215986 | 826.398148 | 413.702712 | 825.414132 | 413.210704 | 7 |
| 21 | 2706.396857 | 1353.702066 | 2689.370308 | 1345.188792 | 2688.386292 | 1344.696784 | Y | 696.356283 | 348.681779 | 679.329734 | 340.168505 | 678.345718 | 339.676497 | 6 |
| 22 | 2807.444536 | 1404.225906 | 2790.417987 | 1395.712631 | 2789.433971 | 1395.220623 | T | 533.292954 | 267.150115 | 516.266405 | 258.636840 | 515.282389 | 258.144832 | 5 |
| 23 | 2906.512950 | 1453.760113 | 2889.486401 | 1445.246838 | 2888.502385 | 1444.754830 | V | 432.245275 | 216.626275 | 415.218726 | 208.113001 | 414.234710 | 207.620993 | 4 |
| 24 | 2963.534414 | 1482.270845 | 2946.507865 | 1473.757570 | 2945.523849 | 1473.265562 | G | 333.176861 | 167.092069 | 316.150312 | 158.578794 | 315.166296 | 158.086786 | 3 |
| 25 | 3092.577007 | 1546.792141 | 3075.550458 | 1538.278867 | 3074.566442 | 1537.786859 | E | 276.155397 | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 26 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IACVLPVLMDGIQSHPQKPFYTVGEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.8 | 3237.675262 | 0.021758 | IACVLPVLMDGIQSHPQKPFYTVGEK |
| 23.1 | 3237.675262 | 0.021758 | IACVLPVLMDGIQSHPQKPFYTVGEK |

**Mascot:** http://www.matrixscience.com/

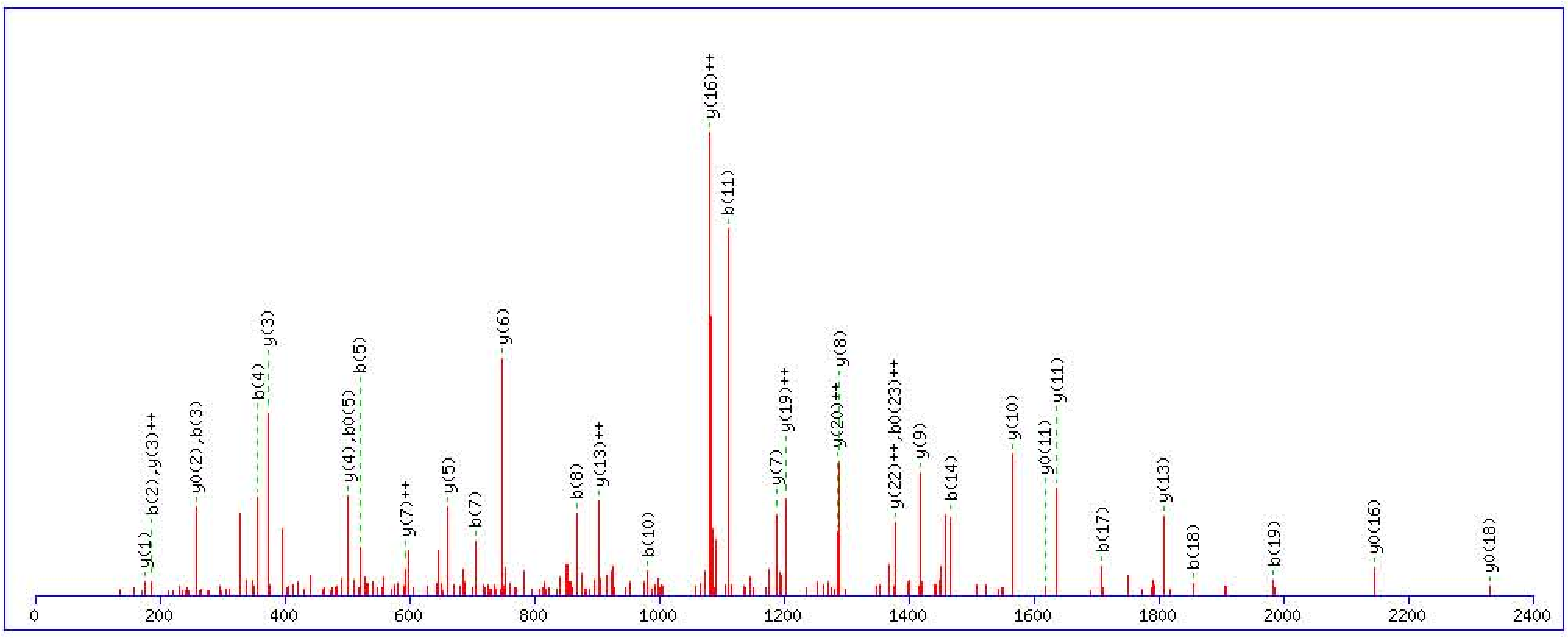
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SVAVYGQYGGQPCVGNAFETQSCEPTR**
Found in **CO7_HUMAN**, Complement component C7 OS=Homo sapiens GN=C7 PE=1 SV=2

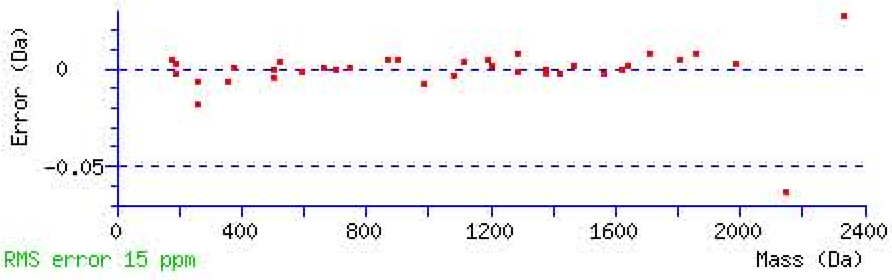
Match to Query 65401: 3272.482782 from(1091.834870,3+) rtinseconds(2163) index(6833)
Title: Locus:1.1.1.1562.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

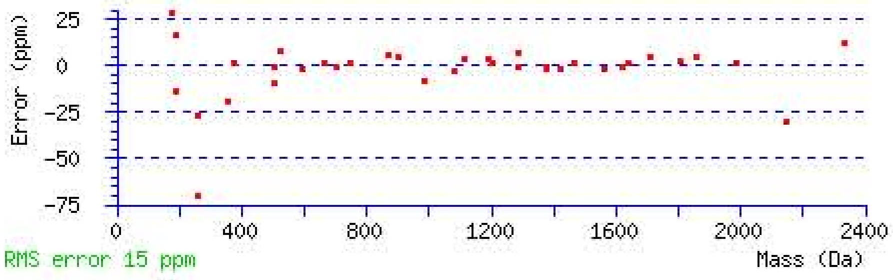
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3272.468933
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q21    : Biotin:Thermo-21345 (Q)
Ions Score: 116  Expect: 2.1e-011
Matches : 36/298 fragment ions using 40 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 27 |
| 2 | ***187.107718*** | 94.057497 | | | 169.097153 | 85.052214 | V | 3186.444157 | 1593.725716 | 3169.417608 | 1585.212442 | 3168.433592 | 1584.720434 | 26 |
| 3 | ***258.144832*** | 129.576054 | | | 240.134267 | 120.570772 | A | 3087.375743 | 1544.191509 | 3070.349194 | 1535.678235 | 3069.365178 | 1535.186227 | 25 |
| 4 | ***357.213246*** | 179.110261 | | | 339.202681 | 170.104979 | V | 3016.338629 | 1508.672952 | 2999.312080 | 1500.159678 | 2998.328064 | 1499.667670 | 24 |
| 5 | ***520.276575*** | 260.641926 | | | 502.266010 | 251.636643 | Y | 2917.270215 | 1459.138745 | 2900.243666 | 1450.625471 | 2899.259650 | 1450.133463 | 23 |
| 6 | 577.298039 | 289.152658 | | | 559.287474 | 280.147375 | G | 2754.206886 | 1377.607081 | 2737.180337 | 1369.093806 | 2736.196321 | 1368.601798 | 22 |
| 7 | ***705.356617*** | 353.181947 | 688.330068 | 344.668672 | 687.346052 | 344.176664 | Q | 2697.185422 | 1349.096349 | 2680.158873 | 1340.583074 | 2679.174857 | 1340.091066 | 21 |
| 8 | ***868.419946*** | 434.713611 | 851.393397 | 426.200337 | 850.409381 | 425.708329 | Y | 2569.126844 | 1285.067060 | 2552.100295 | 1276.553785 | 2551.116279 | 1276.061777 | 20 |
| 9 | 925.441410 | 463.224343 | 908.414861 | 454.711069 | 907.430845 | 454.219061 | G | 2406.063515 | 1203.535395 | 2389.036966 | 1195.022121 | 2388.052950 | 1194.530113 | 19 |
| 10 | ***982.462874*** | 491.735075 | 965.436325 | 483.221801 | 964.452309 | 482.729793 | G | 2349.042051 | 1175.024663 | 2332.015502 | 1166.511389 | 2331.031486 | 1166.019381 | 18 |
| 11 | ***1110.521452*** | 555.764364 | 1093.494903 | 547.251090 | 1092.510887 | 546.759082 | Q | 2292.020587 | 1146.513931 | 2274.994038 | 1138.000657 | 2274.010022 | 1137.508649 | 17 |
| 12 | 1207.574216 | 604.290746 | 1190.547667 | 595.777472 | 1189.563651 | 595.285464 | P | 2163.962009 | 1082.484642 | 2146.935460 | 1073.971368 | 2145.951444 | 1073.479360 | 16 |
| 13 | 1367.604865 | 684.306071 | 1350.578316 | 675.792796 | 1349.594300 | 675.300788 | C | 2066.909245 | 1033.958260 | 2049.882696 | 1025.444986 | 2048.898680 | 1024.952978 | 15 |
| 14 | ***1466.673279*** | 733.840278 | 1449.646730 | 725.327003 | 1448.662714 | 724.834995 | V | 1906.878596 | 953.942936 | 1889.852047 | 945.429662 | 1888.868031 | 944.937654 | 14 |
| 15 | 1523.694743 | 762.351010 | 1506.668194 | 753.837735 | 1505.684178 | 753.345727 | G | ***1807.810182*** | 904.408729 | 1790.783633 | 895.895455 | 1789.799617 | 895.403446 | 13 |
| 16 | 1637.737670 | 819.372473 | 1620.711121 | 810.859199 | 1619.727105 | 810.367191 | N | 1750.788718 | 875.897997 | 1733.762169 | 867.384723 | 1732.778153 | 866.892715 | 12 |
| 17 | ***1708.774784*** | 854.891030 | 1691.748235 | 846.377756 | 1690.764219 | 845.885748 | A | ***1636.745791*** | 818.876534 | 1619.719242 | 810.363259 | 1618.735226 | 809.871251 | 11 |
| 18 | ***1855.843198*** | 928.425237 | 1838.816649 | 919.911963 | 1837.832633 | 919.419955 | F | ***1565.708677*** | 783.357977 | 1548.682128 | 774.844702 | 1547.698112 | 774.352694 | 10 |
| 19 | ***1984.885791*** | 992.946534 | 1967.859242 | 984.433259 | 1966.875226 | 983.941251 | E | ***1418.640263*** | 709.823770 | 1401.613714 | 701.310495 | 1400.629698 | 700.818487 | 9 |
| 20 | 2085.933470 | 1043.470373 | 2068.906921 | 1034.957098 | 2067.922905 | 1034.465090 | T | ***1289.597670*** | 645.302473 | 1272.571121 | 636.789199 | 1271.587105 | 636.297190 | 8 |
| 21 | 2525.158796 | 1263.083036 | 2508.132247 | 1254.569761 | 2507.148231 | 1254.077754 | Q | ***1188.549991*** | 594.778634 | 1171.523442 | 586.265359 | 1170.539426 | 585.773351 | 7 |
| 22 | 2612.190824 | 1306.599050 | 2595.164275 | 1298.085776 | 2594.180259 | 1297.593768 | S | ***749.324665*** | 375.165970 | 732.298116 | 366.652696 | 731.314100 | 366.160688 | 6 |
| 23 | 2772.221473 | 1386.614374 | 2755.194924 | 1378.101100 | 2754.210908 | 1377.609092 | C | ***662.292637*** | 331.649956 | 645.266088 | 323.136682 | 644.282072 | 322.644674 | 5 |
| 24 | 2901.264066 | 1451.135671 | 2884.237517 | 1442.622396 | 2883.253501 | 1442.130389 | E | ***502.261988*** | 251.634632 | 485.235439 | 243.121357 | 484.251423 | 242.629349 | 4 |
| 25 | 2998.316830 | 1499.662053 | 2981.290281 | 1491.148778 | 2980.306265 | 1490.656771 | P | ***373.219395*** | 187.113335 | 356.192846 | 178.600061 | 355.208830 | 178.108053 | 3 |
| 26 | 3099.364509 | 1550.185892 | 3082.337960 | 1541.672618 | 3081.353944 | 1541.180610 | T | 276.166631 | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 27 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SVAVYGQYGGQPCVGNAFETQSCEPTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 116.4 | 3272.468933 | 0.013849 | SVAVYGQYGGQPCVGNAFETQSCEPTR |
| 23.9 | 3272.468933 | 0.013849 | SVAVYGQYGGQPCVGNAFETQSCEPTR |
| 7.5 | 3272.468933 | 0.013849 | SVAVYGQYGGQPCVGNAFETQSCEPTR |

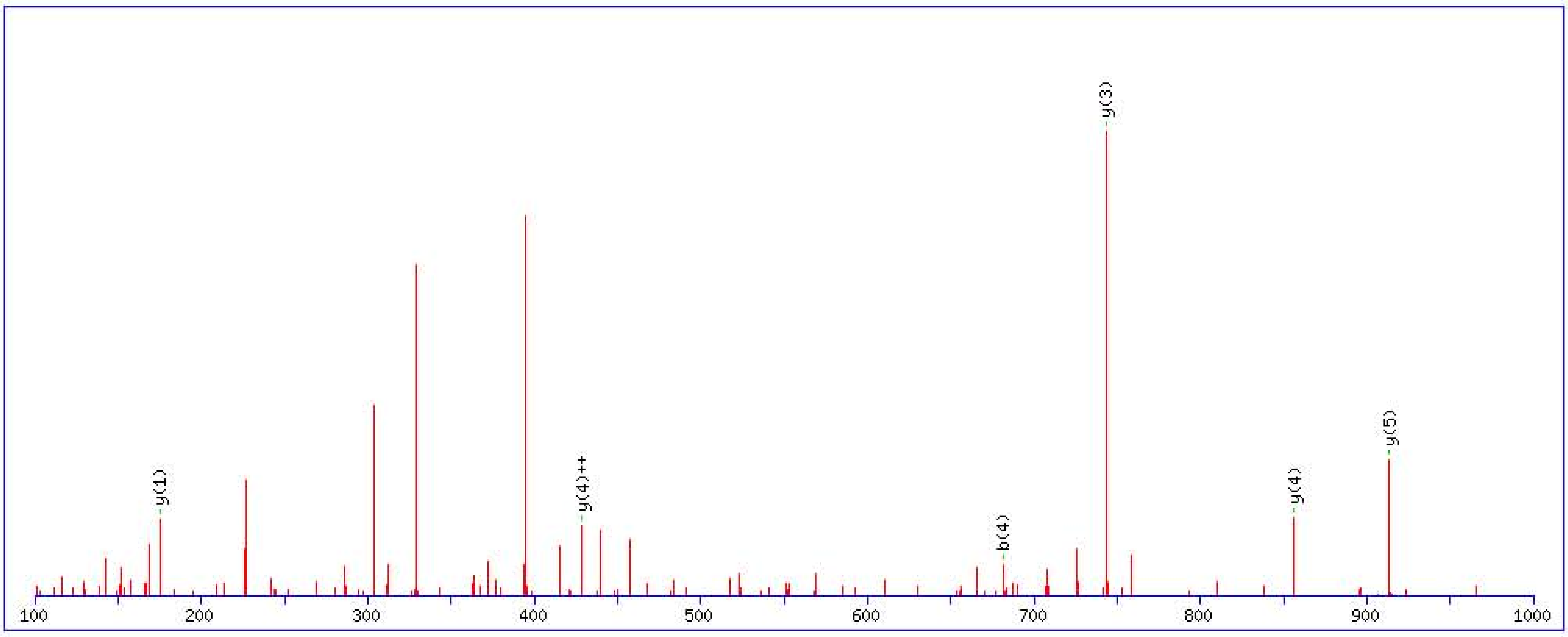
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AGIQER**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

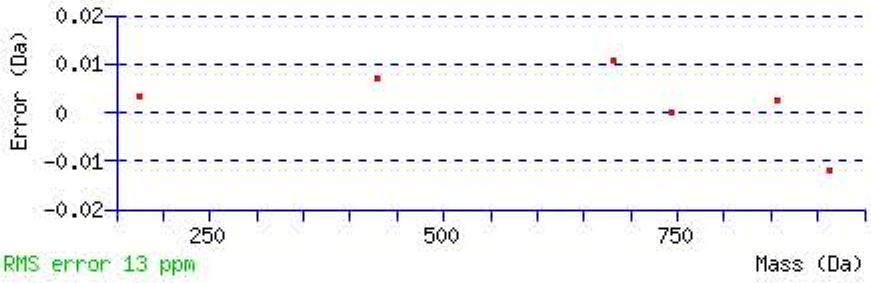
Match to Query 15468: 983.519868 from(492.767210,2+) rtinseconds(1404) index(17786)
Title: Locus:1.1.1.491.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

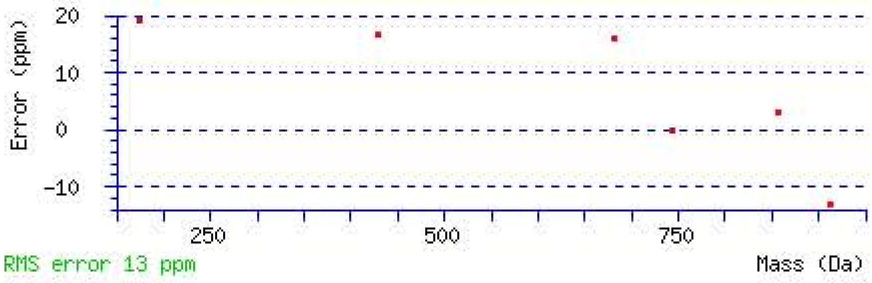
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 983.522217
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q4** : Biotin:Thermo-21345 (Q)
**Ions Score:** 26 **Expect:** 0.051
**Matches :** 6/44 fragment ions using 9 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 6 |
| 2 | 129.065854 | 65.036565 | | | | | G | ***913.492399*** | 457.249838 | 896.465850 | 448.736563 | 895.481834 | 448.244555 | 5 |
| 3 | 242.149918 | 121.578597 | | | | | I | ***856.470935*** | 428.739106 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 4 | **681.375244** | 341.191260 | 664.348695 | 332.677986 | | | Q | ***743.386871*** | 372.197074 | 726.360322 | 363.683799 | 725.376306 | 363.191791 | 3 |
| 5 | 810.417837 | 405.712557 | 793.391288 | 397.199282 | 792.407272 | 396.707274 | E | 304.161545 | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 6 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of AGIQER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.0 | 983.522217 | -0.002349 | AGIQER |
| 23.0 | 983.522217 | -0.002349 | AGLEQR |
| 13.3 | 983.522217 | -0.002349 | QIQER |
| 13.3 | 983.522217 | -0.002349 | QLQER |
| 11.1 | 983.522202 | -0.002334 | KLMENPPR |
| 11.1 | 983.522217 | -0.002349 | QLEQR |
| 11.1 | 983.530090 | -0.010222 | QLLNHFGR |
| 10.0 | 983.514816 | 0.005052 | QPVREAER |
| 8.2 | 983.522217 | -0.002349 | AGQELR |
| 4.1 | 983.522217 | -0.002349 | AAQVER |

**Mascot:** http://www.matrixscience.com/

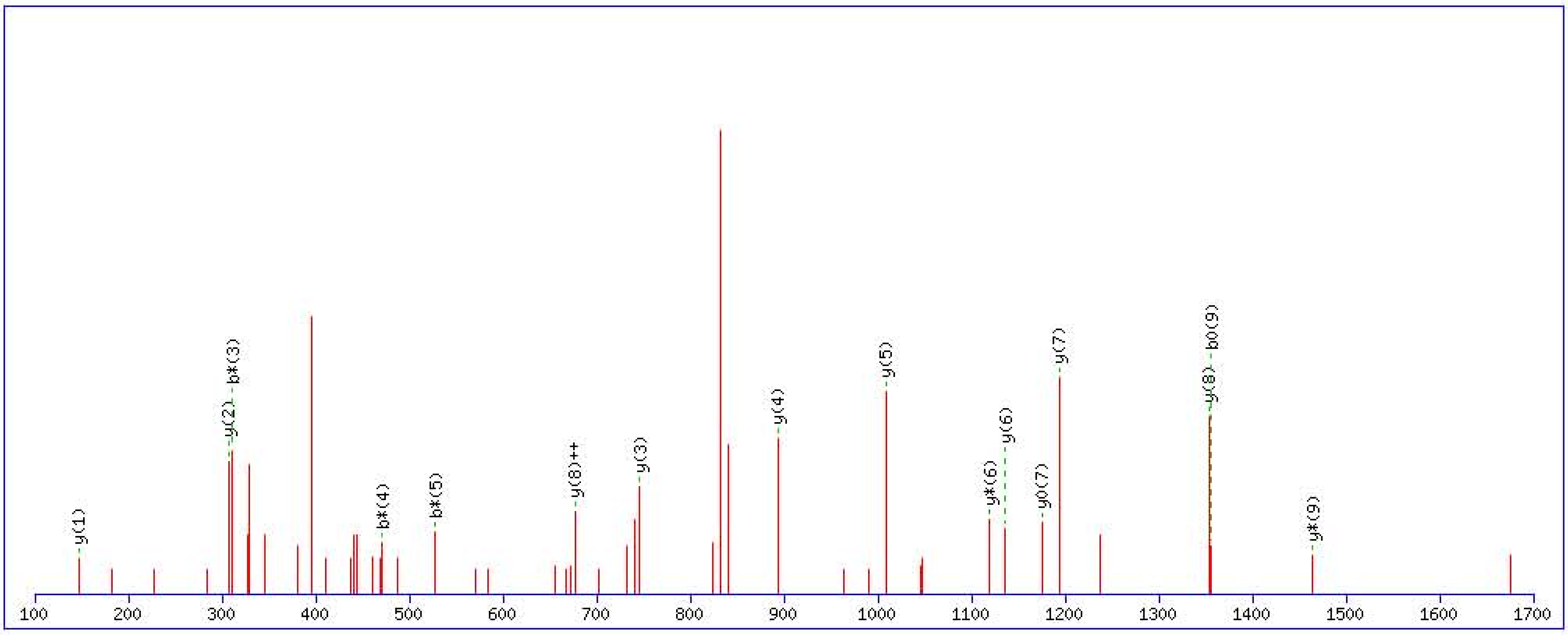
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QAQCGQDFQCK**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

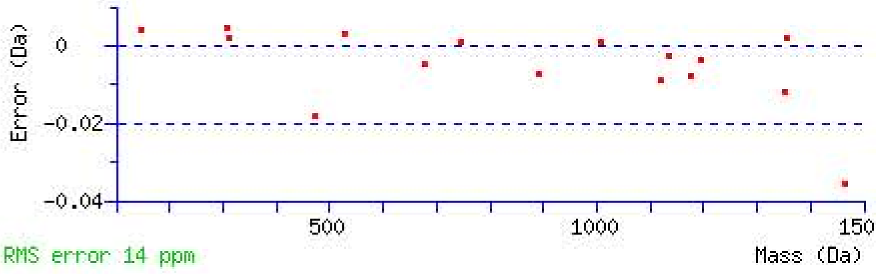
Match to Query 40040: 1679.723448 from(840.869000,2+) rtinseconds(1510) index(18554)
Title: Locus:1.1.1.528.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

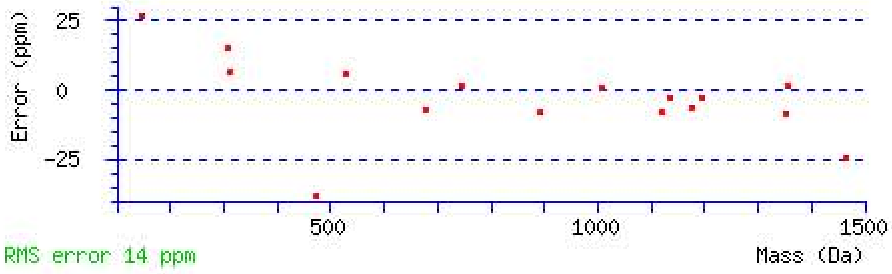
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1700] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1679.721832
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 8e-005
Matches : 16/100 fragment ions using 25 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.065854 | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 11 |
| 2 | 200.102968 | 100.555122 | 183.076419 | 92.041848 | | | A | 1552.670519 | 776.838898 | 1535.643970 | 768.325623 | 1534.659954 | 767.833615 | 10 |
| 3 | 328.161546 | 164.584411 | 311.134997 | 156.071136 | | | Q | 1481.633405 | 741.320341 | 1464.606856 | 732.807066 | 1463.622840 | 732.315058 | 9 |
| 4 | 488.192195 | 244.599736 | 471.165646 | 236.086461 | | | C | ***1353.574827*** | 677.291052 | 1336.548278 | 668.777777 | 1335.564262 | 668.285769 | 8 |
| 5 | 545.213659 | 273.110468 | 528.187110 | 264.597193 | | | G | ***1193.544178*** | 597.275727 | 1176.517629 | 588.762453 | 1175.533613 | 588.270445 | 7 |
| 6 | 673.272237 | 337.139757 | 656.245688 | 328.626482 | | | Q | ***1136.522714*** | 568.764995 | 1119.496165 | 560.251721 | 1118.512149 | 559.759713 | 6 |
| 7 | 788.299180 | 394.653228 | 771.272631 | 386.139954 | 770.288615 | 385.647946 | D | ***1008.464136*** | 504.735706 | 991.437587 | 496.222432 | 990.453571 | 495.730424 | 5 |
| 8 | 935.367594 | 468.187435 | 918.341045 | 459.674161 | 917.357029 | 459.182153 | F | ***893.437193*** | 447.222235 | 876.410644 | 438.708960 | | | 4 |
| 9 | 1374.592920 | 687.800098 | 1357.566371 | 679.286824 | 1356.582355 | 678.794816 | Q | ***746.368779*** | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 10 | 1534.623569 | 767.815423 | 1517.597020 | 759.302148 | 1516.613004 | 758.810140 | C | ***307.143453*** | 154.075365 | 290.116904 | 145.562090 | | | 2 |
| 11 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QAQCGQDFQCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.2 | 1679.721832 | 0.001616 | QAQCGQDFQCK |
| 17.3 | 1679.721832 | 0.001616 | QAQCGQDFQCK |

**Mascot:** http://www.matrixscience.com/

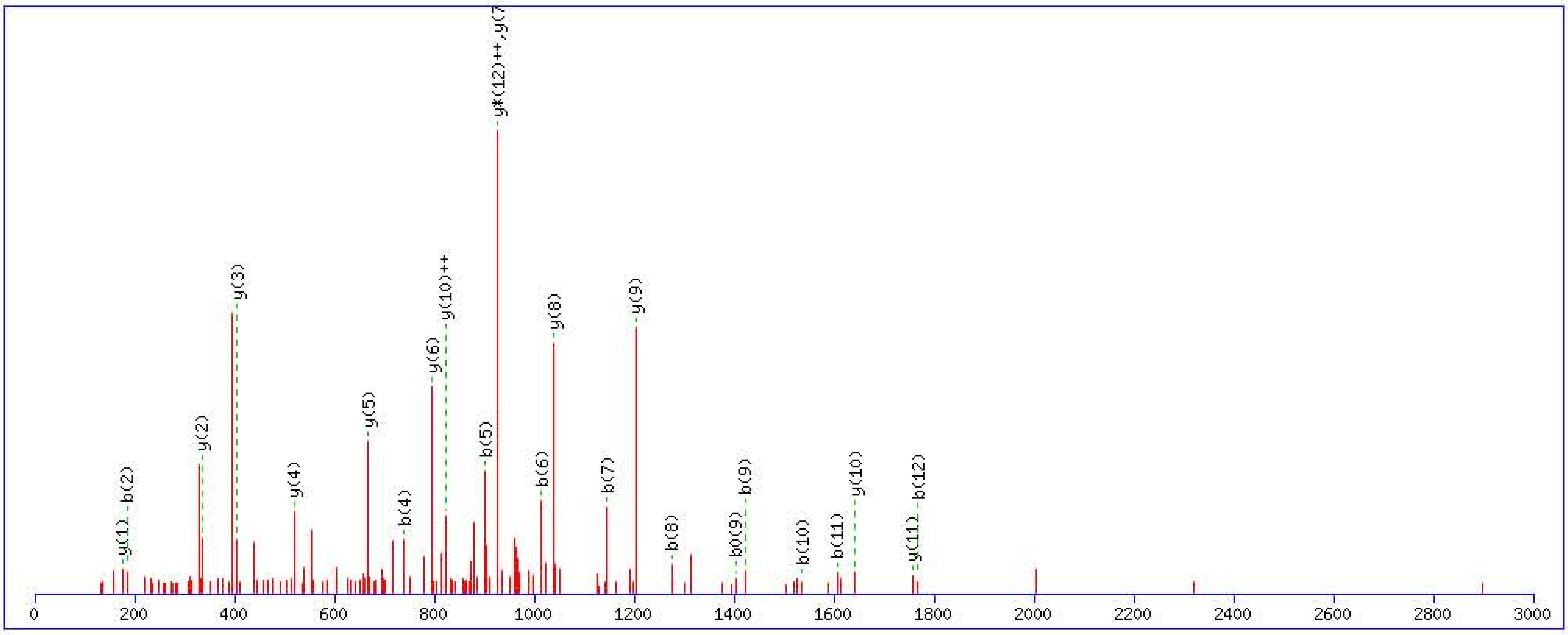
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ALDQYLMEFNACR**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

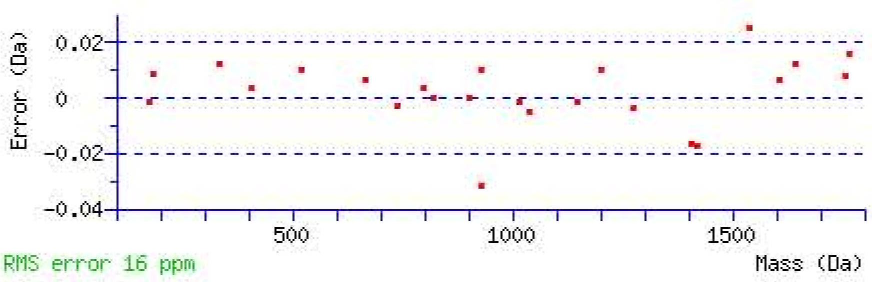
Match to Query 45377: 1940.896808 from(971.455680,2+) rtinseconds(2560) index(39843)
Title: Locus:1.1.1.3310.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

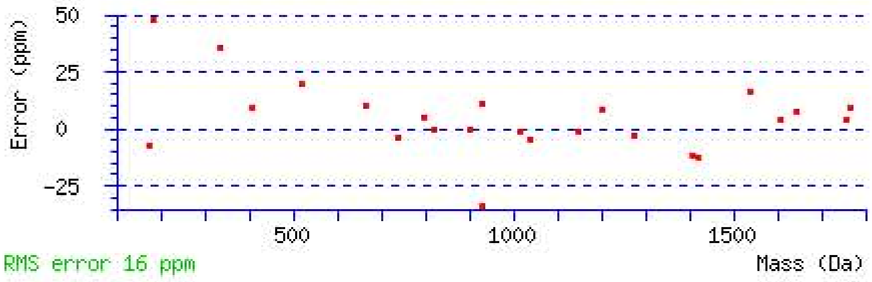
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1940.894669
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 61  Expect: 8.3e-006
Matches : 24/124 fragment ions using 48 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 13 |
| 2 | **185.128454** | 93.067865 | | | | | L | 1870.864860 | 935.936068 | 1853.838311 | 927.422794 | 1852.854295 | 926.930786 | 12 |
| 3 | 300.155397 | 150.581336 | | | 282.144832 | 141.576054 | D | ***1757.780796*** | 879.394036 | 1740.754247 | 870.880762 | 1739.770231 | 870.388754 | 11 |
| 4 | **739.380723** | 370.194000 | 722.354174 | 361.680725 | 721.370158 | 361.188717 | Q | ***1642.753853*** | 821.880565 | 1625.727304 | 813.367290 | 1624.743288 | 812.875282 | 10 |
| 5 | **902.444052** | 451.725664 | 885.417503 | 443.212390 | 884.433487 | 442.720382 | Y | ***1203.528527*** | 602.267902 | 1186.501978 | 593.754627 | 1185.517962 | 593.262619 | 9 |
| 6 | **1015.528116** | 508.267696 | 998.501567 | 499.754422 | 997.517551 | 499.262414 | L | ***1040.465198*** | 520.736237 | 1023.438649 | 512.222963 | 1022.454633 | 511.730955 | 8 |
| 7 | **1146.568601** | 573.787939 | 1129.542052 | 565.274664 | 1128.558036 | 564.782656 | M | ***927.381134*** | 464.194205 | 910.354585 | 455.680931 | 909.370569 | 455.188923 | 7 |
| 8 | **1275.611194** | 638.309235 | 1258.584645 | 629.795961 | 1257.600629 | 629.303953 | E | ***796.340649*** | 398.673963 | 779.314100 | 390.160688 | 778.330084 | 389.668680 | 6 |
| 9 | **1422.679608** | 711.843442 | 1405.653059 | 703.330168 | 1404.669043 | 702.838160 | F | ***667.298056*** | 334.152666 | 650.271507 | 325.639392 | | | 5 |
| 10 | **1536.722535** | 768.864906 | 1519.695986 | 760.351631 | 1518.711970 | 759.859623 | N | ***520.229642*** | 260.618459 | 503.203093 | 252.105185 | | | 4 |
| 11 | **1607.759649** | 804.383463 | 1590.733100 | 795.870188 | 1589.749084 | 795.378180 | A | ***406.186715*** | 203.596995 | 389.160166 | 195.083721 | | | 3 |
| 12 | **1767.790298** | 884.398787 | 1750.763749 | 875.885513 | 1749.779733 | 875.393505 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 13 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ALDQYLMEFNACR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 61.5 | 1940.894669 | 0.002139 | ALDQYLMEFNACR |

**Mascot:** http://www.matrixscience.com/

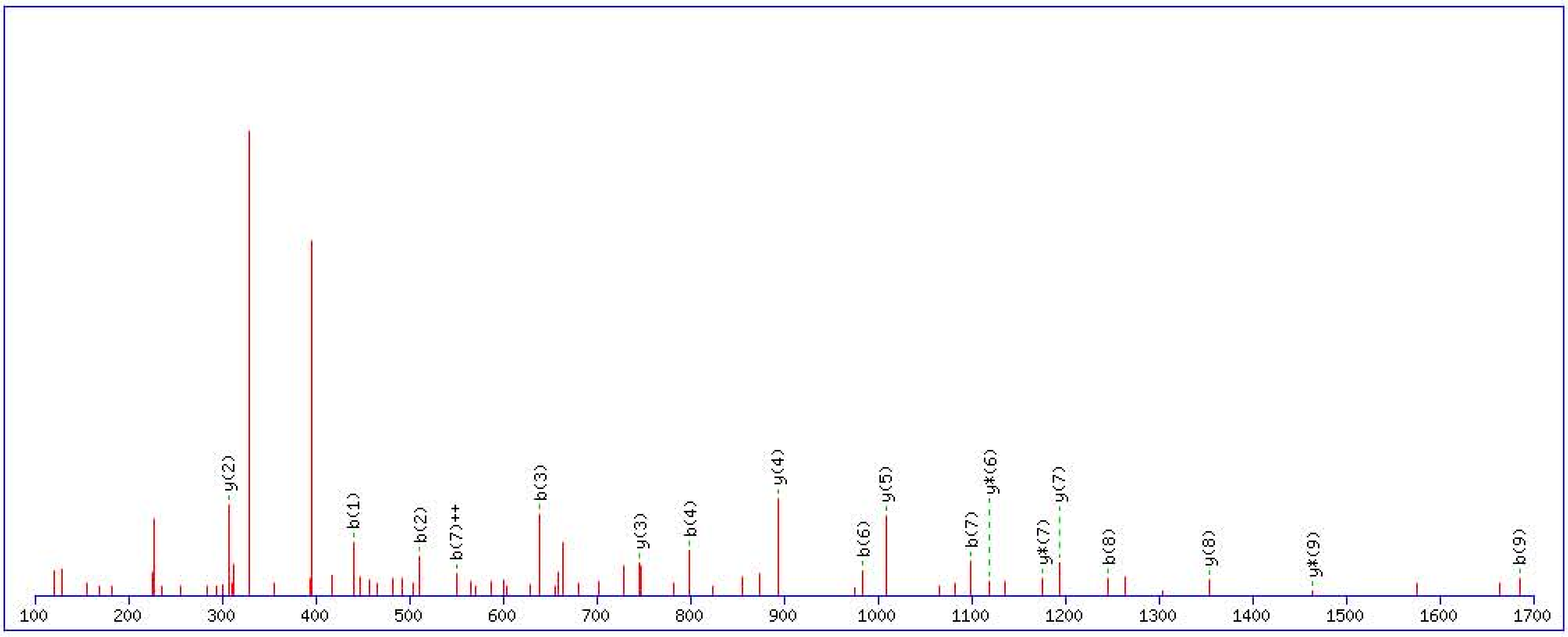
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QAQCGQDFQCK**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

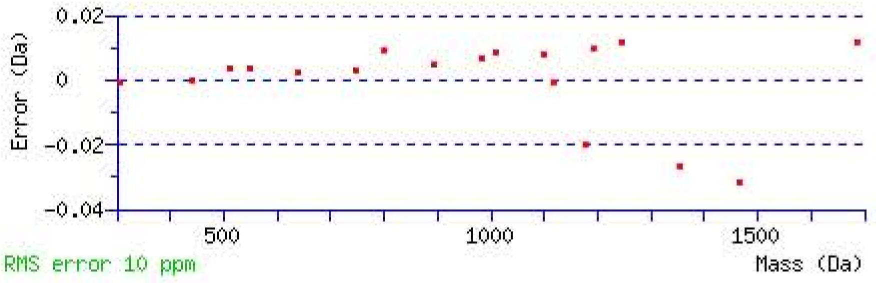
Match to Query 46251: 1990.900122 from(664.640650,3+) rtinseconds(1837) index(35232)
Title: Locus:1.1.1.3059.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

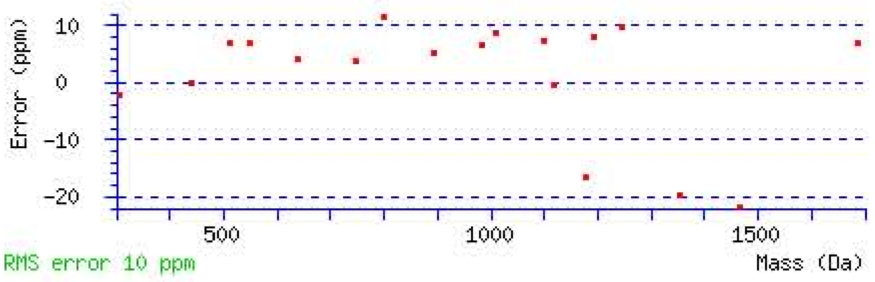
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1990.888580
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1     : Biotin:Thermo-21345 (Q)
Q9     : Biotin:Thermo-21345 (Q)
Ions Score: 43  Expect: 0.00048
Matches : 18/100 fragment ions using 30 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | *440.232602* | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 11 |
| 2 | *511.269716* | 256.138496 | 494.243167 | 247.625221 | | | A | 1552.670519 | 776.838898 | 1535.643970 | 768.325623 | 1534.659954 | 767.833615 | 10 |
| 3 | *639.328294* | 320.167785 | 622.301745 | 311.654511 | | | Q | 1481.633405 | 741.320341 | 1464.606856 | 732.807066 | 1463.622840 | 732.315058 | 9 |
| 4 | *799.358943* | 400.183110 | 782.332394 | 391.669835 | | | C | **1353.574827** | 677.291052 | 1336.548278 | 668.777777 | 1335.564262 | 668.285769 | 8 |
| 5 | 856.380407 | 428.693842 | 839.353858 | 420.180567 | | | G | **1193.544178** | 597.275727 | 1176.517629 | 588.762453 | 1175.533613 | 588.270445 | 7 |
| 6 | *984.438985* | 492.723131 | 967.412436 | 484.209856 | | | Q | 1136.522714 | 568.764995 | 1119.496165 | 560.251721 | 1118.512149 | 559.759713 | 6 |
| 7 | *1099.465928* | 550.236602 | 1082.439379 | 541.723328 | 1081.455363 | 541.231320 | D | **1008.464136** | 504.735706 | 991.437587 | 496.222432 | 990.453571 | 495.730424 | 5 |
| 8 | *1246.534342* | 623.770809 | 1229.507793 | 615.257535 | 1228.523777 | 614.765527 | F | **893.437193** | 447.222235 | 876.410644 | 438.708960 | | | 4 |
| 9 | *1685.759668* | 843.383472 | 1668.733119 | 834.870198 | 1667.749103 | 834.378190 | Q | **746.368779** | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 10 | 1845.790317 | 923.398797 | 1828.763768 | 914.885522 | 1827.779752 | 914.393514 | C | **307.143453** | 154.075365 | 290.116904 | 145.562090 | | | 2 |
| 11 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QAQCGQDFQCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 42.6 | 1990.888580 | 0.011542 | QAQCGQDFQCK |
| 31.0 | 1990.888580 | 0.011542 | QAQCGQDFQCK |
| 12.9 | 1990.888580 | 0.011542 | QAQCGQDFQCK |
| 8.3 | 1990.888580 | 0.011542 | QAQCGQDFQCK |
| 7.4 | 1990.888580 | 0.011542 | QAQCGQDFQCK |

**Mascot:** http://www.matrixscience.com/

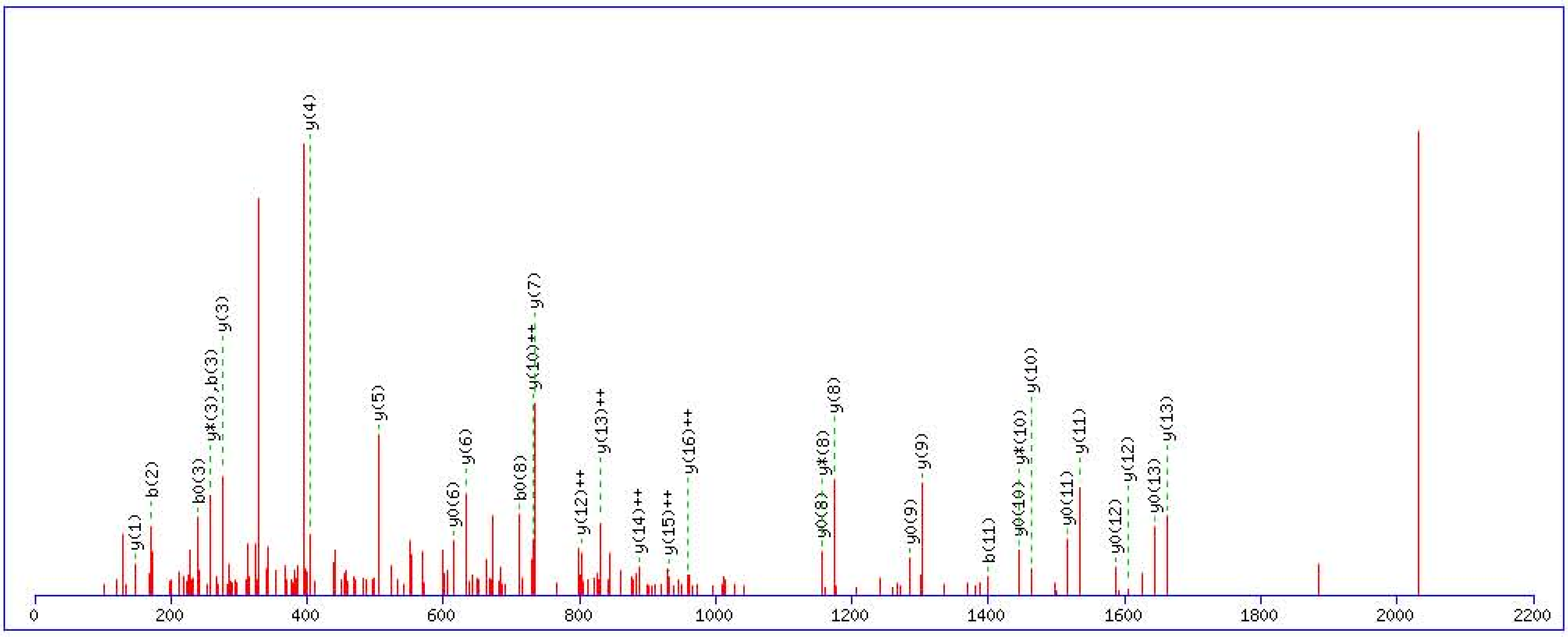
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LGSLGAACEQTQTEGAK**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

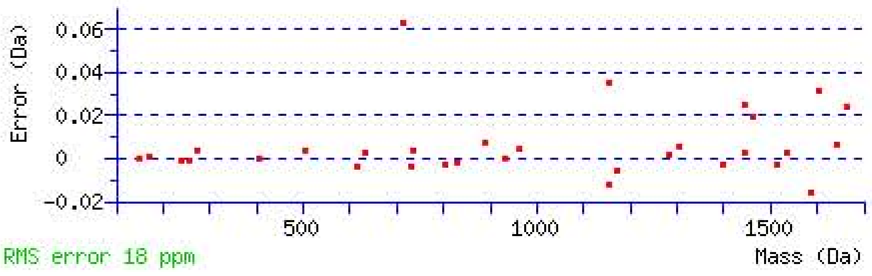
Match to Query 47909: 2030.973372 from(677.998400,3+) rtinseconds(1704) index(34443)
Title: Locus:1.1.1.3013.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

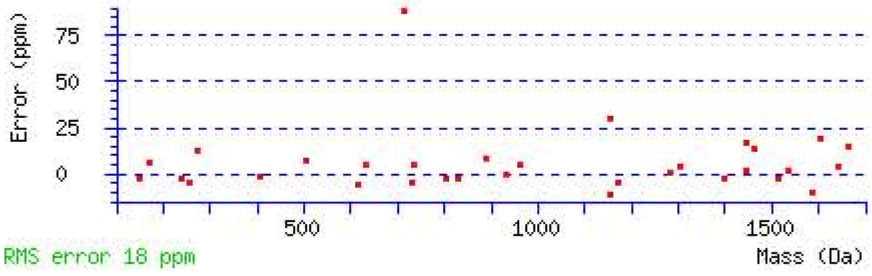
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2030.976501
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 63 **Expect:** 1.6e-006
**Matches :** 33/164 fragment ions using 65 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 17 |
| 2 | **171.112804** | 86.060040 | | | | | G | 1918.899727 | 959.953502 | 1901.873178 | 951.440227 | 1900.889162 | 950.948219 | 16 |
| 3 | **258.144832** | 129.576054 | | | 240.134267 | 120.570772 | S | 1861.878263 | 931.442770 | 1844.851714 | 922.929495 | 1843.867698 | 922.437487 | 15 |
| 4 | 371.228896 | 186.118086 | | | 353.218331 | 177.112804 | L | 1774.846235 | 887.926756 | 1757.819686 | 879.413481 | 1756.835670 | 878.921473 | 14 |
| 5 | 428.250360 | 214.628818 | | | 410.239795 | 205.623536 | G | ***1661.762171*** | 831.384724 | 1644.735622 | 822.871449 | 1643.751606 | 822.379441 | 13 |
| 6 | 499.287474 | 250.147375 | | | 481.276909 | 241.142093 | A | ***1604.740707*** | 802.873992 | 1587.714158 | 794.360717 | 1586.730142 | 793.868709 | 12 |
| 7 | 570.324588 | 285.665932 | | | 552.314023 | 276.660650 | A | ***1533.703593*** | 767.355435 | 1516.677044 | 758.842160 | 1515.693028 | 758.350152 | 11 |
| 8 | 730.355237 | 365.681257 | | | 712.344672 | 356.675974 | C | ***1462.666479*** | 731.836878 | 1445.639930 | 723.323603 | 1444.655914 | 722.831595 | 10 |
| 9 | 859.397830 | 430.202553 | | | 841.387265 | 421.197271 | E | ***1302.635830*** | 651.821553 | 1285.609281 | 643.308279 | 1284.625265 | 642.816270 | 9 |
| 10 | 1298.623156 | 649.815216 | 1281.596607 | 641.301942 | 1280.612591 | 640.809934 | Q | ***1173.593237*** | 587.300257 | 1156.566688 | 578.786982 | 1155.582672 | 578.294974 | 8 |
| 11 | **1399.670835** | 700.339056 | 1382.644286 | 691.825781 | 1381.660270 | 691.333773 | T | ***734.367911*** | 367.687594 | 717.341362 | 359.174319 | 716.357346 | 358.682311 | 7 |
| 12 | 1527.729413 | 764.368345 | 1510.702864 | 755.855070 | 1509.718848 | 755.363062 | Q | ***633.320232*** | 317.163754 | 616.293683 | 308.650480 | 615.309667 | 308.158472 | 6 |
| 13 | 1628.777092 | 814.892184 | 1611.750543 | 806.378910 | 1610.766527 | 805.886902 | T | ***505.261654*** | 253.134465 | 488.235105 | 244.621190 | 487.251089 | 244.129182 | 5 |
| 14 | 1757.819685 | 879.413481 | 1740.793136 | 870.900206 | 1739.809120 | 870.408198 | E | ***404.213975*** | 202.610625 | 387.187426 | 194.097351 | 386.203410 | 193.605343 | 4 |
| 15 | 1814.841149 | 907.924213 | 1797.814600 | 899.410938 | 1796.830584 | 898.918930 | G | ***275.171382*** | 138.089329 | 258.144833 | 129.576054 | | | 3 |
| 16 | 1885.878263 | 943.442770 | 1868.851714 | 934.929495 | 1867.867698 | 934.437487 | A | 218.149918 | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 17 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LGSLGAACEQTQTEGAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.1 | 2030.976501 | -0.003129 | LGSLGAACEQTQTEGAK |
| 47.2 | 2030.976501 | -0.003129 | LGSLGAACEQTQTEGAK |
| 1.4 | 2031.000748 | -0.027376 | LEQQVEDLESSLEQEKK |

**Mascot:** http://www.matrixscience.com/

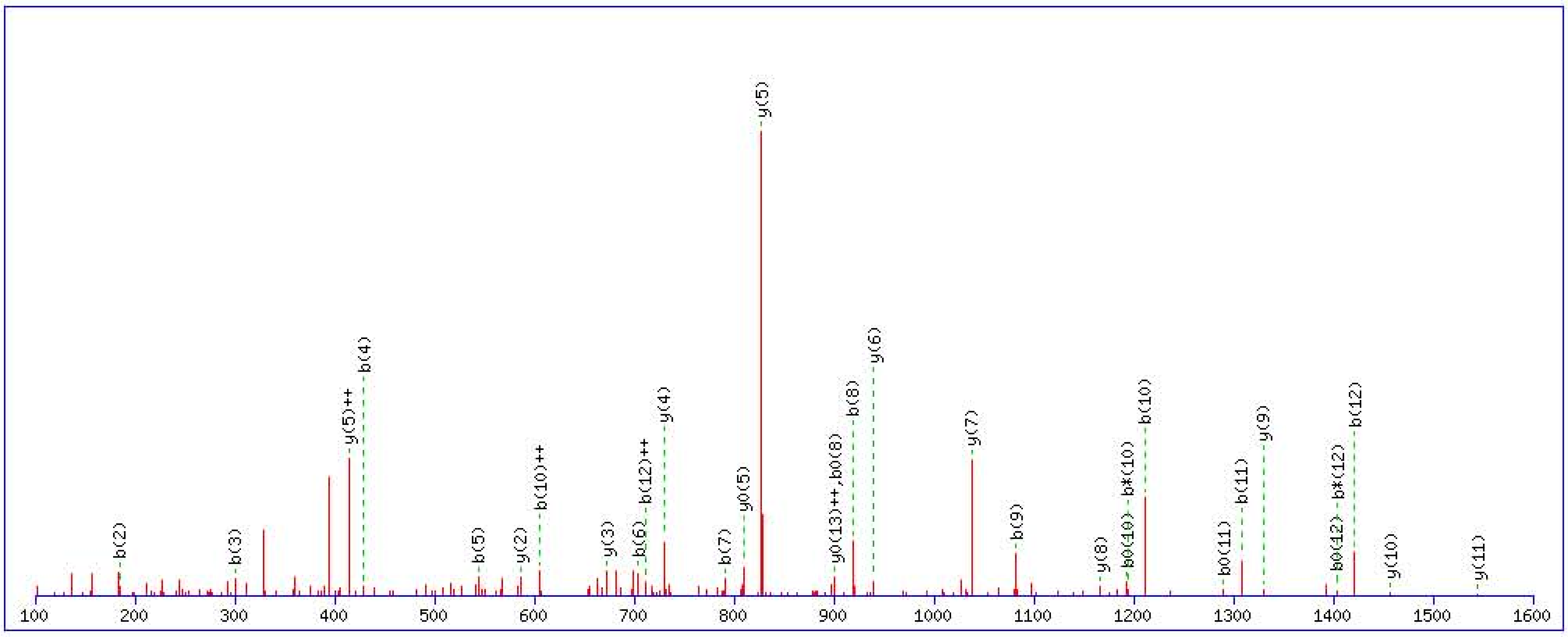
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AIDEDCSQYEPIPGSQK**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

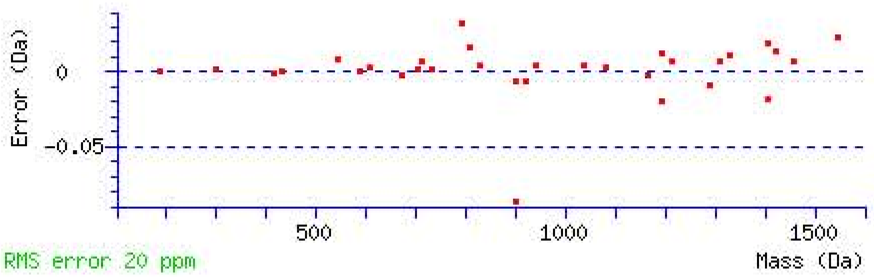
Match to Query 51945: 2247.023082 from(750.014970,3+) rtinseconds(1892) index(35596)
Title: Locus:1.1.1.3078.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

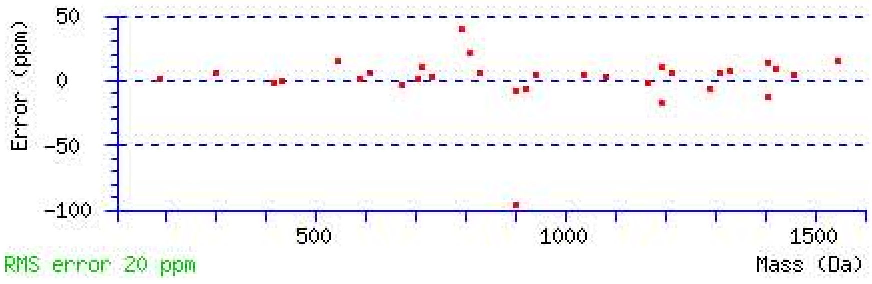
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1600] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2247.018753
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16     : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 3.2e-006
Matches : 32/170 fragment ions using 57 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 17 |
| 2 | ***185.128454*** | 93.067865 | | | | | I | 2176.988934 | 1088.998105 | 2159.962385 | 1080.484830 | 2158.978369 | 1079.992822 | 16 |
| 3 | ***300.155397*** | 150.581336 | | | 282.144832 | 141.576054 | D | 2063.904870 | 1032.456073 | 2046.878321 | 1023.942798 | 2045.894305 | 1023.450790 | 15 |
| 4 | ***429.197990*** | 215.102633 | | | 411.187425 | 206.097351 | E | 1948.877927 | 974.942602 | 1931.851378 | 966.429327 | 1930.867362 | 965.937319 | 14 |
| 5 | ***544.224933*** | 272.616105 | | | 526.214368 | 263.610822 | D | 1819.835334 | 910.421305 | 1802.808785 | 901.908031 | 1801.824769 | 901.416022 | 13 |
| 6 | ***704.255582*** | 352.631429 | | | 686.245017 | 343.626147 | C | 1704.808391 | 852.907833 | 1687.781842 | 844.394559 | 1686.797826 | 843.902551 | 12 |
| 7 | ***791.287610*** | 396.147443 | | | 773.277045 | 387.142161 | S | ***1544.777742*** | 772.892509 | 1527.751193 | 764.379235 | 1526.767177 | 763.887227 | 11 |
| 8 | ***919.346188*** | 460.176732 | 902.319639 | 451.663458 | 901.335623 | 451.171450 | Q | ***1457.745714*** | 729.376495 | 1440.719165 | 720.863221 | 1439.735149 | 720.371212 | 10 |
| 9 | ***1082.409517*** | 541.708397 | 1065.382968 | 533.195122 | 1064.398952 | 532.703114 | Y | ***1329.687136*** | 665.347206 | 1312.660587 | 656.833931 | 1311.676571 | 656.341923 | 9 |
| 10 | ***1211.452110*** | **606.229693** | 1194.425561 | 597.716419 | 1193.441545 | 597.224410 | E | ***1166.623807*** | 583.815541 | 1149.597258 | 575.302267 | 1148.613242 | 574.810259 | 8 |
| 11 | ***1308.504874*** | 654.756075 | 1291.478325 | 646.242801 | 1290.494309 | 645.750792 | P | ***1037.581214*** | 519.294245 | 1020.554665 | 510.780971 | 1019.570649 | 510.288963 | 7 |
| 12 | ***1421.588938*** | **711.298107** | 1404.562389 | 702.784832 | 1403.578373 | 702.292824 | I | ***940.528450*** | 470.767863 | 923.501901 | 462.254589 | 922.517885 | 461.762581 | 6 |
| 13 | 1518.641702 | 759.824489 | 1501.615153 | 751.311215 | 1500.631137 | 750.819206 | P | ***827.444386*** | 414.225831 | 810.417837 | 405.712557 | 809.433821 | 405.220549 | 5 |
| 14 | 1575.663166 | 788.335221 | 1558.636617 | 779.821946 | 1557.652601 | 779.329938 | G | ***730.391622*** | 365.699449 | 713.365073 | 357.186175 | 712.381057 | 356.694167 | 4 |
| 15 | 1662.695194 | 831.851235 | 1645.668645 | 823.337961 | 1644.684629 | 822.845952 | S | ***673.370158*** | 337.188717 | 656.343609 | 328.675443 | 655.359593 | 328.183435 | 3 |
| 16 | 2101.920520 | 1051.463898 | 2084.893971 | 1042.950623 | 2083.909955 | 1042.458615 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AIDEDCSQYEPIPGSQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.7 | 2247.018753 | 0.004329 | AIDEDCSQYEPIPGSQK |
| 2.8 | 2247.018753 | 0.004329 | AIDEDCSQYEPIPGSQK |

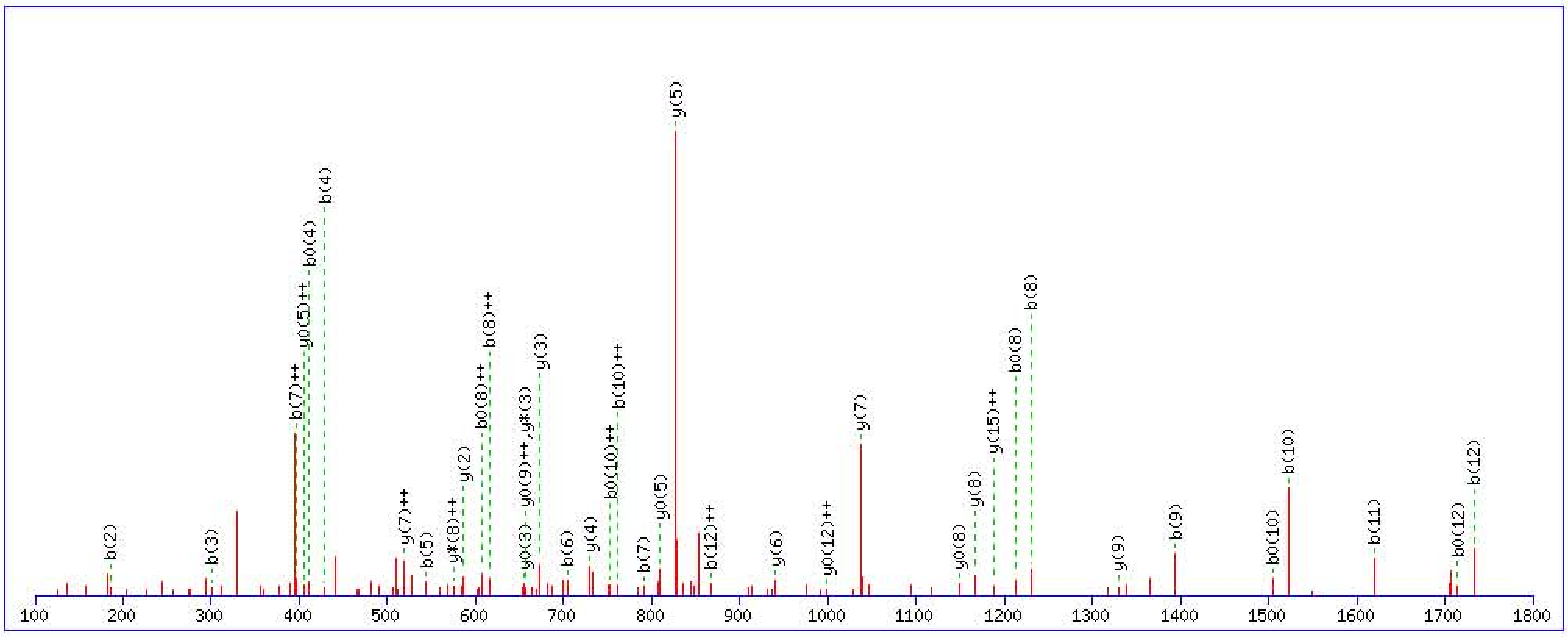
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AIDEDCSQYEPIPGSQK**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

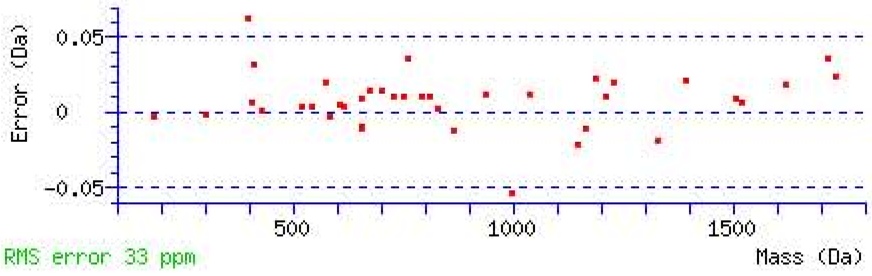
Match to Query 57259: 2558.212182 from(853.744670,3+) rtinseconds(2148) index(37306)
Title: Locus:1.1.1.3167.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

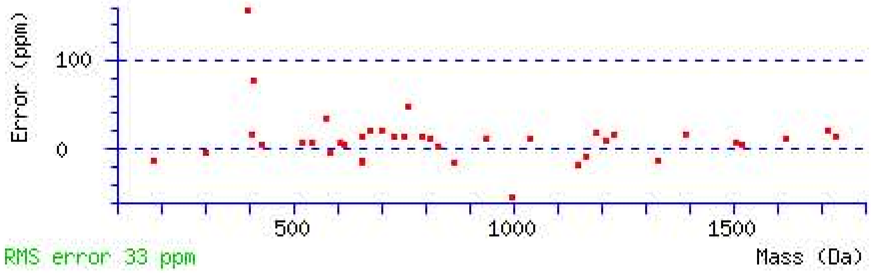
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2558.185501
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8     : Biotin:Thermo-21345 (Q)
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.00086
Matches : 39/170 fragment ions using 95 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 17 |
| 2 | ***185.128454*** | 93.067865 | | | | | I | 2488.155682 | 1244.581479 | 2471.129133 | 1236.068204 | 2470.145117 | 1235.576196 | 16 |
| 3 | ***300.155397*** | 150.581336 | | | 282.144832 | 141.576054 | D | 2375.071618 | 1188.039447 | 2358.045069 | 1179.526172 | 2357.061053 | 1179.034164 | 15 |
| 4 | ***429.197990*** | 215.102633 | | | 411.187425 | 206.097351 | E | 2260.044675 | 1130.525975 | 2243.018126 | 1122.012701 | 2242.034110 | 1121.520693 | 14 |
| 5 | ***544.224933*** | 272.616105 | | | 526.214368 | 263.610822 | D | 2131.002082 | 1066.004679 | 2113.975533 | 1057.491404 | 2112.991517 | 1056.999396 | 13 |
| 6 | ***704.255582*** | 352.631429 | | | 686.245017 | 343.626147 | C | 2015.975139 | 1008.491208 | 1998.948590 | 999.977933 | 1997.964574 | 999.485925 | 12 |
| 7 | ***791.287610*** | **396.147443** | | | 773.277045 | 387.142161 | S | 1855.944490 | 928.475883 | 1838.917941 | 919.962609 | 1837.933925 | 919.470601 | 11 |
| 8 | ***1230.512936*** | **615.760106** | 1213.486387 | 607.246832 | 1212.502371 | 606.754824 | Q | 1768.912462 | 884.959869 | 1751.885913 | 876.446595 | 1750.901897 | 875.954587 | 10 |
| 9 | ***1393.576265*** | 697.291771 | 1376.549716 | 688.778496 | 1375.565700 | 688.286488 | Y | ***1329.687136*** | 665.347206 | 1312.660587 | 656.833932 | 1311.676571 | 656.341924 | 9 |
| 10 | ***1522.618858*** | **761.813067** | 1505.592309 | 753.299793 | 1504.608293 | 752.807785 | E | ***1166.623807*** | 583.815541 | 1149.597258 | 575.302267 | 1148.613242 | 574.810259 | 8 |
| 11 | ***1619.671622*** | 810.339449 | 1602.645073 | 801.826175 | 1601.661057 | 801.334167 | P | ***1037.581214*** | 519.294245 | 1020.554665 | 510.780971 | 1019.570649 | 510.288963 | 7 |
| 12 | ***1732.755686*** | **866.881481** | 1715.729137 | 858.368207 | 1714.745121 | 857.876198 | I | ***940.528450*** | 470.767863 | 923.501901 | 462.254589 | 922.517885 | 461.762581 | 6 |
| 13 | 1829.808450 | 915.407863 | 1812.781901 | 906.894589 | 1811.797885 | 906.402581 | P | ***827.444386*** | 414.225831 | 810.417837 | 405.712557 | 809.433821 | 405.220549 | 5 |
| 14 | 1886.829914 | 943.918595 | 1869.803365 | 935.405321 | 1868.819349 | 934.913312 | G | ***730.391622*** | 365.699449 | 713.365073 | 357.186175 | 712.381057 | 356.694167 | 4 |
| 15 | 1973.861942 | 987.434609 | 1956.835393 | 978.921335 | 1955.851377 | 978.429327 | S | ***673.370158*** | 337.188717 | 656.343609 | 328.675443 | 655.359593 | 328.183435 | 3 |
| 16 | 2413.087268 | 1207.047272 | 2396.060719 | 1198.533997 | 2395.076703 | 1198.041989 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AIDEDCSQYEPIPGSQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.4 | 2558.185501 | 0.026681 | AIDEDCSQYEPIPGSQK |
| 5.7 | 2558.214981 | -0.002799 | TSPQSAPPSSPLSPNWVSPSDHQR |

**Mascot:** http://www.matrixscience.com/

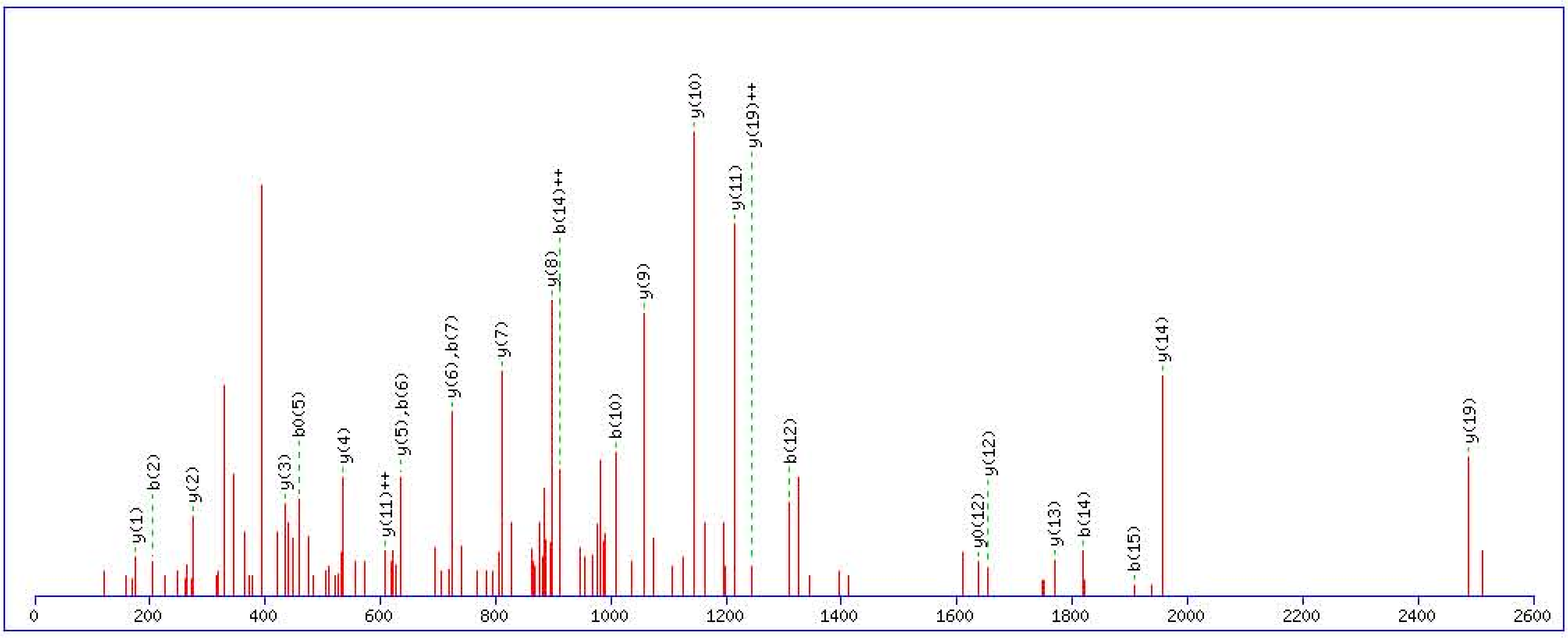
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **FGGTICSGDIWDQASCSSSTTCVR**
Found in **CO8A_HUMAN**, Complement component C8 alpha chain OS=Homo sapiens GN=C8A PE=1 SV=2

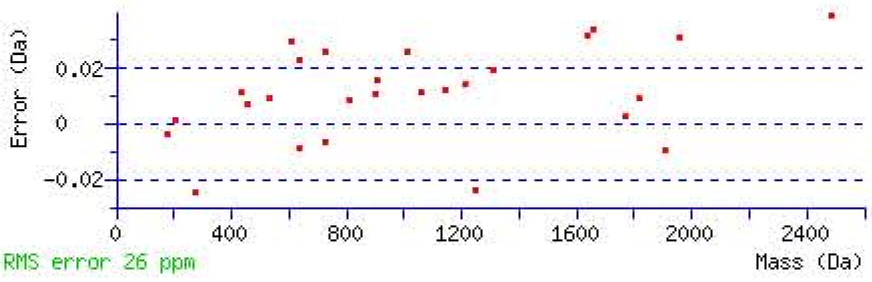
Match to Query 61435: 2962.301742 from(988.441190,3+) rtinseconds(2367) index(23815)
Title: Locus:1.1.1.826.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

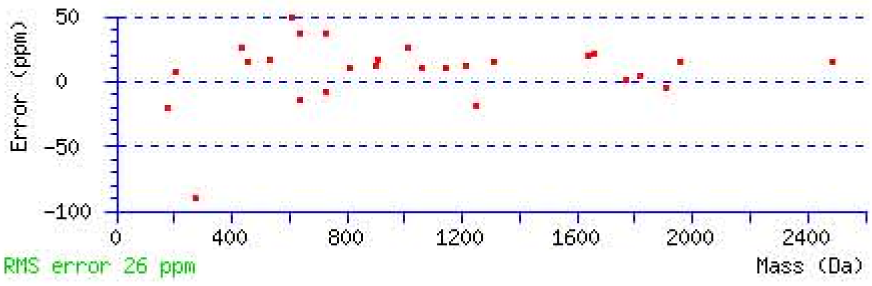
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2962.271835
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13    : Biotin:Thermo-21345 (Q)
Ions Score: 107  Expect: 1.3e-010
Matches : 27/240 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 24 |
| 2 | **205.097154** | 103.052215 | | | | | G | 2816.210649 | 1408.608962 | 2799.184100 | 1400.095688 | 2798.200084 | 1399.603680 | 23 |
| 3 | 262.118618 | 131.562947 | | | | | G | 2759.189185 | 1380.098230 | 2742.162636 | 1371.584956 | 2741.178620 | 1371.092948 | 22 |
| 4 | 363.166297 | 182.086786 | | | 345.155732 | 173.081504 | T | 2702.167721 | 1351.587498 | 2685.141172 | 1343.074224 | 2684.157156 | 1342.582216 | 21 |
| 5 | 476.250361 | 238.628818 | | | 458.239796 | 229.623536 | I | 2601.120042 | 1301.063659 | 2584.093493 | 1292.550384 | 2583.109477 | 1292.058376 | 20 |
| 6 | **636.281010** | 318.644143 | | | 618.270445 | 309.638861 | C | ***2488.035978*** | 1244.521627 | 2471.009429 | 1236.008352 | 2470.025413 | 1235.516344 | 19 |
| 7 | **723.313038** | 362.160157 | | | 705.302473 | 353.154875 | S | 2328.005329 | 1164.506302 | 2310.978780 | 1155.993028 | 2309.994764 | 1155.501020 | 18 |
| 8 | 780.334502 | 390.670889 | | | 762.323937 | 381.665607 | G | 2240.973301 | 1120.990288 | 2223.946752 | 1112.477014 | 2222.962736 | 1111.985006 | 17 |
| 9 | 895.361445 | 448.184361 | | | 877.350880 | 439.179078 | D | 2183.951837 | 1092.479556 | 2166.925288 | 1083.966282 | 2165.941272 | 1083.474274 | 16 |
| 10 | **1008.445509** | 504.726393 | | | 990.434944 | 495.721110 | I | 2068.924894 | 1034.966085 | 2051.898345 | 1026.452810 | 2050.914329 | 1025.960802 | 15 |
| 11 | 1194.524822 | 597.766049 | | | 1176.514257 | 588.760767 | W | ***1955.840830*** | 978.424053 | 1938.814281 | 969.910778 | 1937.830265 | 969.418770 | 14 |
| 12 | **1309.551765** | 655.279521 | | | 1291.541200 | 646.274238 | D | ***1769.761517*** | 885.384396 | 1752.734968 | 876.871122 | 1751.750952 | 876.379114 | 13 |
| 13 | 1748.777091 | 874.892184 | 1731.750542 | 866.378909 | 1730.766526 | 865.886901 | Q | ***1654.734574*** | 827.870925 | 1637.708025 | 819.357650 | 1636.724009 | 818.865642 | 12 |
| 14 | **1819.814205** | 910.410741 | 1802.787656 | 901.897466 | 1801.803640 | 901.405458 | A | ***1215.509248*** | 608.258262 | 1198.482699 | 599.744987 | 1197.498683 | 599.252979 | 11 |
| 15 | **1906.846233** | 953.926755 | 1889.819684 | 945.413480 | 1888.835668 | 944.921472 | S | ***1144.472134*** | 572.739705 | 1127.445585 | 564.226430 | 1126.461569 | 563.734422 | 10 |
| 16 | 2066.876882 | 1033.942079 | 2049.850333 | 1025.428804 | 2048.866317 | 1024.936796 | C | ***1057.440106*** | 529.223691 | 1040.413557 | 520.710416 | 1039.429541 | 520.218408 | 9 |
| 17 | 2153.908910 | 1077.458093 | 2136.882361 | 1068.944818 | 2135.898345 | 1068.452810 | S | ***897.409457*** | 449.208366 | 880.382908 | 440.695092 | 879.398892 | 440.203084 | 8 |
| 18 | 2240.940938 | 1120.974107 | 2223.914389 | 1112.460832 | 2222.930373 | 1111.968825 | S | ***810.377429*** | 405.692352 | 793.350880 | 397.179078 | 792.366864 | 396.687070 | 7 |
| 19 | 2327.972966 | 1164.490121 | 2310.946417 | 1155.976847 | 2309.962401 | 1155.484839 | S | ***723.345401*** | 362.176338 | 706.318852 | 353.663064 | 705.334836 | 353.171056 | 6 |
| 20 | 2429.020645 | 1215.013960 | 2411.994096 | 1206.500686 | 2411.010080 | 1206.008678 | T | ***636.313373*** | 318.660324 | 619.286824 | 310.147050 | 618.302808 | 309.655042 | 5 |
| 21 | 2530.068324 | 1265.537800 | 2513.041775 | 1257.024525 | 2512.057759 | 1256.532517 | T | ***535.265694*** | 268.136485 | 518.239145 | 259.623210 | 517.255129 | 259.131202 | 4 |
| 22 | 2690.098973 | 1345.553124 | 2673.072424 | 1337.039850 | 2672.088408 | 1336.547842 | C | ***434.218015*** | 217.612645 | 417.191466 | 209.099371 | | | 3 |
| 23 | 2789.167387 | 1395.087331 | 2772.140838 | 1386.574057 | 2771.156822 | 1386.082049 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084046 | | | 2 |
| 24 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FGGTICSGDIWDQASCSSSTTCVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 106.9 | 2962.271835 | 0.029907 | FGGTICSGDIWDQASCSSSTTCVR |

**Mascot:** http://www.matrixscience.com/

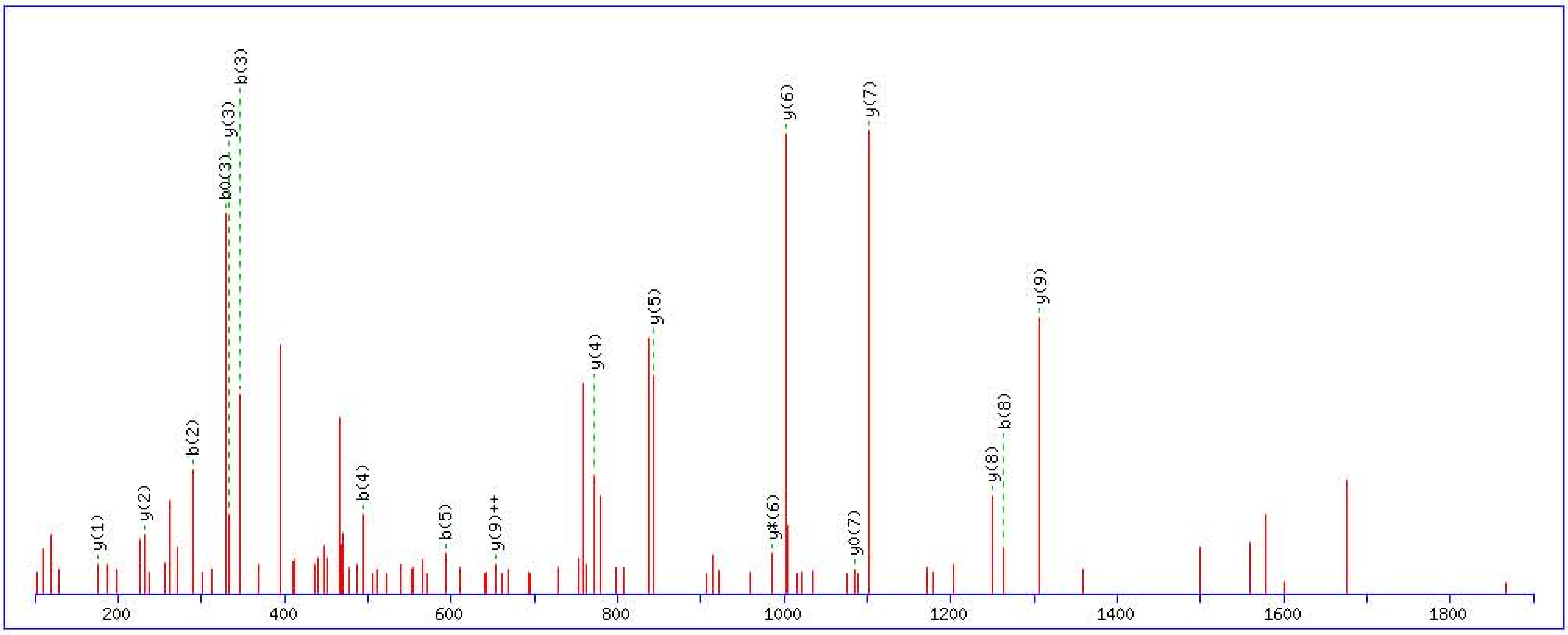
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **CEGFVCAQTGR**
Found in **CO8B_HUMAN**, Complement component C8 beta chain OS=Homo sapiens GN=C8B PE=1 SV=3

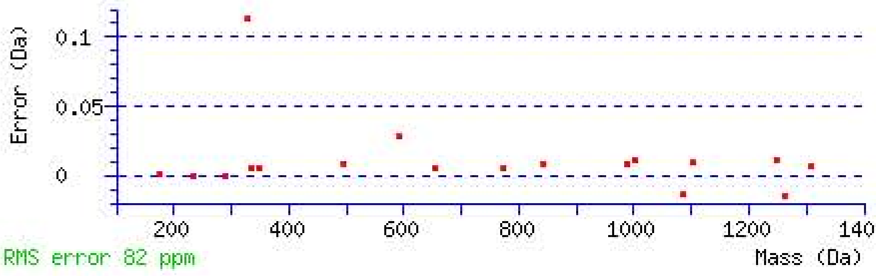
Match to Query 36888: 1594.703388 from(798.358970,2+) rtinseconds(1772) index(20168)
Title: Locus:1.1.1.619.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

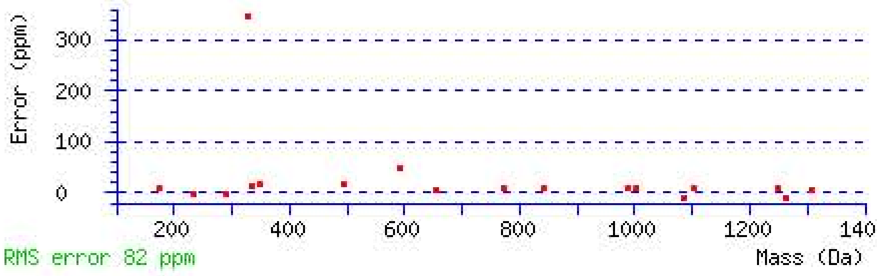
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1594.705460
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.00056
Matches : 18/100 fragment ions using 51 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 11 |
| 2 | **290.080518** | 145.543897 | | | 272.069953 | 136.538615 | E | 1435.682069 | 718.344673 | 1418.655520 | 709.831398 | 1417.671504 | 709.339390 | 10 |
| 3 | **347.101982** | 174.054629 | | | 329.091417 | 165.049347 | G | ***1306.639476*** | 653.823376 | 1289.612927 | 645.310102 | 1288.628911 | 644.818094 | 9 |
| 4 | **494.170396** | 247.588836 | | | 476.159831 | 238.583554 | F | ***1249.618012*** | 625.312644 | 1232.591463 | 616.799370 | 1231.607447 | 616.307361 | 8 |
| 5 | **593.238810** | 297.123043 | | | 575.228245 | 288.117761 | V | ***1102.549598*** | 551.778437 | 1085.523049 | 543.265162 | 1084.539033 | 542.773154 | 7 |
| 6 | 753.269459 | 377.138368 | | | 735.258894 | 368.133085 | C | ***1003.481184*** | 502.244230 | 986.454635 | 493.730955 | 985.470619 | 493.238947 | 6 |
| 7 | 824.306573 | 412.656925 | | | 806.296008 | 403.651642 | A | ***843.450535*** | 422.228906 | 826.423986 | 413.715631 | 825.439970 | 413.223623 | 5 |
| 8 | **1263.531899** | 632.269588 | 1246.505350 | 623.756313 | 1245.521334 | 623.264305 | Q | ***772.413421*** | 386.710349 | 755.386872 | 378.197074 | 754.402856 | 377.705066 | 4 |
| 9 | 1364.579578 | 682.793427 | 1347.553029 | 674.280153 | 1346.569013 | 673.788145 | T | ***333.188095*** | 167.097685 | 316.161546 | 158.584411 | 315.177530 | 158.092403 | 3 |
| 10 | 1421.601042 | 711.304159 | 1404.574493 | 702.790885 | 1403.590477 | 702.298877 | G | ***232.140416*** | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CEGFVCAQTGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.4 | 1594.705460 | -0.002072 | CEGFVCAQTGR |

**Mascot:** http://www.matrixscience.com/

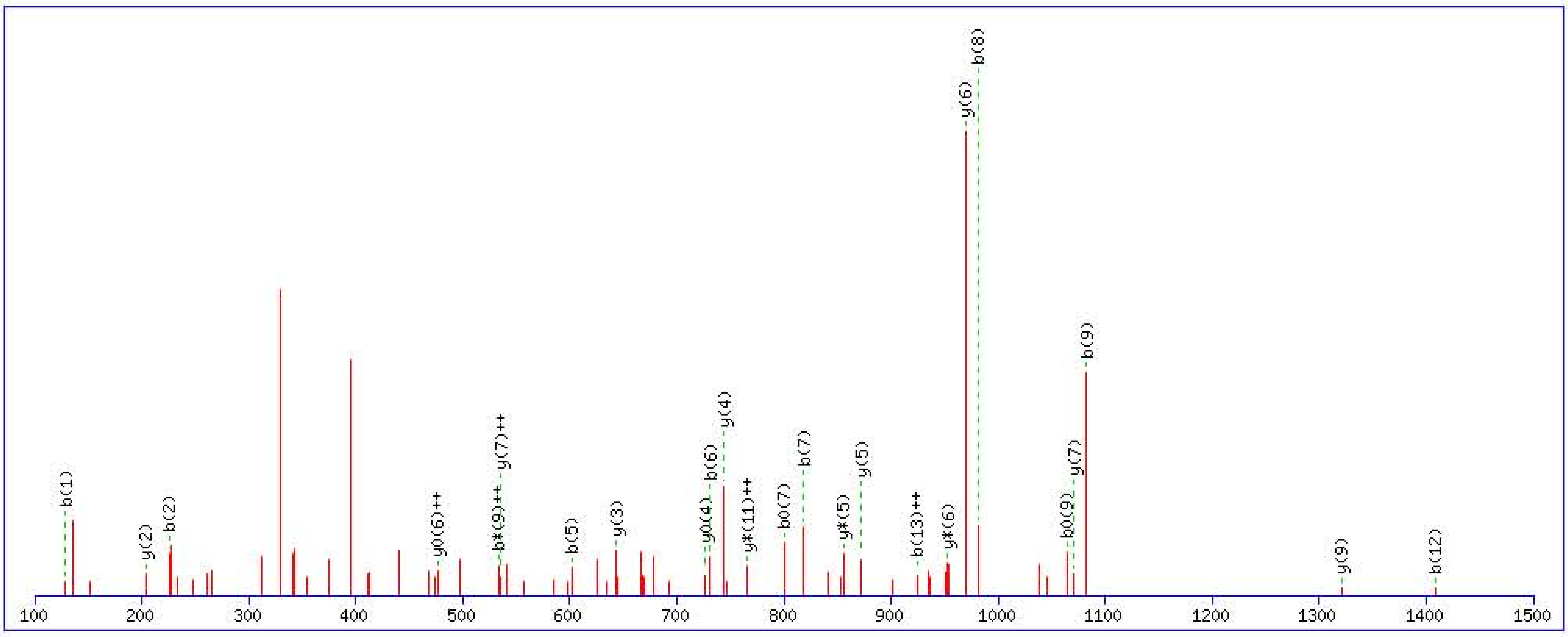
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KPYNVESYTPQTQGK**
Found in **CO8B_HUMAN**, Complement component C8 beta chain OS=Homo sapiens GN=C8B PE=1 SV=3

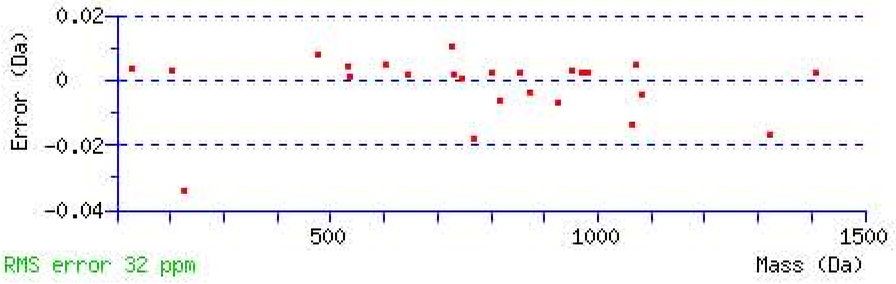
Match to Query 48400: 2050.012212 from(684.344680,3+) rtinseconds(1582) index(19018)
Title: Locus:1.1.1.553.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

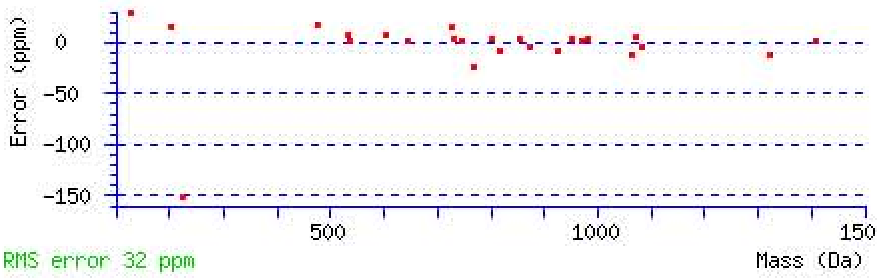
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2050.019348
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q13** : Biotin:Thermo-21345 (Q)
**Ions Score:** 37 **Expect:** 0.0045
**Matches :** 25/152 fragment ions using 52 most intense peaks (help)

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 15 |
| 2 | ***226.155003*** | 113.581139 | 209.128454 | 105.067865 | | | P | 1922.931678 | 961.969477 | 1905.905129 | 953.456203 | 1904.921113 | 952.964195 | 14 |
| 3 | 389.218332 | 195.112804 | 372.191783 | 186.599529 | | | Y | 1825.878914 | 913.443095 | 1808.852365 | 904.929821 | 1807.868349 | 904.437813 | 13 |
| 4 | 503.261259 | 252.134267 | 486.234710 | 243.620993 | | | N | 1662.815585 | 831.911431 | 1645.789036 | 823.398156 | 1644.805020 | 822.906148 | 12 |
| 5 | ***602.329673*** | 301.668475 | 585.303124 | 293.155200 | | | V | 1548.772658 | 774.889967 | 1531.746109 | 766.376693 | 1530.762093 | 765.884685 | 11 |
| 6 | ***731.372266*** | 366.189771 | 714.345717 | 357.676497 | 713.361701 | 357.184489 | E | 1449.704244 | 725.355760 | 1432.677695 | 716.842486 | 1431.693679 | 716.350478 | 10 |
| 7 | ***818.404294*** | 409.705785 | 801.377745 | 401.192511 | 800.393729 | 400.700503 | S | ***1320.661651*** | 660.834464 | 1303.635102 | 652.321189 | 1302.651086 | 651.829181 | 9 |
| 8 | ***981.467623*** | 491.237450 | 964.441074 | 482.724175 | 963.457058 | 482.232167 | Y | 1233.629623 | 617.318450 | 1216.603074 | 608.805175 | 1215.619058 | 608.313167 | 8 |
| 9 | ***1082.515302*** | 541.761289 | 1065.488753 | 533.248015 | 1064.504737 | 532.756007 | T | ***1070.566294*** | 535.786785 | 1053.539745 | 527.273511 | 1052.555729 | 526.781503 | 7 |
| 10 | 1179.568066 | 590.287671 | 1162.541517 | 581.774397 | 1161.557501 | 581.282389 | P | ***969.518615*** | 485.262946 | 952.492066 | 476.749671 | 951.508050 | 476.257663 | 6 |
| 11 | 1307.626644 | 654.316960 | 1290.600095 | 645.803686 | 1289.616079 | 645.311678 | Q | ***872.465851*** | 436.736564 | 855.439302 | 428.223289 | 854.455286 | 427.731281 | 5 |
| 12 | ***1408.674323*** | 704.840800 | 1391.647774 | 696.327525 | 1390.663758 | 695.835517 | T | ***744.407273*** | 372.707275 | 727.380724 | 364.194000 | 726.396708 | 363.701992 | 4 |
| 13 | 1847.899649 | 924.453463 | 1830.873100 | 915.940188 | 1829.889084 | 915.448180 | Q | ***643.359594*** | 322.183435 | 626.333045 | 313.670161 | | | 3 |
| 14 | 1904.921113 | 952.964195 | 1887.894564 | 944.450920 | 1886.910548 | 943.958912 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 15 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of KPYNVESYTPQTQGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.4 | 2050.019348 | -0.007136 | KPYNVESYTPQTQGK |
| 21.3 | 2050.019348 | -0.007136 | KPYNVESYTPQTQGK |

**Mascot:** http://www.matrixscience.com/

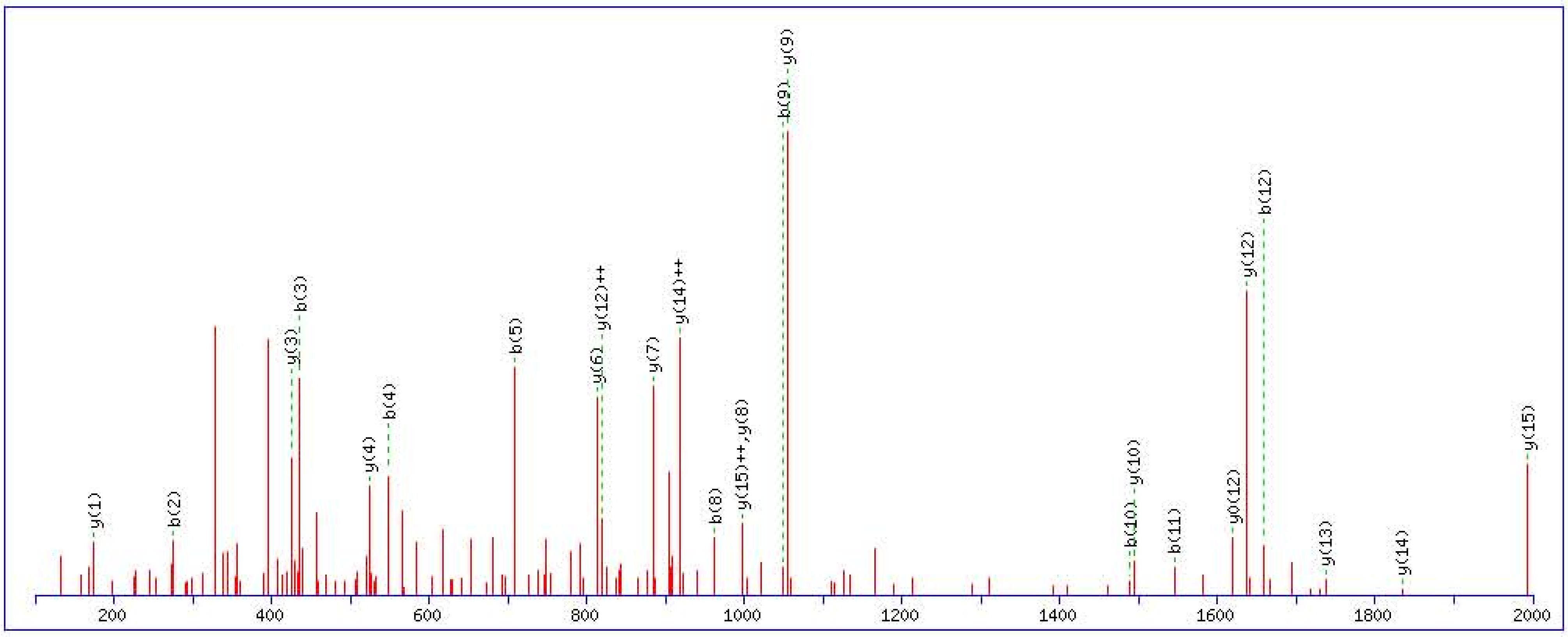
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **CDCICPVGSQGLACEVSYR**
Found in **CO8B_HUMAN**, Complement component C8 beta chain OS=Homo sapiens GN=C8B PE=1 SV=3

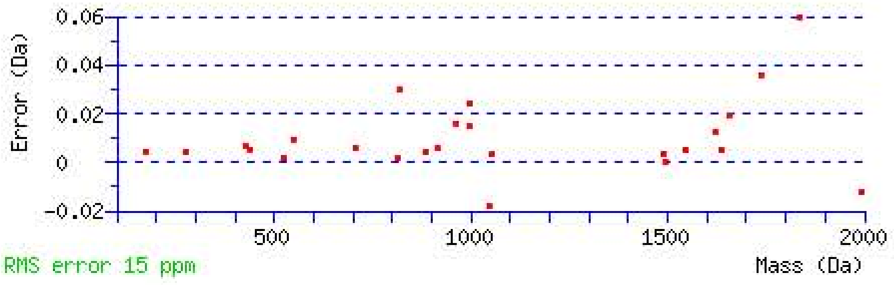
Match to Query 57167: 2541.100812 from(848.040880,3+) rtinseconds(2149) index(22589)
Title: Locus:1.1.1.750.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

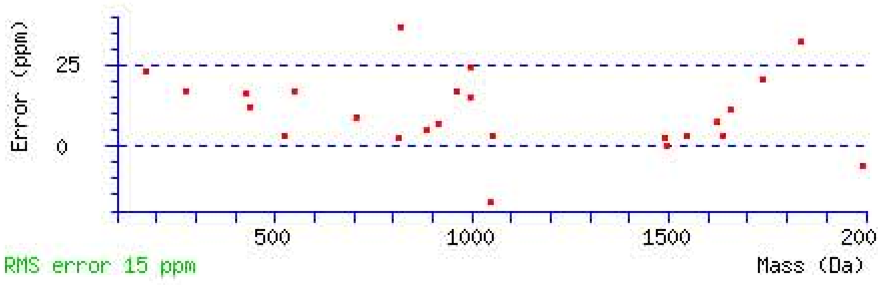
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2541.094299
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 90 **Expect:** 3.9e-009
**Matches :** 25/192 fragment ions using 35 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 19 |
| 2 | ***276.064868*** | 138.536072 | | | 258.054303 | 129.530790 | D | 2382.070908 | 1191.539092 | 2365.044359 | 1183.025817 | 2364.060343 | 1182.533809 | 18 |
| 3 | ***436.095517*** | 218.551397 | | | 418.084952 | 209.546114 | C | 2267.043965 | 1134.025620 | 2250.017416 | 1125.512346 | 2249.033400 | 1125.020338 | 17 |
| 4 | ***549.179581*** | 275.093429 | | | 531.169016 | 266.088146 | I | 2107.013316 | 1054.010296 | 2089.986767 | 1045.497021 | 2089.002751 | 1045.005013 | 16 |
| 5 | ***709.210230*** | 355.108753 | | | 691.199665 | 346.103471 | C | ***1993.929252*** | 997.468264 | 1976.902703 | 988.954990 | 1975.918687 | 988.462982 | 15 |
| 6 | 806.262994 | 403.635135 | | | 788.252429 | 394.629853 | P | ***1833.898603*** | 917.452940 | 1816.872054 | 908.939665 | 1815.888038 | 908.447657 | 14 |
| 7 | 905.331408 | 453.169342 | | | 887.320843 | 444.164060 | V | ***1736.845839*** | 868.926558 | 1719.819290 | 860.413283 | 1718.835274 | 859.921275 | 13 |
| 8 | ***962.352872*** | 481.680074 | | | 944.342307 | 472.674792 | G | ***1637.777425*** | 819.392351 | 1620.750876 | 810.879076 | 1619.766860 | 810.387068 | 12 |
| 9 | ***1049.384900*** | 525.196088 | | | 1031.374335 | 516.190806 | S | 1580.755961 | 790.881619 | 1563.729412 | 782.368344 | 1562.745396 | 781.876336 | 11 |
| 10 | ***1488.610226*** | 744.808751 | 1471.583677 | 736.295477 | 1470.599661 | 735.803469 | Q | ***1493.723933*** | 747.365605 | 1476.697384 | 738.852330 | 1475.713368 | 738.360322 | 10 |
| 11 | ***1545.631690*** | 773.319483 | 1528.605141 | 764.806209 | 1527.621125 | 764.314201 | G | ***1054.498607*** | 527.752941 | 1037.472058 | 519.239667 | 1036.488042 | 518.747659 | 9 |
| 12 | ***1658.715754*** | 829.861515 | 1641.689205 | 821.348241 | 1640.705189 | 820.856233 | L | ***997.477143*** | 499.242209 | 980.450594 | 490.728935 | 979.466578 | 490.236927 | 8 |
| 13 | 1729.752868 | 865.380072 | 1712.726319 | 856.866798 | 1711.742303 | 856.374790 | A | ***884.393079*** | 442.700178 | 867.366530 | 434.186903 | 866.382514 | 433.694895 | 7 |
| 14 | 1889.783517 | 945.395397 | 1872.756968 | 936.882122 | 1871.772952 | 936.390114 | C | ***813.355965*** | 407.181621 | 796.329416 | 398.668346 | 795.345400 | 398.176338 | 6 |
| 15 | 2018.826110 | 1009.916693 | 2001.799561 | 1001.403419 | 2000.815545 | 1000.911411 | E | 653.325316 | 327.166296 | 636.298767 | 318.653021 | 635.314751 | 318.161013 | 5 |
| 16 | 2117.894524 | 1059.450900 | 2100.867975 | 1050.937625 | 2099.883959 | 1050.445617 | V | ***524.282723*** | 262.645000 | 507.256174 | 254.131725 | 506.272158 | 253.639717 | 4 |
| 17 | 2204.926552 | 1102.966914 | 2187.900003 | 1094.453639 | 2186.915987 | 1093.961631 | S | ***425.214309*** | 213.110793 | 408.187760 | 204.597518 | 407.203744 | 204.105510 | 3 |
| 18 | 2367.989881 | 1184.498578 | 2350.963332 | 1175.985304 | 2349.979316 | 1175.493296 | Y | 338.182281 | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CDCICPVGSQGLACEVSYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 90.5 | 2541.094299 | 0.006513 | CDCICPVGSQGLACEVSYR |

**Mascot:** http://www.matrixscience.com/

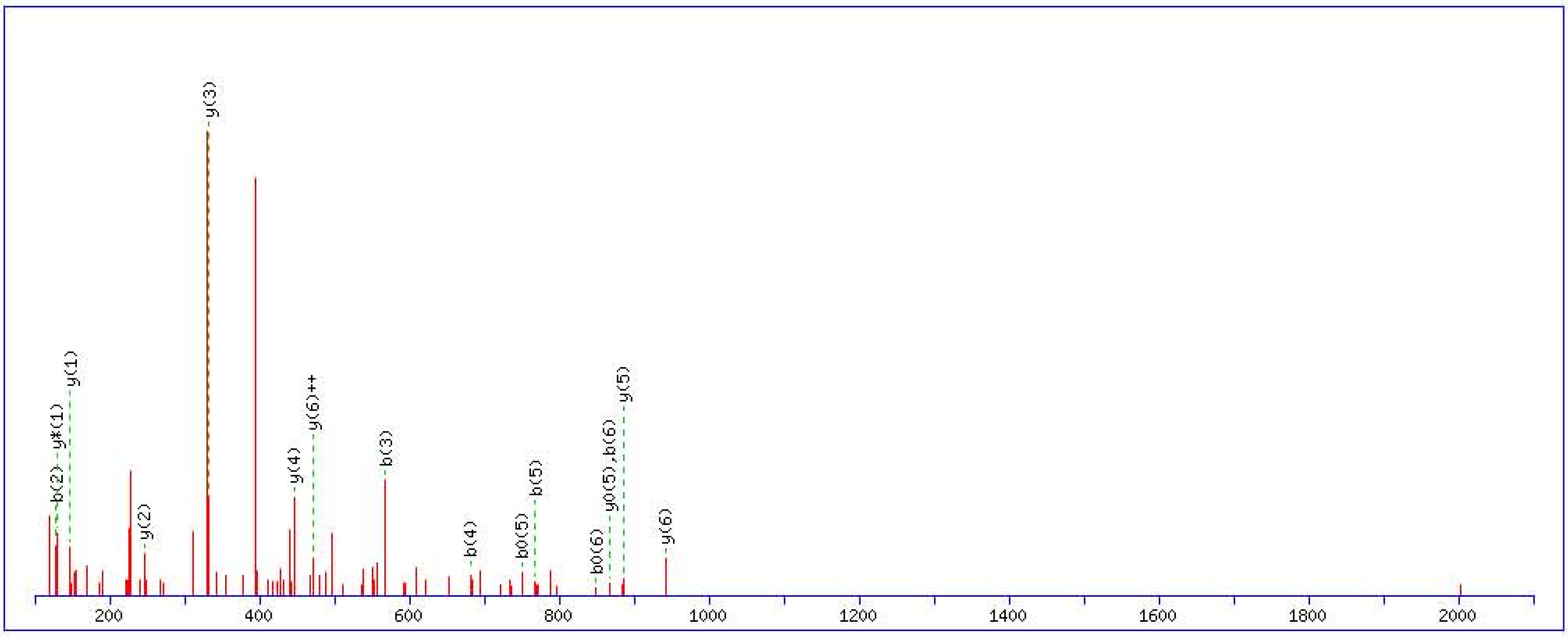
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AGQLSVK**
Found in **CO8G_HUMAN**, Complement component C8 gamma chain OS=Homo sapiens GN=C8G PE=1 SV=3

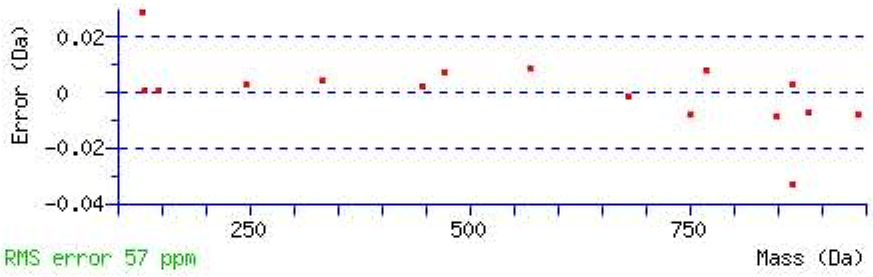
Match to Query 16066: 1012.569648 from(507.292100,2+) rtinseconds(1562) index(18906)
Title: Locus:1.1.1.546.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

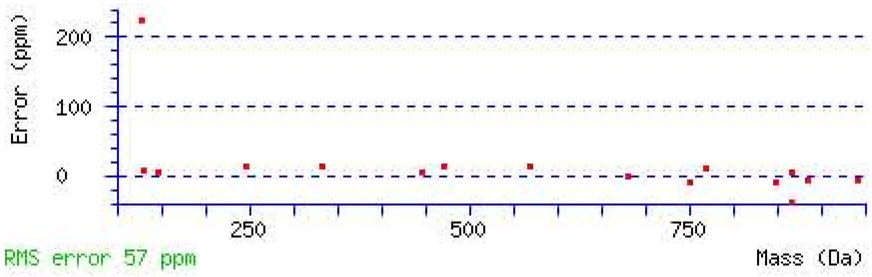
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1012.573929
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 26  Expect: 0.037
Matches : 16/56 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 7 |
| 2 | **129.065854** | 65.036565 | | | | | G | ***942.544100*** | 471.775688 | 925.517551 | 463.262414 | 924.533535 | 462.770406 | 6 |
| 3 | **568.291180** | 284.649228 | 551.264631 | 276.135954 | | | Q | ***885.522636*** | 443.264956 | 868.496087 | 434.751682 | 867.512071 | 434.259674 | 5 |
| 4 | **681.375244** | 341.191260 | 664.348695 | 332.677986 | | | L | ***446.297310*** | 223.652293 | 429.270761 | 215.139018 | 428.286745 | 214.647010 | 4 |
| 5 | **768.407272** | 384.707274 | 751.380723 | 376.194000 | 750.396707 | 375.701992 | S | ***333.213246*** | 167.110261 | 316.186697 | 158.596986 | 315.202681 | 158.104978 | 3 |
| 6 | **867.475686** | 434.241481 | 850.449137 | 425.728207 | 849.465121 | 425.236199 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080972 | | | 2 |
| 7 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AGQLSVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.0 | 1012.573929 | -0.004281 | AGQLSVK |
| 10.1 | 1012.573914 | -0.004266 | KEAQVK |
| 8.2 | 1012.573929 | -0.004281 | QAGLVSK |
| 8.2 | 1012.573914 | -0.004266 | QKLEGK |
| 7.4 | 1012.555267 | 0.014381 | EPSKPAEKK |
| 6.2 | 1012.570557 | -0.000909 | IIDFGLAHK |
| 6.2 | 1012.570557 | -0.000909 | LIDFGIAHK |
| 5.8 | 1012.555267 | 0.014381 | EPSKPKAEK |
| 4.2 | 1012.555313 | 0.014335 | GGEIQPVSVK |
| 3.4 | 1012.573929 | -0.004281 | QNLTVK |

**Mascot:** http://www.matrixscience.com/

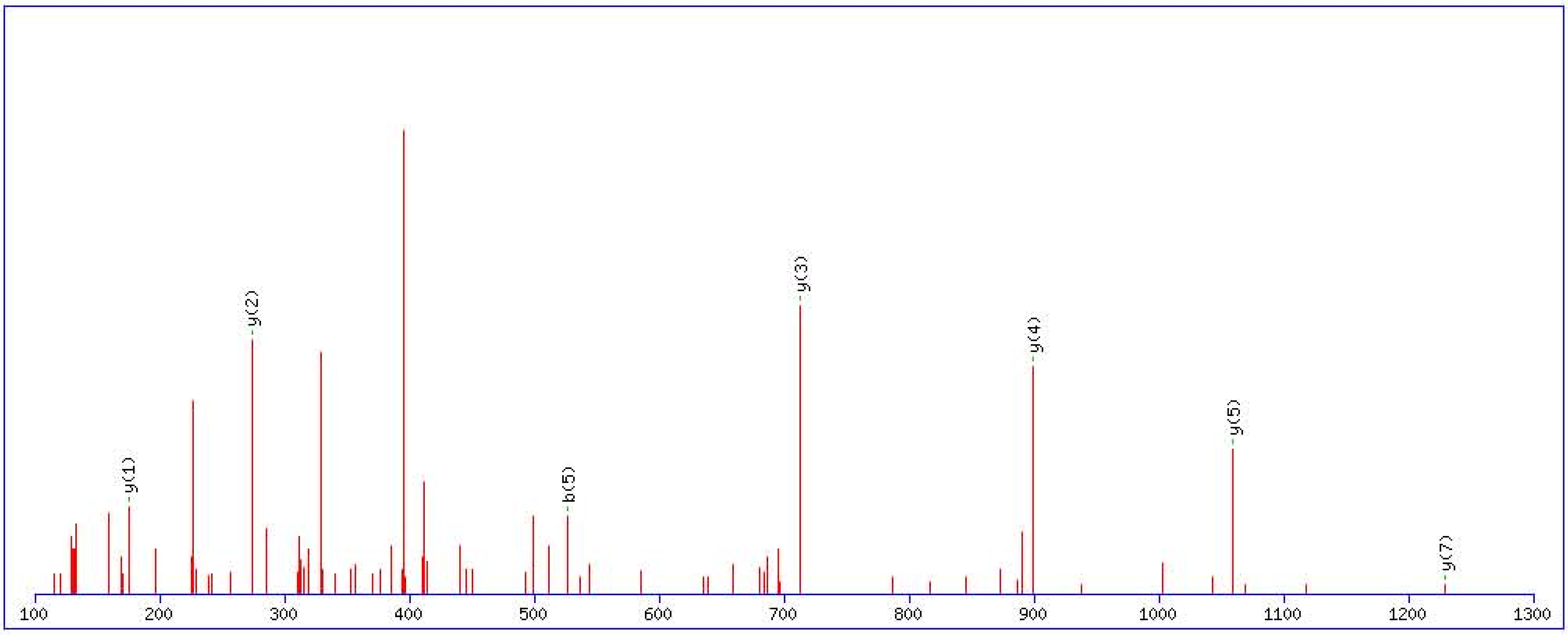
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KLDGICWQVR**
Found in **CO8G_HUMAN**, Complement component C8 gamma chain OS=Homo sapiens GN=C8G PE=1 SV=3

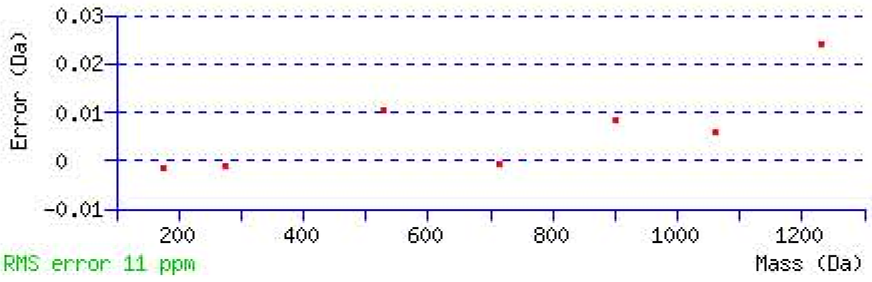
Match to Query 36473: 1584.828072 from(529.283300,3+) rtinseconds(2075) index(36864)
Title: Locus:1.1.1.3142.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

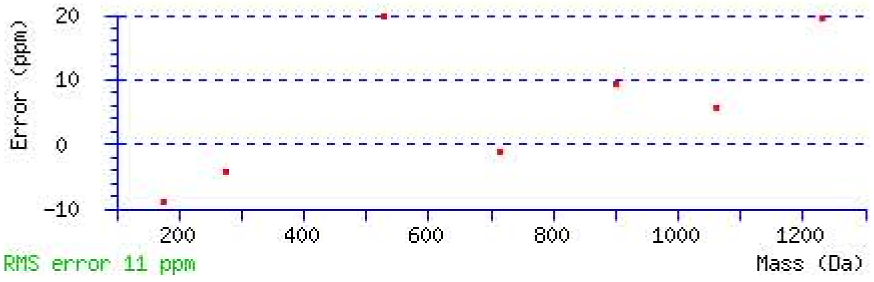
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1584.826874
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 36  Expect: 0.0017
Matches : 7/90 fragment ions using 12 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.102239 | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 10 |
| 2 | 242.186303 | 121.596790 | 225.159754 | 113.083515 | | | L | 1457.739189 | 729.373233 | 1440.712640 | 720.859958 | 1439.728624 | 720.367950 | 9 |
| 3 | 357.213246 | 179.110261 | 340.186697 | 170.596987 | 339.202681 | 170.104979 | D | 1344.655125 | 672.831201 | 1327.628576 | 664.317926 | 1326.644560 | 663.825918 | 8 |
| 4 | 414.234710 | 207.620993 | 397.208161 | 199.107719 | 396.224145 | 198.615711 | G | ***1229.628182*** | 615.317729 | 1212.601633 | 606.804455 | | | 7 |
| 5 | **527.318774** | 264.163025 | 510.292225 | 255.649751 | 509.308209 | 255.157743 | I | 1172.606718 | 586.806997 | 1155.580169 | 578.293723 | | | 6 |
| 6 | 687.349423 | 344.178350 | 670.322874 | 335.665075 | 669.338858 | 335.173067 | C | ***1059.522654*** | 530.264965 | 1042.496105 | 521.751691 | | | 5 |
| 7 | 873.428736 | 437.218006 | 856.402187 | 428.704732 | 855.418171 | 428.212724 | W | ***899.492005*** | 450.249641 | 882.465456 | 441.736366 | | | 4 |
| 8 | 1312.654062 | 656.830669 | 1295.627513 | 648.317395 | 1294.643497 | 647.825387 | Q | ***713.412692*** | 357.209984 | 696.386143 | 348.696710 | | | 3 |
| 9 | 1411.722476 | 706.364876 | 1394.695927 | 697.851602 | 1393.711911 | 697.359594 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084047 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KLDGICWQVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.0 | 1584.826874 | 0.001198 | KLDGICWQVR |
| 6.1 | 1584.805099 | 0.022973 | SQCVVPICRR |
| 4.5 | 1584.829346 | -0.001274 | QAESQINKQTK |
| 1.0 | 1584.822845 | 0.005227 | SQMSPQGLRVR |

**Mascot:** http://www.matrixscience.com/

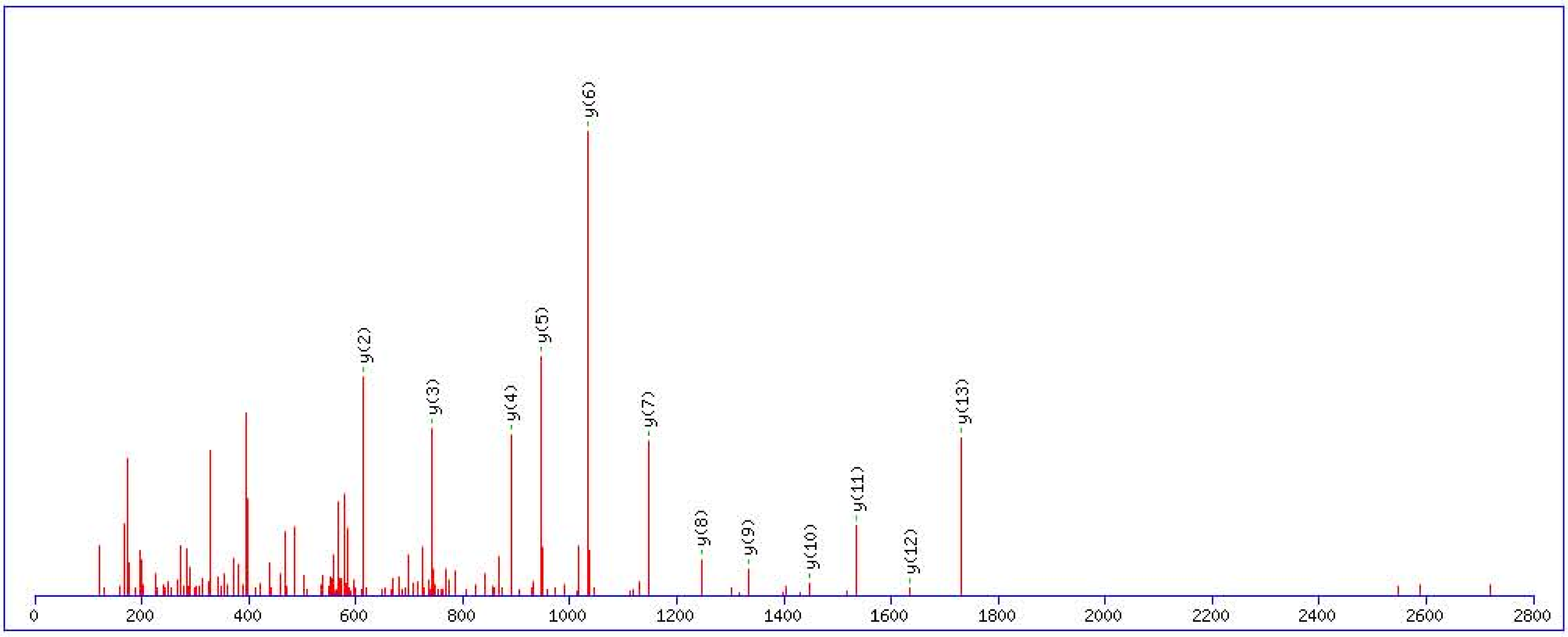
# {MATRIX}{SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SLPVSDSVLSGFEQR**
Found in **CO8G_HUMAN**, Complement component C8 gamma chain OS=Homo sapiens GN=C8G PE=1 SV=3

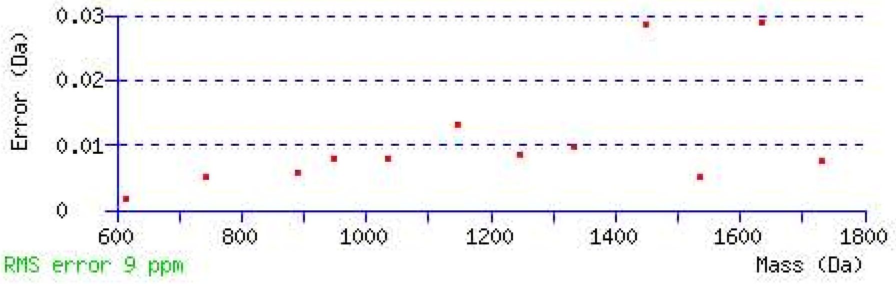
Match to Query 45137: 1930.989312 from(644.670380,3+) rtinseconds(2510) index(39574)
Title: Locus:1.1.1.3293.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

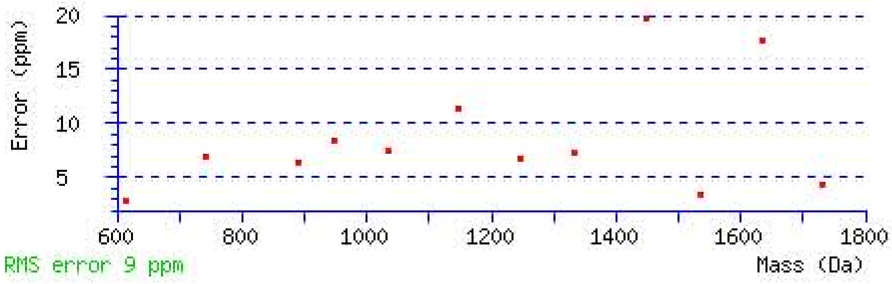
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1930.982254
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 104  Expect: 2.1e-010
Matches : 12/138 fragment ions using 17 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 15 |
| 2 | 201.123368 | 101.065322 | | | 183.112803 | 92.060039 | L | 1844.957496 | 922.982386 | 1827.930947 | 914.469112 | 1826.946931 | 913.977104 | 14 |
| 3 | 298.176132 | 149.591704 | | | 280.165567 | 140.586422 | P | ***1731.873432*** | 866.440354 | 1714.846883 | 857.927080 | 1713.862867 | 857.435072 | 13 |
| 4 | 397.244546 | 199.125911 | | | 379.233981 | 190.120629 | V | ***1634.820668*** | 817.913972 | 1617.794119 | 809.400698 | 1616.810103 | 808.908690 | 12 |
| 5 | 484.276574 | 242.641925 | | | 466.266009 | 233.636643 | S | ***1535.752254*** | 768.379765 | 1518.725705 | 759.866491 | 1517.741689 | 759.374483 | 11 |
| 6 | 599.303517 | 300.155397 | | | 581.292952 | 291.150114 | D | ***1448.720226*** | 724.863751 | 1431.693677 | 716.350477 | 1430.709661 | 715.858469 | 10 |
| 7 | 686.335545 | 343.671411 | | | 668.324980 | 334.666128 | S | ***1333.693283*** | 667.350280 | 1316.666734 | 658.837005 | 1315.682718 | 658.344997 | 9 |
| 8 | 785.403959 | 393.205618 | | | 767.393394 | 384.200335 | V | ***1246.661255*** | 623.834266 | 1229.634706 | 615.320991 | 1228.650690 | 614.828983 | 8 |
| 9 | 898.488023 | 449.747650 | | | 880.477458 | 440.742367 | L | ***1147.592841*** | 574.300059 | 1130.566292 | 565.786784 | 1129.582276 | 565.294776 | 7 |
| 10 | 985.520051 | 493.263664 | | | 967.509486 | 484.258381 | S | ***1034.508777*** | 517.758027 | 1017.482228 | 509.244752 | 1016.498212 | 508.752744 | 6 |
| 11 | 1042.541515 | 521.774395 | | | 1024.530950 | 512.769113 | G | ***947.476749*** | 474.242013 | 930.450200 | 465.728738 | 929.466184 | 465.236730 | 5 |
| 12 | 1189.609929 | 595.308603 | | | 1171.599364 | 586.303320 | F | ***890.455285*** | 445.731281 | 873.428736 | 437.218006 | 872.444720 | 436.725998 | 4 |
| 13 | 1318.652522 | 659.829899 | | | 1300.641957 | 650.824617 | E | ***743.386871*** | 372.197074 | 726.360322 | 363.683799 | 725.376306 | 363.191791 | 3 |
| 14 | 1757.877848 | 879.442562 | 1740.851299 | 870.929288 | 1739.867283 | 870.437280 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 15 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SLPVSDSVLSGFEQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 104.2 | 1930.982254 | 0.007058 | SLPVSDSVLSGFEQR |
| 1.0 | 1931.000885 | -0.011573 | LSPVTACAGQTLQFK |

**Mascot:** http://www.matrixscience.com/

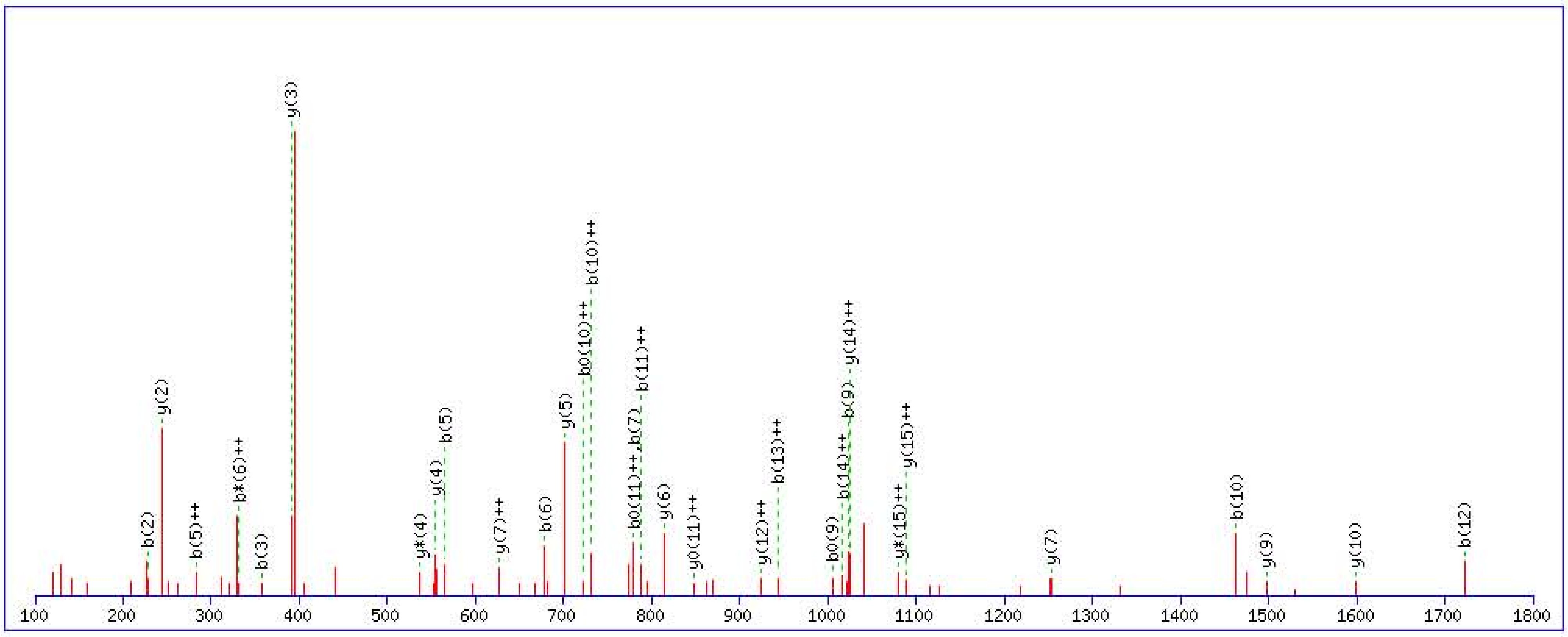
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VQEAHLTEDQIFYFPK**
Found in **CO8G_HUMAN**, Complement component C8 gamma chain OS=Homo sapiens GN=C8G PE=1 SV=3

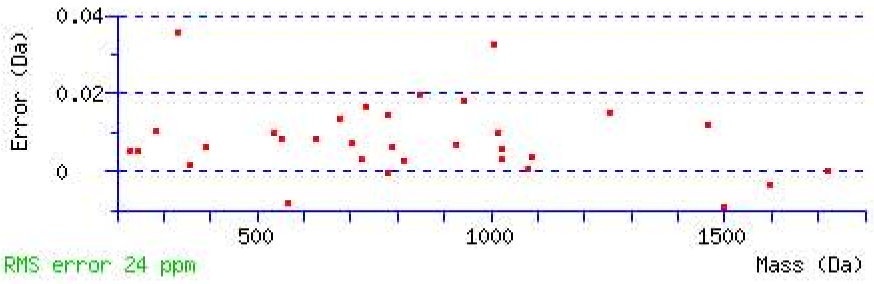
Match to Query 52614: 2275.148982 from(759.390270,3+) rtinseconds(2364) index(23784)
Title: Locus:1.1.1.825.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

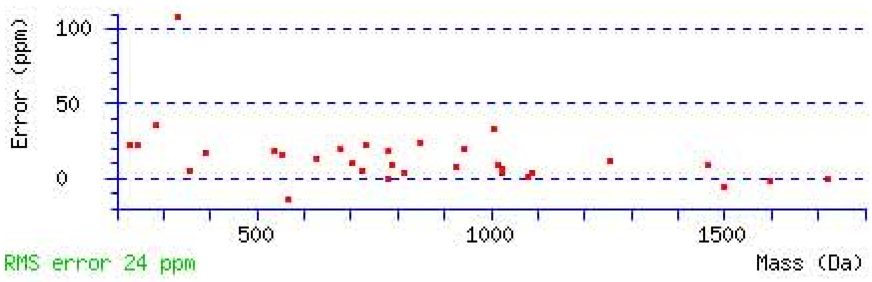
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2275.134720
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 39 **Expect:** 0.0036
**Matches :** 32/160 fragment ions using 61 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 16 |
| 2 | ***228.134268*** | 114.570772 | 211.107719 | 106.057498 | | | Q | 2177.073591 | 1089.040433 | 2160.047042 | 1080.527159 | 2159.063026 | 1080.035151 | 15 |
| 3 | ***357.176861*** | 179.092069 | 340.150312 | 170.578794 | 339.166296 | 170.086786 | E | 2049.015013 | 1025.011144 | 2031.988464 | 1016.497870 | 2031.004448 | 1016.005862 | 14 |
| 4 | 428.213975 | 214.610626 | 411.187426 | 206.097351 | 410.203410 | 205.605343 | A | 1919.972420 | 960.489848 | 1902.945871 | 951.976573 | 1901.961855 | 951.484565 | 13 |
| 5 | ***565.272887*** | **283.140082** | 548.246338 | 274.626807 | 547.262322 | 274.134799 | H | 1848.935306 | 924.971291 | 1831.908757 | 916.458016 | 1830.924741 | 915.966008 | 12 |
| 6 | ***678.356951*** | 339.682114 | 661.330402 | 331.168839 | 660.346386 | 330.676831 | L | 1711.876394 | 856.441835 | 1694.849845 | 847.928561 | 1693.865829 | 847.436552 | 11 |
| 7 | ***779.404630*** | 390.205953 | 762.378081 | 381.692679 | 761.394065 | 381.200671 | T | ***1598.792330*** | 799.899803 | 1581.765781 | 791.386529 | 1580.781765 | 790.894521 | 10 |
| 8 | 908.447223 | 454.727250 | 891.420674 | 446.213975 | 890.436658 | 445.721967 | E | ***1497.744651*** | 749.375963 | 1480.718102 | 740.862689 | 1479.734086 | 740.370681 | 9 |
| 9 | ***1023.474166*** | 512.240721 | 1006.447617 | 503.727447 | 1005.463601 | 503.235439 | D | 1368.702058 | 684.854667 | 1351.675509 | 676.341392 | 1350.691493 | 675.849384 | 8 |
| 10 | ***1462.699492*** | **731.853384** | 1445.672943 | 723.340110 | 1444.688927 | 722.848101 | Q | ***1253.675115*** | 627.341195 | 1236.648566 | 618.827921 | | | 7 |
| 11 | 1575.783556 | **788.395416** | 1558.757007 | 779.882141 | 1557.772991 | 779.390133 | I | ***814.449789*** | 407.728533 | 797.423240 | 399.215258 | | | 6 |
| 12 | ***1722.851970*** | 861.929623 | 1705.825421 | 853.416349 | 1704.841405 | 852.924340 | F | ***701.365725*** | 351.186501 | 684.339176 | 342.673226 | | | 5 |
| 13 | 1885.915299 | **943.461288** | 1868.888750 | 934.948013 | 1867.904734 | 934.456005 | Y | ***554.297311*** | 277.652294 | 537.270762 | 269.139019 | | | 4 |
| 14 | 2032.983713 | **1016.995495** | 2015.957164 | 1008.482220 | 2014.973148 | 1007.990212 | F | ***391.233982*** | 196.120629 | 374.207433 | 187.607354 | | | 3 |
| 15 | 2130.036477 | 1065.521876 | 2113.009928 | 1057.008602 | 2112.025912 | 1056.516594 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073147 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VQEAHLTEDQIFYFPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.5 | 2275.134720 | 0.014262 | VQEAHLTEDQIFYFPK |
| 12.4 | 2275.134720 | 0.014262 | VQEAHLTEDQIFYFPK |

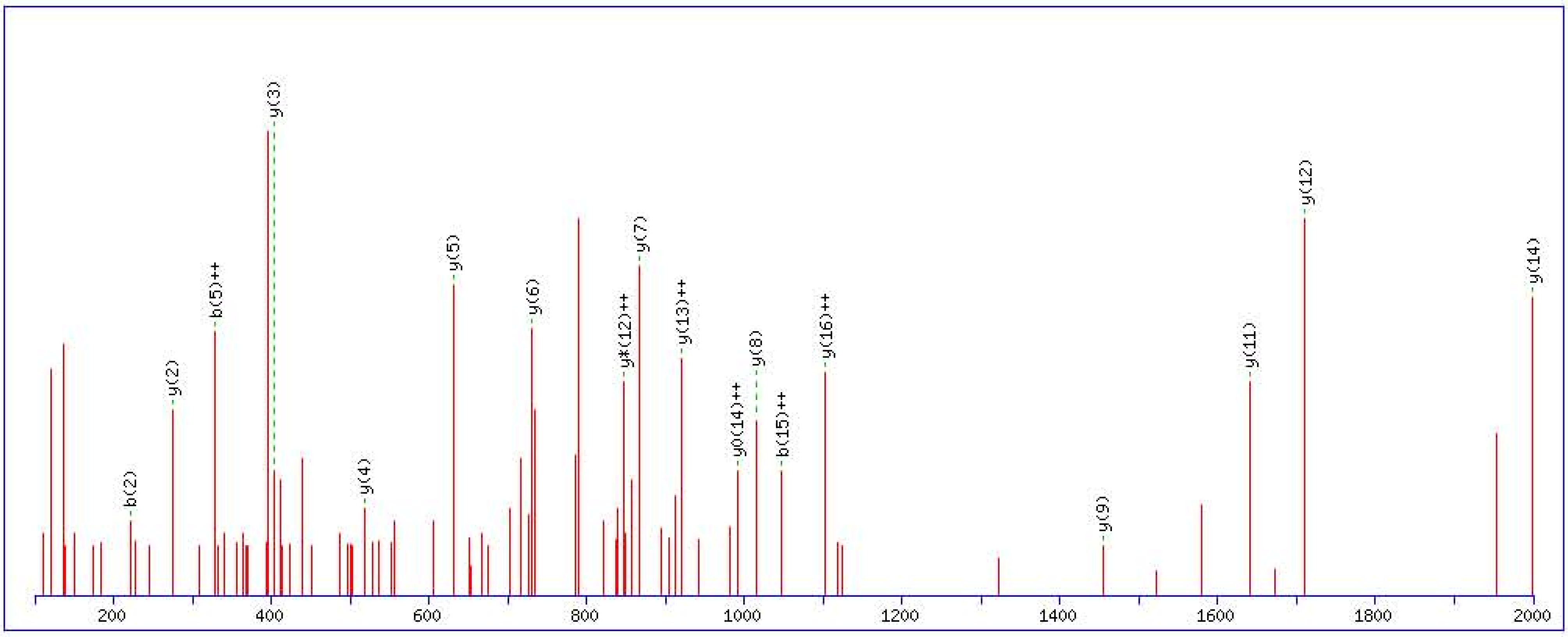
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YGFCEAADQFHVLDEVR**
Found in **CO8G_HUMAN**, Complement component C8 gamma chain OS=Homo sapiens GN=C8G PE=1 SV=3

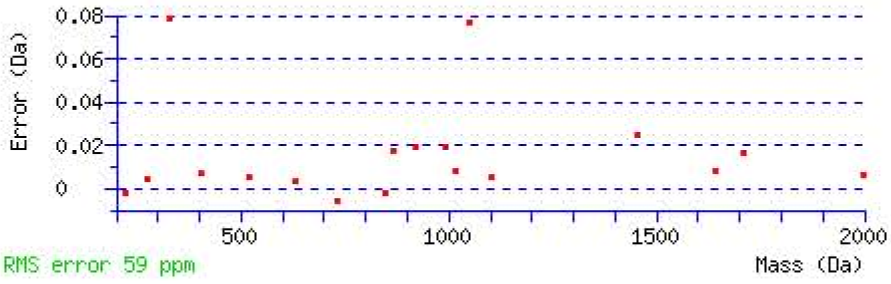
Match to Query 53929: 2366.094732 from(789.705520,3+) rtinseconds(2567) index(39873)
Title: Locus:1.1.1.3313.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

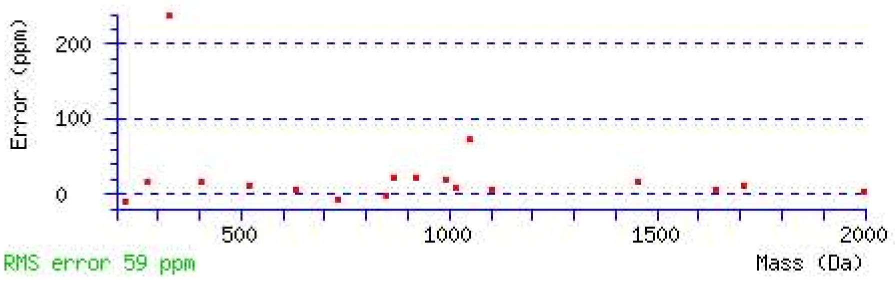
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2366.082382
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q9 : Biotin:Thermo-21345 (Q)
**Ions Score:** 51 **Expect:** 0.00011
**Matches :** 18/164 fragment ions using 41 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 17 |
| 2 | 221.092069 | 111.049673 | | | | | G | 2204.026323 | 1102.516799 | 2186.999774 | 1094.003525 | 2186.015758 | 1093.511517 | 16 |
| 3 | 368.160483 | 184.583879 | | | | | F | 2147.004859 | 1074.006067 | 2129.978310 | 1065.492793 | 2128.994294 | 1065.000785 | 15 |
| 4 | 528.191132 | 264.599204 | | | | | C | ***1999.936445*** | 1000.471860 | 1982.909896 | 991.958586 | 1981.925880 | 991.466578 | 14 |
| 5 | 657.233725 | **329.120501** | | | 639.223160 | 320.115218 | E | 1839.905796 | 920.456536 | 1822.879247 | 911.943261 | 1821.895231 | 911.451253 | 13 |
| 6 | 728.270839 | 364.639058 | | | 710.260274 | 355.633775 | A | ***1710.863203*** | 855.935239 | 1693.836654 | 847.421965 | 1692.852638 | 846.929957 | 12 |
| 7 | 799.307953 | 400.157615 | | | 781.297388 | 391.152332 | A | ***1639.826089*** | 820.416682 | 1622.799540 | 811.903408 | 1621.815524 | 811.411400 | 11 |
| 8 | 914.334896 | 457.671086 | | | 896.324331 | 448.665803 | D | 1568.788975 | 784.898125 | 1551.762426 | 776.384851 | 1550.778410 | 775.892843 | 10 |
| 9 | 1353.560222 | 677.283749 | 1336.533673 | 668.770474 | 1335.549657 | 668.278466 | Q | ***1453.762032*** | 727.384654 | 1436.735483 | 718.871379 | 1435.751467 | 718.379371 | 9 |
| 10 | 1500.628636 | 750.817956 | 1483.602087 | 742.304682 | 1482.618071 | 741.812673 | F | ***1014.536706*** | 507.771991 | 997.510157 | 499.258717 | 996.526141 | 498.766709 | 8 |
| 11 | 1637.687548 | 819.347412 | 1620.660999 | 810.834138 | 1619.676983 | 810.342129 | H | ***867.468292*** | 434.237784 | 850.441743 | 425.724510 | 849.457727 | 425.232502 | 7 |
| 12 | 1736.755962 | 868.881619 | 1719.729413 | 860.368345 | 1718.745397 | 859.876336 | V | ***730.409380*** | 365.708328 | 713.382831 | 357.195054 | 712.398815 | 356.703046 | 6 |
| 13 | 1849.840026 | 925.423651 | 1832.813477 | 916.910376 | 1831.829461 | 916.418368 | L | ***631.340966*** | 316.174121 | 614.314417 | 307.660846 | 613.330401 | 307.168838 | 5 |
| 14 | 1964.866969 | 982.937122 | 1947.840420 | 974.423848 | 1946.856404 | 973.931840 | D | ***518.256902*** | 259.632089 | 501.230353 | 251.118815 | 500.246337 | 250.626807 | 4 |
| 15 | 2093.909562 | **1047.458419** | 2076.883013 | 1038.945144 | 2075.898997 | 1038.453136 | E | ***403.229959*** | 202.118617 | 386.203410 | 193.605343 | 385.219394 | 193.113335 | 3 |
| 16 | 2192.977976 | 1096.992626 | 2175.951427 | 1088.479351 | 2174.967411 | 1087.987343 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084046 | | | 2 |
| 17 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of YGFCEAADQFHVLDEVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.3 | 2366.082382 | 0.012350 | YGFCEAADQFHVLDEVR |

**Mascot:** http://www.matrixscience.com/

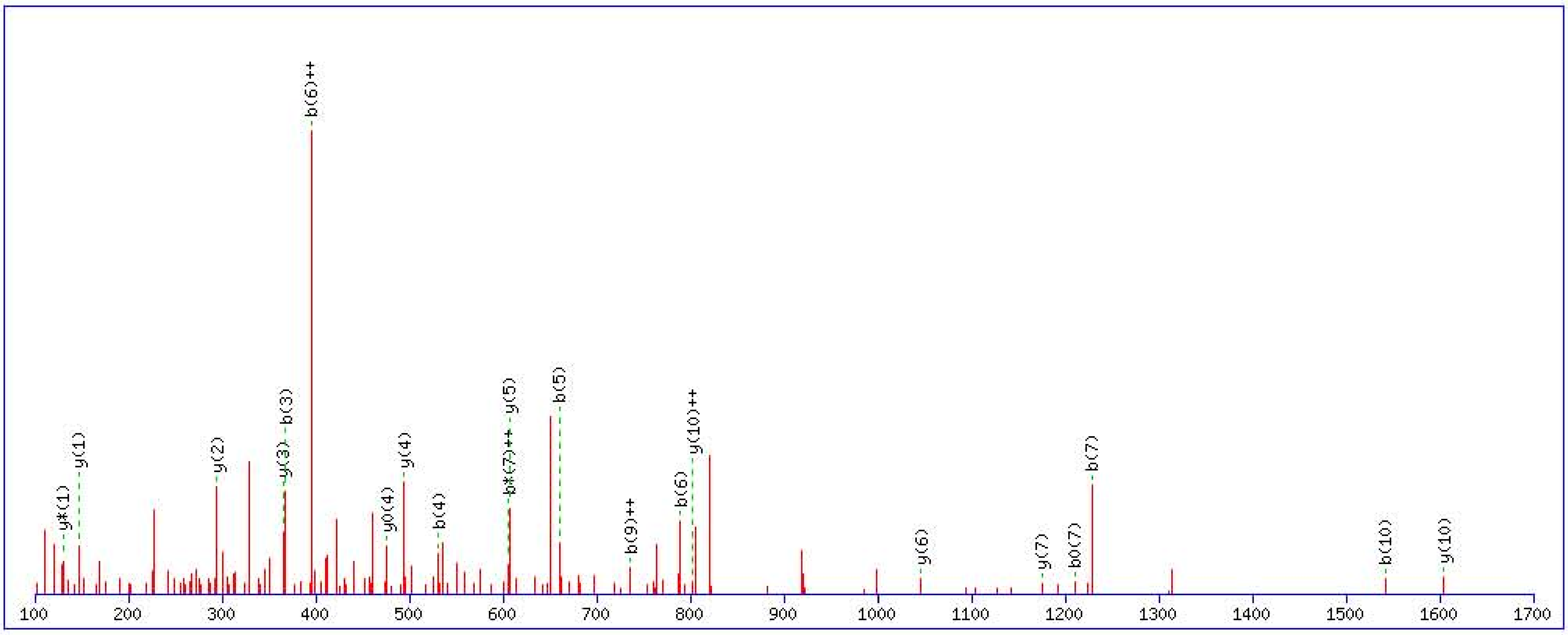
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TEHYEEQIEAFK**
Found in **CO9_HUMAN**, Complement component C9 OS=Homo sapiens GN=C9 PE=1 SV=2

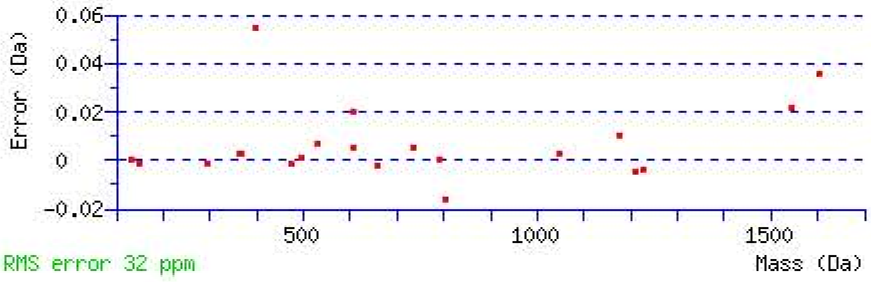
Match to Query 43357: 1833.861522 from(612.294450,3+) rtinseconds(1972) index(36258)
Title: Locus:1.1.1.3106.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

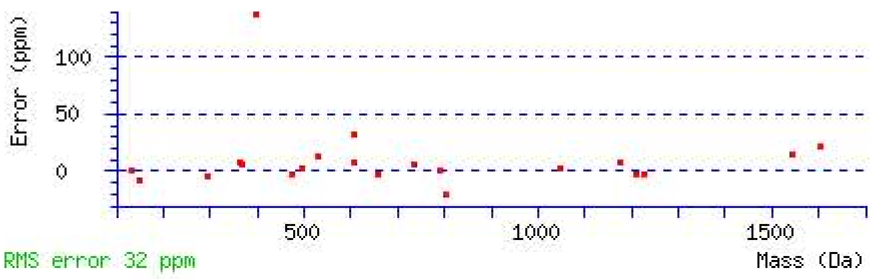
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1833.860703
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 33 **Expect:** 0.011
**Matches :** 21/114 fragment ions using 49 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 12 |
| 2 | 231.097548 | 116.052412 | | | 213.086983 | 107.047130 | E | 1733.820335 | 867.413805 | 1716.793786 | 858.900531 | 1715.809770 | 858.408523 | 11 |
| 3 | ***368.156460*** | 184.581868 | | | 350.145895 | 175.576585 | H | ***1604.777742*** | 802.892509 | 1587.751193 | 794.379235 | 1586.767177 | 793.887227 | 10 |
| 4 | ***531.219789*** | 266.113533 | | | 513.209224 | 257.108250 | Y | 1467.718830 | 734.363053 | 1450.692281 | 725.849779 | 1449.708265 | 725.357771 | 9 |
| 5 | ***660.262382*** | 330.634829 | | | 642.251817 | 321.629547 | E | 1304.655501 | 652.831389 | 1287.628952 | 644.318114 | 1286.644936 | 643.826106 | 8 |
| 6 | ***789.304975*** | **395.156126** | | | 771.294410 | 386.150843 | E | ***1175.612908*** | 588.310092 | 1158.586359 | 579.796817 | 1157.602343 | 579.304809 | 7 |
| 7 | ***1228.530301*** | 614.768789 | 1211.503752 | 606.255514 | 1210.519736 | 605.763506 | Q | ***1046.570315*** | 523.788795 | 1029.543766 | 515.275521 | 1028.559750 | 514.783513 | 6 |
| 8 | 1341.614365 | 671.310820 | 1324.587816 | 662.797546 | 1323.603800 | 662.305538 | I | ***607.344989*** | 304.176132 | 590.318440 | 295.662858 | 589.334424 | 295.170850 | 5 |
| 9 | 1470.656958 | **735.832117** | 1453.630409 | 727.318842 | 1452.646393 | 726.826834 | E | ***494.260925*** | 247.634100 | 477.234376 | 239.120826 | 476.250360 | 238.628818 | 4 |
| 10 | ***1541.694072*** | 771.350674 | 1524.667523 | 762.837399 | 1523.683507 | 762.345391 | A | ***365.218332*** | 183.112804 | 348.191783 | 174.599530 | | | 3 |
| 11 | 1688.762486 | 844.884881 | 1671.735937 | 836.371606 | 1670.751921 | 835.879598 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TEHYEEQIEAFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.5 | 1833.860703 | 0.000819 | TEHYEEQIEAFK |

**Mascot:** http://www.matrixscience.com/

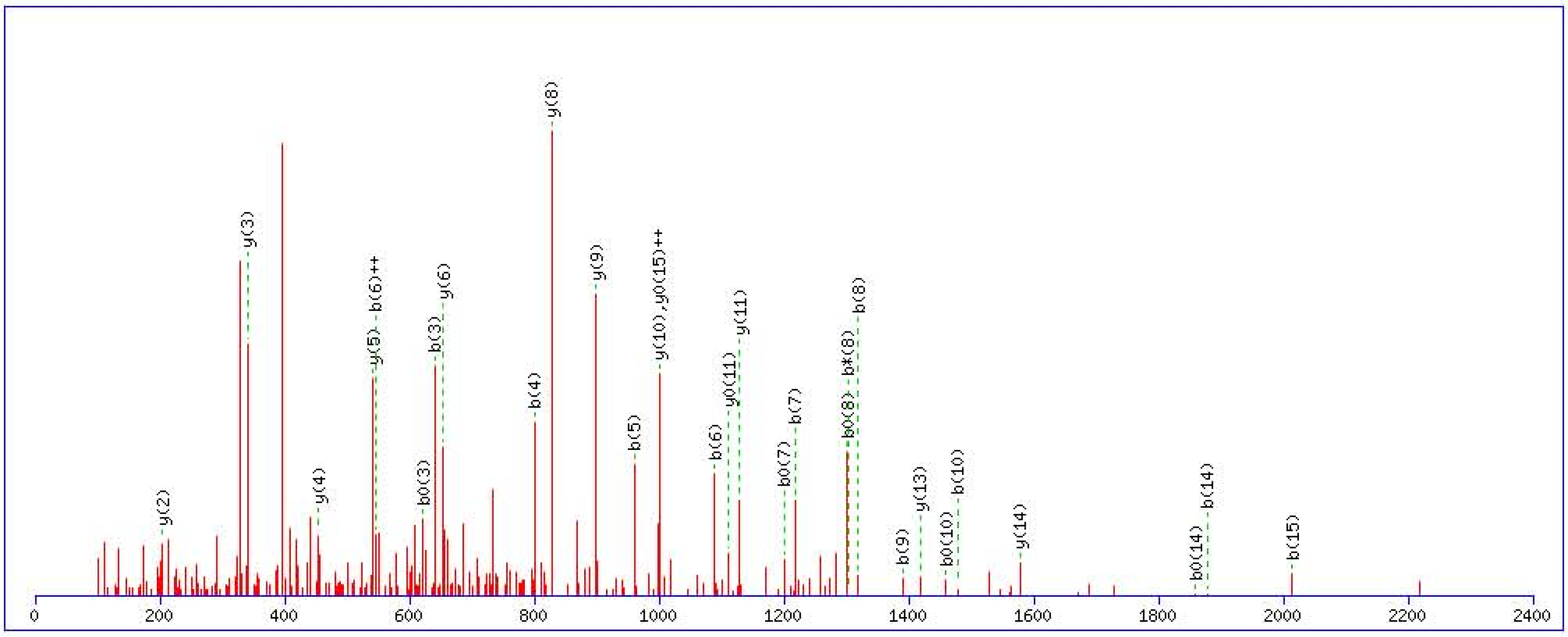
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AEQCCEETASSISLHGK**
Found in **CO9_HUMAN**, Complement component C9 OS=Homo sapiens GN=C9 PE=1 SV=2

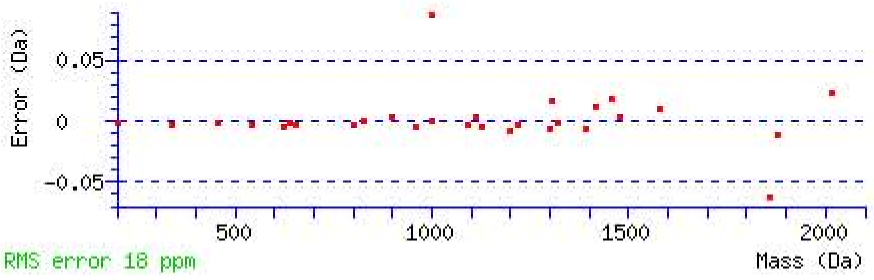
Match to Query 51399: 2216.981232 from(740.001020,3+) rtinseconds(1542) index(33562)
Title: Locus:1.1.1.2956.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

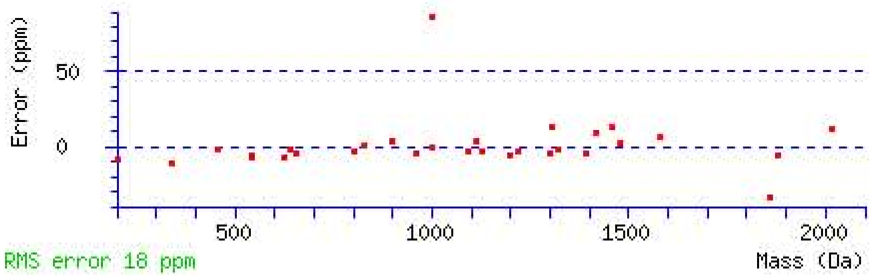
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2216.986404
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 1.9e-006
Matches : 30/178 fragment ions using 51 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 17 |
| 2 | 201.086983 | 101.047130 | | | 183.076418 | 92.041847 | E | 2146.956588 | 1073.981932 | 2129.930039 | 1065.468657 | 2128.946023 | 1064.976649 | 16 |
| 3 | ***640.312309*** | 320.659793 | 623.285760 | 312.146518 | 622.301744 | 311.654510 | Q | 2017.913995 | 1009.460636 | 2000.887446 | 1000.947361 | 1999.903430 | 1000.455353 | 15 |
| 4 | ***800.342958*** | 400.675117 | 783.316409 | 392.161843 | 782.332393 | 391.669835 | C | ***1578.688669*** | 789.847972 | 1561.662120 | 781.334698 | 1560.678104 | 780.842690 | 14 |
| 5 | ***960.373607*** | 480.690442 | 943.347058 | 472.177167 | 942.363042 | 471.685159 | C | ***1418.658020*** | 709.832648 | 1401.631471 | 701.319374 | 1400.647455 | 700.827366 | 13 |
| 6 | ***1089.416200*** | 545.211738 | 1072.389651 | 536.698464 | 1071.405635 | 536.206456 | E | 1258.627371 | 629.817323 | 1241.600822 | 621.304049 | 1240.616806 | 620.812041 | 12 |
| 7 | ***1218.458793*** | 609.733035 | 1201.432244 | 601.219760 | 1200.448228 | 600.727752 | E | ***1129.584778*** | 565.296027 | 1112.558229 | 556.782753 | 1111.574213 | 556.290744 | 11 |
| 8 | ***1319.506472*** | 660.256874 | 1302.479923 | 651.743600 | 1301.495907 | 651.251592 | T | ***1000.542185*** | 500.774731 | 983.515636 | 492.261456 | 982.531620 | 491.769448 | 10 |
| 9 | ***1390.543586*** | 695.775431 | 1373.517037 | 687.262157 | 1372.533021 | 686.770149 | A | ***899.494506*** | 450.250891 | 882.467957 | 441.737617 | 881.483941 | 441.245609 | 9 |
| 10 | ***1477.575614*** | 739.291445 | 1460.549065 | 730.778171 | 1459.565049 | 730.286163 | S | ***828.457392*** | 414.732334 | 811.430843 | 406.219060 | 810.446827 | 405.727052 | 8 |
| 11 | 1564.607642 | 782.807459 | 1547.581093 | 774.294185 | 1546.597077 | 773.802177 | S | 741.425364 | 371.216320 | 724.398815 | 362.703045 | 723.414799 | 362.211037 | 7 |
| 12 | 1677.691706 | 839.349491 | 1660.665157 | 830.836217 | 1659.681141 | 830.344209 | I | ***654.393336*** | 327.700306 | 637.366787 | 319.187031 | 636.382771 | 318.695023 | 6 |
| 13 | 1764.723734 | 882.865505 | 1747.697185 | 874.352231 | 1746.713169 | 873.860223 | S | ***541.309272*** | 271.158274 | 524.282723 | 262.644999 | 523.298707 | 262.152991 | 5 |
| 14 | ***1877.807798*** | 939.407537 | 1860.781249 | 930.894263 | 1859.797233 | 930.402255 | L | ***454.277244*** | 227.642260 | 437.250695 | 219.128985 | | | 4 |
| 15 | ***2014.866710*** | 1007.936993 | 1997.840161 | 999.423719 | 1996.856145 | 998.931711 | H | ***341.193180*** | 171.100228 | 324.166631 | 162.586953 | | | 3 |
| 16 | 2071.888174 | 1036.447725 | 2054.861625 | 1027.934450 | 2053.877609 | 1027.442442 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AEQCCEETASSISLHGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.9 | 2216.986404 | -0.005172 | AEQCCEETASSISLHGK |

**Mascot:** http://www.matrixscience.com/

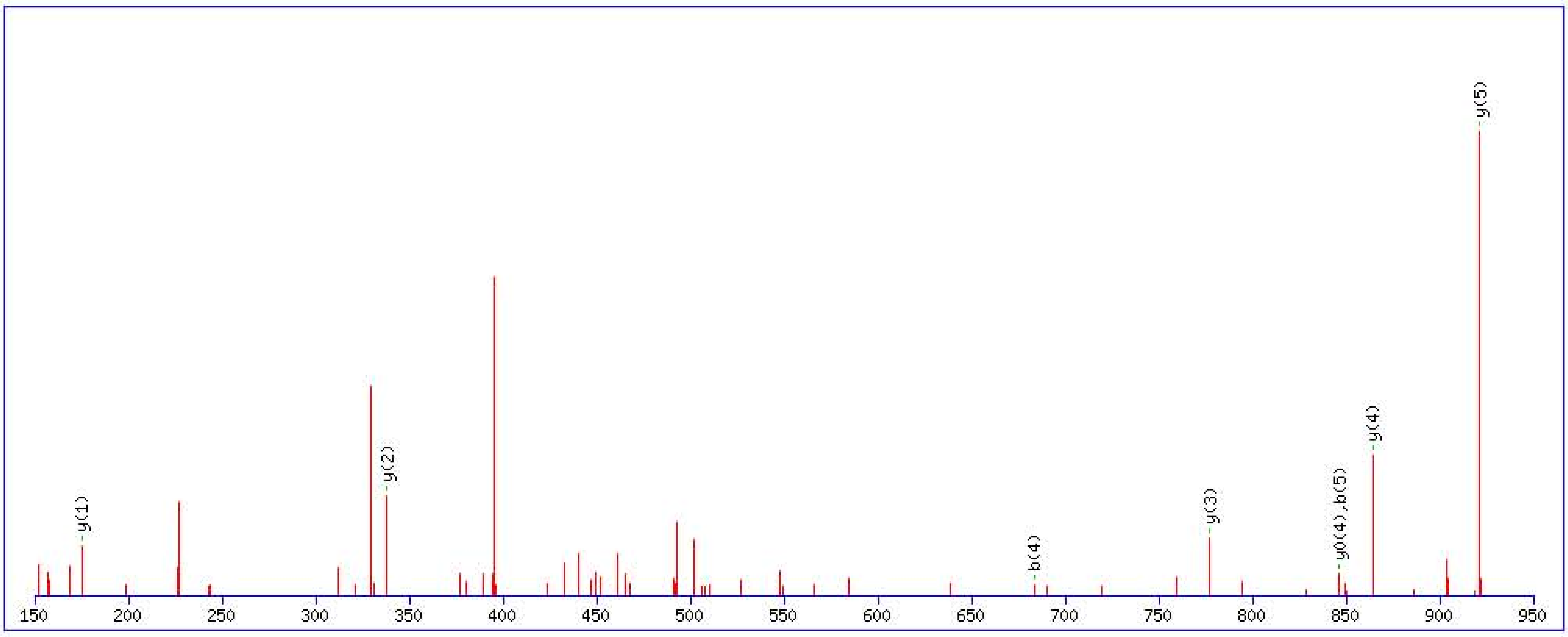
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VGSQYR**
Found in **CFAB_HUMAN**, Complement factor B OS=Homo sapiens GN=CFB PE=1 SV=2

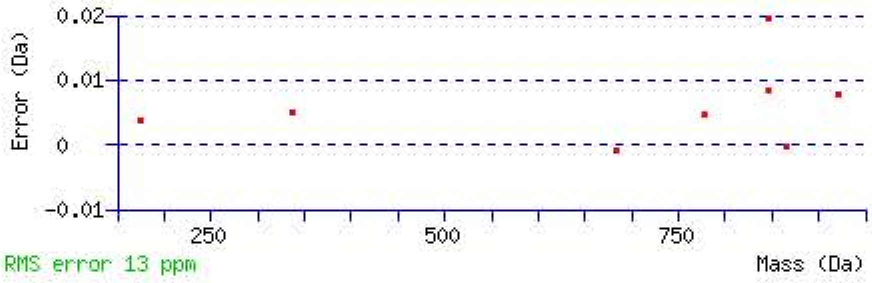
Match to Query 16615: 1019.519788 from(510.767170,2+) rtinseconds(1399) index(65104)
Title: Locus:1.1.1.1424.15 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

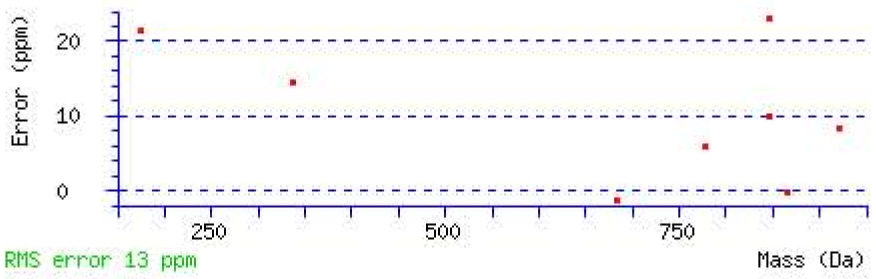
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 150 to 950 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1019.522232
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.021
Matches : 8/44 fragment ions using 16 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 6 |
| 2 | 157.097154 | 79.052215 | | | | | G | *921.461099* | 461.234188 | 904.434550 | 452.720913 | 903.450534 | 452.228905 | 5 |
| 3 | 244.129182 | 122.568229 | | | 226.118617 | 113.562946 | S | *864.439635* | 432.723456 | 847.413086 | 424.210181 | 846.429070 | 423.718173 | 4 |
| 4 | **683.354508** | 342.180892 | 666.327959 | 333.667618 | 665.343943 | 333.175610 | Q | *777.407607* | 389.207442 | 760.381058 | 380.694167 | | | 3 |
| 5 | **846.417837** | 423.712557 | 829.391288 | 415.199282 | 828.407272 | 414.707274 | Y | *338.182281* | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 6 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VGSQYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.2 | 1019.522232 | -0.002444 | VGSQYR |
| 18.9 | 1019.533447 | -0.013659 | RSQYR |
| 15.1 | 1019.510818 | 0.008970 | RSSVSSGGAGR |
| 8.4 | 1019.526047 | -0.006259 | SRERGPYR |
| 7.2 | 1019.533447 | -0.013659 | RQSYR |
| 7.1 | 1019.522217 | -0.002429 | QKDYR |
| 6.1 | 1019.533447 | -0.013659 | QSRYR |
| 6.1 | 1019.504944 | 0.014844 | SHLWGHQR |
| 5.7 | 1019.512146 | 0.007642 | RSRGHHDR |
| 4.6 | 1019.530090 | -0.010302 | SPLPWQHR |

**Mascot:** http://www.matrixscience.com/

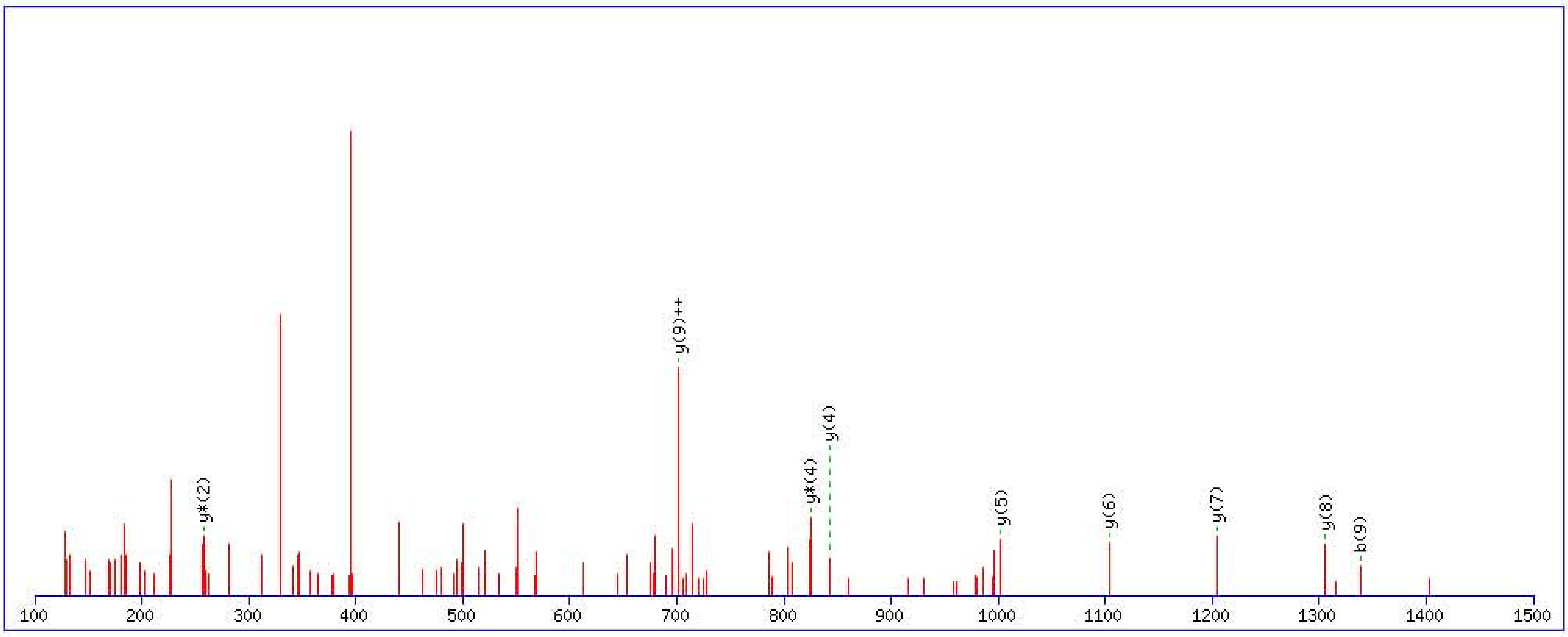
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LPPTTTCQQQK**
Found in **CFAB_HUMAN**, Complement factor B OS=Homo sapiens GN=CFB PE=1 SV=2

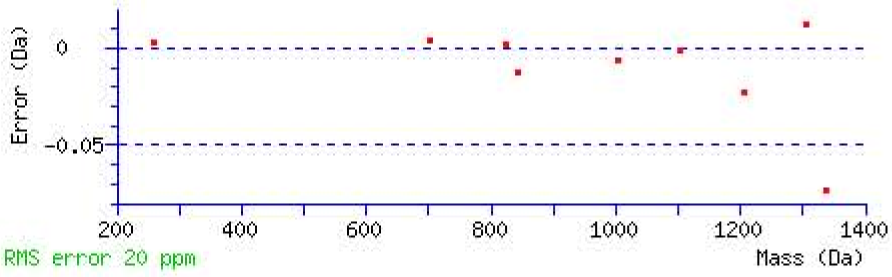
Match to Query 37672: 1611.800922 from(538.274250,3+) rtinseconds(1425) index(2386)
Title: Locus:1.1.1.1305.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

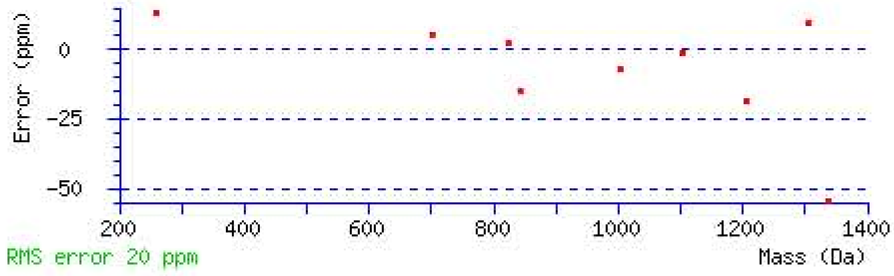
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1611.811295
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.0049
Matches : 9/90 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 11 |
| 2 | 211.144104 | 106.075690 | | | | | P | 1499.734500 | 750.370888 | 1482.707951 | 741.857614 | 1481.723935 | 741.365606 | 10 |
| 3 | 308.196868 | 154.602072 | | | | | P | 1402.681736 | 701.844506 | 1385.655187 | 693.331232 | 1384.671171 | 692.839224 | 9 |
| 4 | 409.244547 | 205.125911 | | | 391.233982 | 196.120629 | T | ***1305.628972*** | 653.318124 | 1288.602423 | 644.804850 | 1287.618407 | 644.312842 | 8 |
| 5 | 510.292226 | 255.649751 | | | 492.281661 | 246.644468 | T | ***1204.581293*** | 602.794285 | 1187.554744 | 594.281010 | 1186.570728 | 593.789002 | 7 |
| 6 | 611.339905 | 306.173591 | | | 593.329340 | 297.168308 | T | ***1103.533614*** | 552.270445 | 1086.507065 | 543.757171 | 1085.523049 | 543.265163 | 6 |
| 7 | 771.370554 | 386.188915 | | | 753.359989 | 377.183633 | C | ***1002.485935*** | 501.746606 | 985.459386 | 493.233331 | | | 5 |
| 8 | 899.429132 | 450.218204 | 882.402583 | 441.704930 | 881.418567 | 441.212922 | Q | ***842.455286*** | 421.731281 | 825.428737 | 413.218007 | | | 4 |
| 9 | **1338.654458** | 669.830867 | 1321.627909 | 661.317593 | 1320.643893 | 660.825585 | Q | 714.396708 | 357.701992 | 697.370159 | 349.188718 | | | 3 |
| 10 | 1466.713036 | 733.860156 | 1449.686487 | 725.346882 | 1448.702471 | 724.854874 | Q | 275.171382 | 138.089329 | 258.144833 | 129.576055 | | | 2 |
| 11 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LPPTTTCQQQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.6 | 1611.811295 | -0.010373 | LPPTTTCQQQK |
| 27.6 | 1611.811295 | -0.010373 | LPPTTTCQQQK |
| 22.2 | 1611.811295 | -0.010373 | LPPTTTCQQQK |
| 3.0 | 1611.803879 | -0.002957 | RVQMEQPDAVPAQK |
| 2.3 | 1611.803406 | -0.002484 | TPIKMGISASTMTMK |

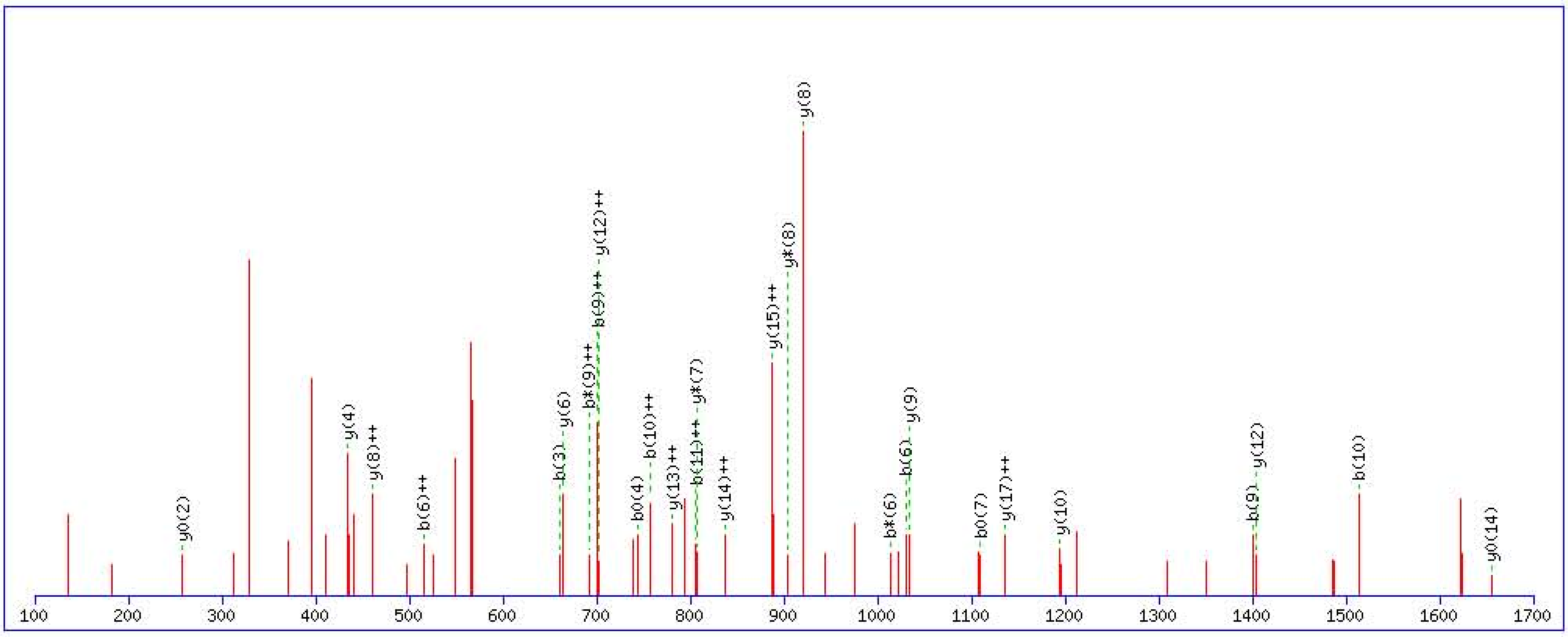
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **YGQTIRPICLPCTEGTTR**
Found in **CFAB_HUMAN**, Complement factor B OS=Homo sapiens GN=CFB PE=1 SV=2

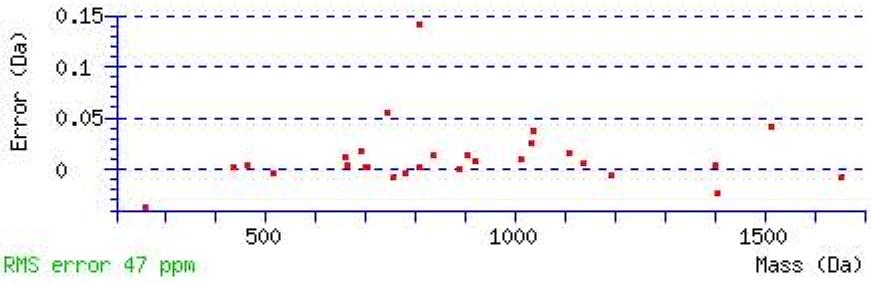
Match to Query 55089: 2433.196872 from(812.072900,3+) rtinseconds(2065) index(6244)
Title: Locus:1.1.1.1528.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

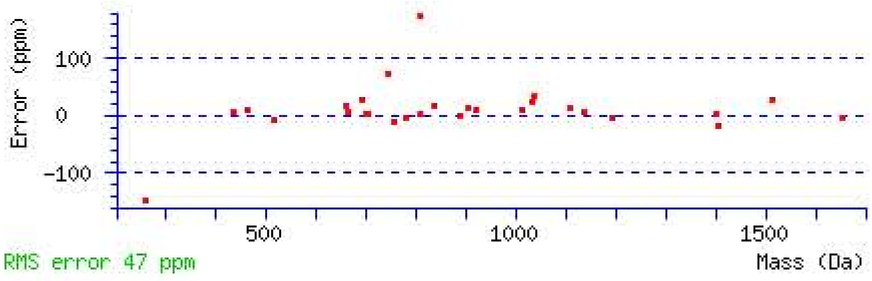
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2433.196701
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.054
Matches : 28/192 fragment ions using 58 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 18 |
| 2 | 221.092069 | 111.049673 | | | | | G | 2271.140644 | 1136.073960 | 2254.114095 | 1127.560685 | 2253.130079 | 1127.068677 | 17 |
| 3 | **660.317395** | 330.662336 | 643.290846 | 322.149061 | | | Q | 2214.119180 | 1107.563228 | 2197.092631 | 1099.049953 | 2196.108615 | 1098.557945 | 16 |
| 4 | 761.365074 | 381.186175 | 744.338525 | 372.672901 | 743.354509 | 372.180893 | T | 1774.893854 | 887.950565 | 1757.867305 | 879.437290 | 1756.883289 | 878.945282 | 15 |
| 5 | 874.449138 | 437.728207 | 857.422589 | 429.214933 | 856.438573 | 428.722925 | I | 1673.846175 | 837.426725 | 1656.819626 | 828.913451 | 1655.835610 | 828.421443 | 14 |
| 6 | **1030.550249** | **515.778763** | 1013.523700 | 507.265488 | 1012.539684 | 506.773480 | R | 1560.762111 | 780.884693 | 1543.735562 | 772.371419 | 1542.751546 | 771.879411 | 13 |
| 7 | 1127.603013 | 564.305145 | 1110.576464 | 555.791870 | 1109.592448 | 555.299862 | P | ***1404.661000*** | 702.834138 | 1387.634451 | 694.320863 | 1386.650435 | 693.828855 | 12 |
| 8 | 1240.687077 | 620.847177 | 1223.660528 | 612.333902 | 1222.676512 | 611.841894 | I | 1307.608236 | 654.307756 | 1290.581687 | 645.794481 | 1289.597671 | 645.302473 | 11 |
| 9 | **1400.717726** | **700.862501** | 1383.691177 | 692.349227 | 1382.707161 | 691.857219 | C | ***1194.524172*** | 597.765724 | 1177.497623 | 589.252449 | 1176.513607 | 588.760441 | 10 |
| 10 | **1513.801790** | **757.404533** | 1496.775241 | 748.891259 | 1495.791225 | 748.399250 | L | ***1034.493523*** | 517.750399 | 1017.466974 | 509.237125 | 1016.482958 | 508.745117 | 9 |
| 11 | 1610.854554 | **805.930915** | 1593.828005 | 797.417641 | 1592.843989 | 796.925633 | P | ***921.409459*** | 461.208367 | 904.382910 | 452.695093 | 903.398894 | 452.203085 | 8 |
| 12 | 1770.885203 | 885.946240 | 1753.858654 | 877.432965 | 1752.874638 | 876.940957 | C | 824.356695 | 412.681985 | 807.330146 | 404.168711 | 806.346130 | 403.676703 | 7 |
| 13 | 1871.932882 | 936.470079 | 1854.906333 | 927.956805 | 1853.922317 | 927.464797 | T | ***664.326046*** | 332.666661 | 647.299497 | 324.153386 | 646.315481 | 323.661378 | 6 |
| 14 | 2000.975475 | 1000.991376 | 1983.948926 | 992.478101 | 1982.964910 | 991.986093 | E | 563.278367 | 282.142821 | 546.251818 | 273.629547 | 545.267802 | 273.137539 | 5 |
| 15 | 2057.996939 | 1029.502107 | 2040.970390 | 1020.988833 | 2039.986374 | 1020.496825 | G | ***434.235774*** | 217.621525 | 417.209225 | 209.108250 | 416.225209 | 208.616242 | 4 |
| 16 | 2159.044618 | 1080.025947 | 2142.018069 | 1071.512672 | 2141.034053 | 1071.020664 | T | 377.214310 | 189.110793 | 360.187761 | 180.597518 | 359.203745 | 180.105510 | 3 |
| 17 | 2260.092297 | 1130.549786 | 2243.065748 | 1122.036512 | 2242.081732 | 1121.544504 | T | 276.166631 | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 18 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of YGQTIRPICLPCTEGTTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.8 | 2433.196701 | 0.000171 | YGQTIRPICLPCTEGTTR |

**Mascot:** http://www.matrixscience.com/

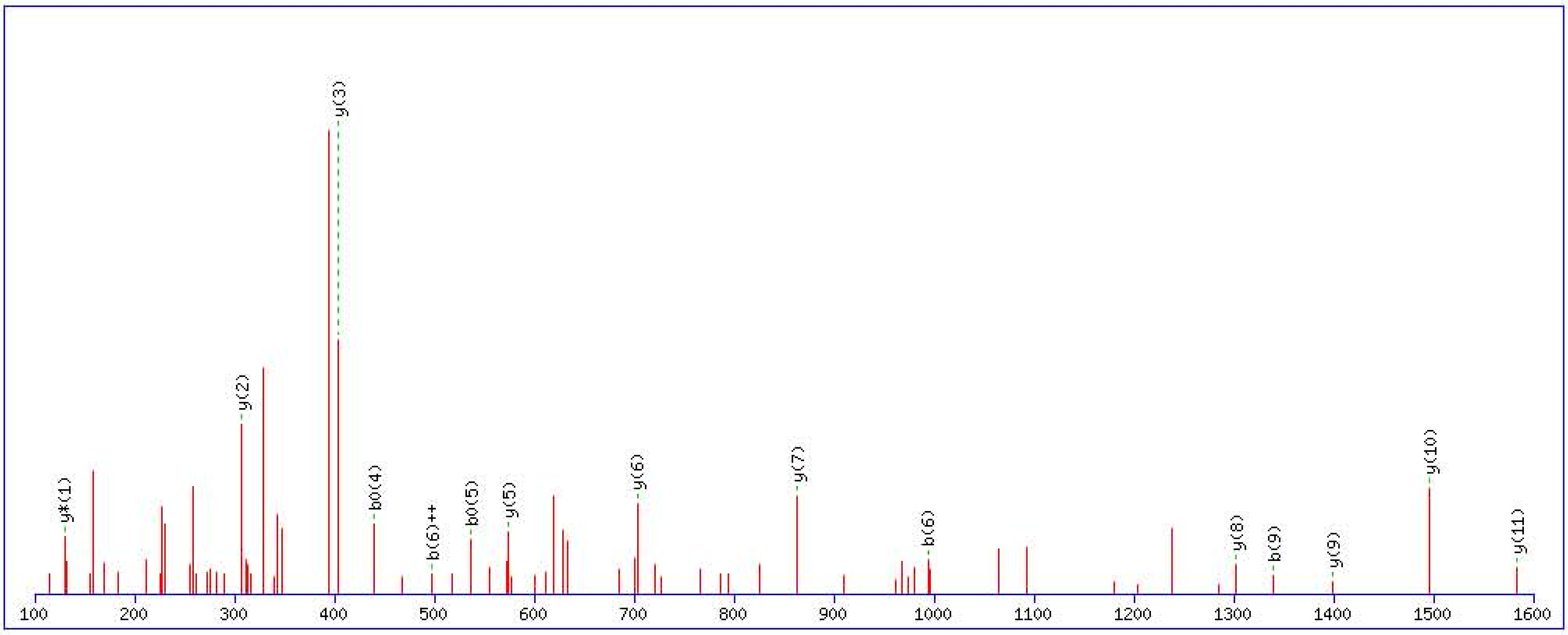
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **WSSPPQCEGLPCK**
Found in **CFAH_HUMAN**, Complement factor H OS=Homo sapiens GN=CFH PE=1 SV=4

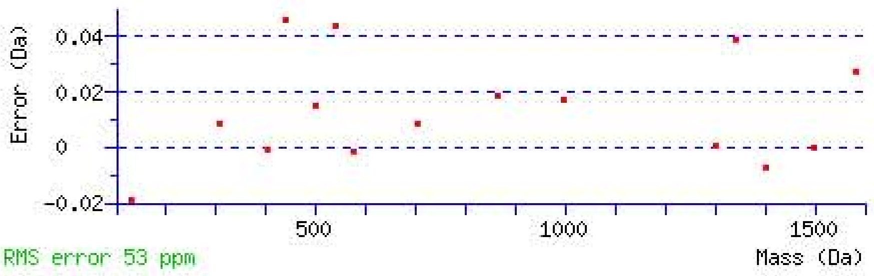
Match to Query 43906: 1855.843512 from(619.621780,3+) rtinseconds(1898) index(21034)
Title: Locus:1.1.1.663.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

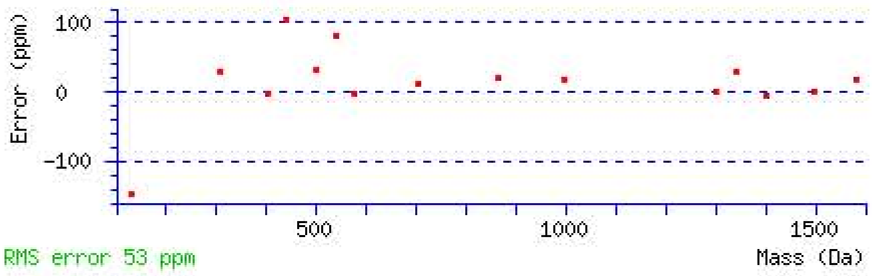
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1855.841934
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 50 **Expect:** 9.5e-005
**Matches** : 15/122 fragment ions using 28 most intense peaks (help)

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 187.086589 | 94.046932 | | | | | W | | | | | | | 13 |
| 2 | 274.118617 | 137.562947 | | | 256.108052 | 128.557664 | S | 1670.769897 | 835.888587 | 1653.743348 | 827.375312 | 1652.759332 | 826.883304 | 12 |
| 3 | 361.150645 | 181.078960 | | | 343.140080 | 172.073678 | S | ***1583.737869*** | 792.372573 | 1566.711320 | 783.859298 | 1565.727304 | 783.367290 | 11 |
| 4 | 458.203409 | 229.605343 | | | 440.192844 | 220.600060 | P | ***1496.705841*** | 748.856559 | 1479.679292 | 740.343284 | 1478.695276 | 739.851276 | 10 |
| 5 | 555.256173 | 278.131725 | | | 537.245608 | 269.126442 | P | ***1399.653077*** | 700.330177 | 1382.626528 | 691.816902 | 1381.642512 | 691.324894 | 9 |
| 6 | **994.481499** | 497.744388 | 977.454950 | 489.231113 | 976.470934 | 488.739105 | Q | ***1302.600313*** | 651.803795 | 1285.573764 | 643.290520 | 1284.589748 | 642.798512 | 8 |
| 7 | 1154.512148 | 577.759712 | 1137.485599 | 569.246438 | 1136.501583 | 568.754430 | C | ***863.374987*** | 432.191132 | 846.348438 | 423.677857 | 845.364422 | 423.185849 | 7 |
| 8 | 1283.554741 | 642.281009 | 1266.528192 | 633.767734 | 1265.544176 | 633.275726 | E | ***703.344338*** | 352.175807 | 686.317789 | 343.662533 | 685.333773 | 343.170525 | 6 |
| 9 | **1340.576205** | 670.791741 | 1323.549656 | 662.278466 | 1322.565640 | 661.786458 | G | ***574.301745*** | 287.654511 | 557.275196 | 279.141236 | | | 5 |
| 10 | 1453.660269 | 727.333773 | 1436.633720 | 718.820498 | 1435.649704 | 718.328490 | L | 517.280281 | 259.143779 | 500.253732 | 250.630504 | | | 4 |
| 11 | 1550.713033 | 775.860155 | 1533.686484 | 767.346880 | 1532.702468 | 766.854872 | P | ***404.196217*** | 202.601747 | 387.169668 | 194.088472 | | | 3 |
| 12 | 1710.743682 | 855.875479 | 1693.717133 | 847.362205 | 1692.733117 | 846.870197 | C | ***307.143453*** | 154.075365 | 290.116904 | 145.562090 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of WSSPPQCEGLPCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.2 | 1855.841934 | 0.001578 | WSSPPQCEGLPCK |

**Mascot:** http://www.matrixscience.com/

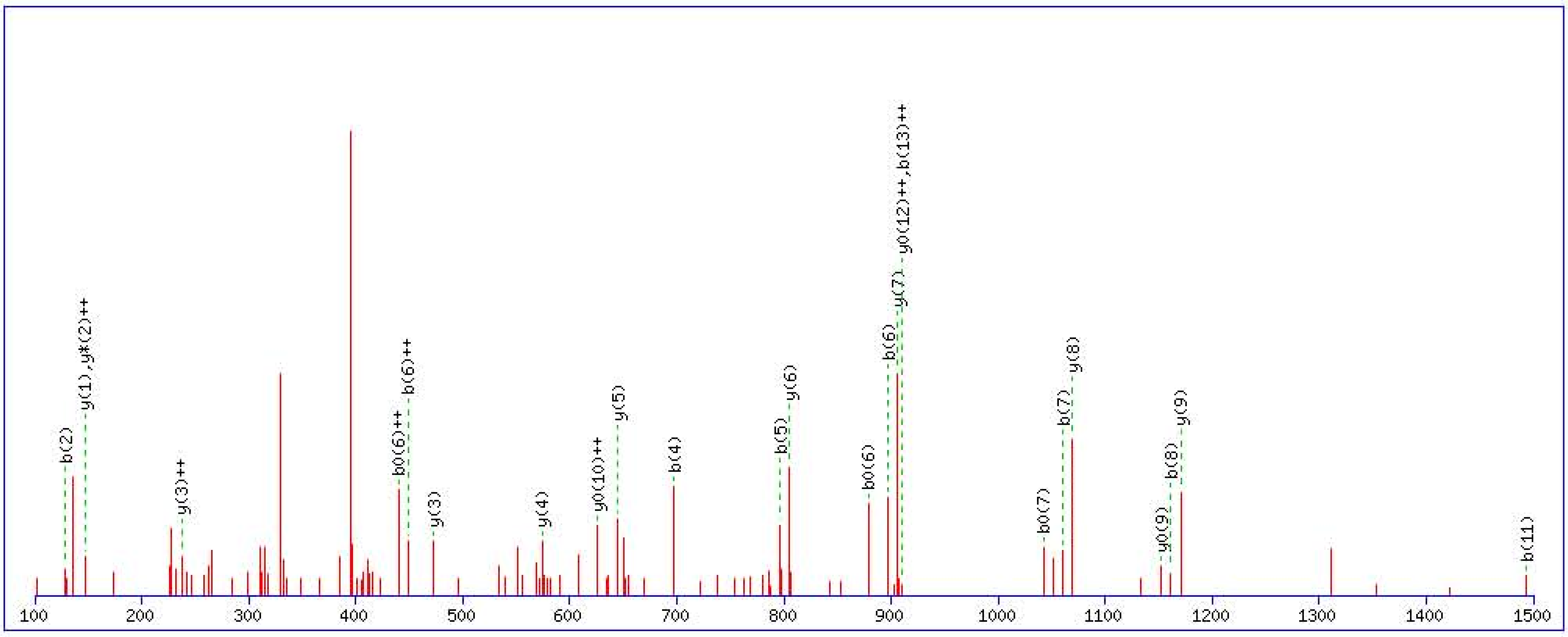
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AGEQVTYTCATYYK**
Found in **CFAH_HUMAN**, Complement factor H OS=Homo sapiens GN=CFH PE=1 SV=4

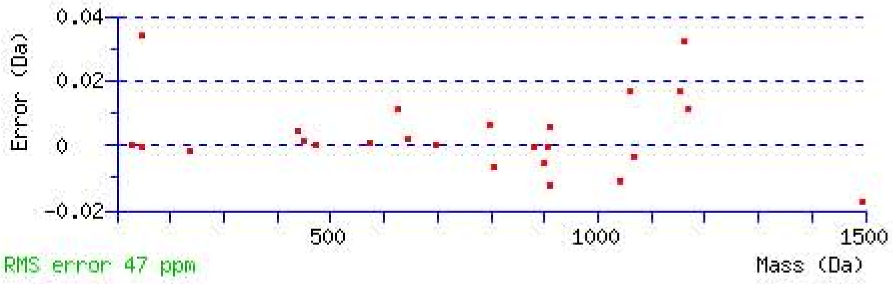
Match to Query 45865: 1964.900352 from(655.974060,3+) rtinseconds(1868) index(35393)
Title: Locus:1.1.1.3070.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

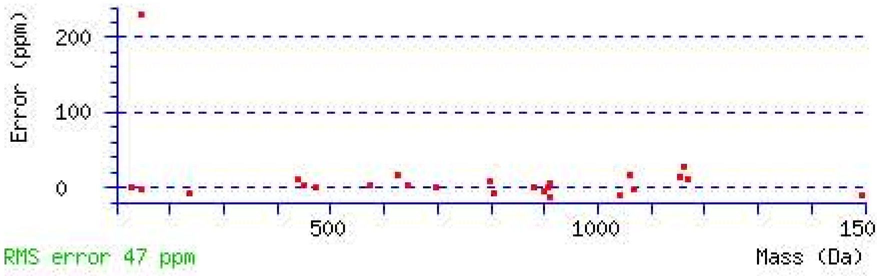
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1964.901215
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 48  Expect: 0.00017
Matches : 25/140 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 14 |
| 2 | ***129.065854*** | 65.036565 | | | | | G | 1894.871388 | 947.939332 | 1877.844839 | 939.426058 | 1876.860823 | 938.934050 | 13 |
| 3 | 258.108447 | 129.557862 | | | 240.097882 | 120.552579 | E | 1837.849924 | 919.428600 | 1820.823375 | 910.915326 | 1819.839359 | 910.423318 | 12 |
| 4 | ***697.333773*** | 349.170525 | 680.307224 | 340.657250 | 679.323208 | 340.165242 | Q | 1708.807331 | 854.907304 | 1691.780782 | 846.394029 | 1690.796766 | 845.902021 | 11 |
| 5 | ***796.402187*** | 398.704732 | 779.375638 | 390.191457 | 778.391622 | 389.699449 | V | 1269.582005 | 635.294641 | 1252.555456 | 626.781366 | 1251.571440 | 626.289358 | 10 |
| 6 | ***897.449866*** | **449.228571** | 880.423317 | 440.715297 | 879.439301 | 440.223289 | T | ***1170.513591*** | 585.760434 | 1153.487042 | 577.247159 | 1152.503026 | 576.755151 | 9 |
| 7 | ***1060.513195*** | 530.760236 | 1043.486646 | 522.246961 | 1042.502630 | 521.754953 | Y | ***1069.465912*** | 535.236594 | 1052.439363 | 526.723320 | 1051.455347 | 526.231312 | 8 |
| 8 | ***1161.560874*** | 581.284075 | 1144.534325 | 572.770801 | 1143.550309 | 572.278793 | T | ***906.402583*** | 453.704930 | 889.376034 | 445.191655 | 888.392018 | 444.699647 | 7 |
| 9 | 1321.591523 | 661.299400 | 1304.564974 | 652.786125 | 1303.580958 | 652.294117 | C | ***805.354904*** | 403.181090 | 788.328355 | 394.667816 | 787.344339 | 394.175808 | 6 |
| 10 | 1392.628637 | 696.817957 | 1375.602088 | 688.304682 | 1374.618072 | 687.812674 | A | ***645.324255*** | 323.165766 | 628.297706 | 314.652491 | 627.313690 | 314.160483 | 5 |
| 11 | ***1493.676316*** | 747.341796 | 1476.649767 | 738.828522 | 1475.665751 | 738.336514 | T | ***574.287141*** | 287.647209 | 557.260592 | 279.133934 | 556.276576 | 278.641926 | 4 |
| 12 | 1656.739645 | 828.873461 | 1639.713096 | 820.360186 | 1638.729080 | 819.868178 | Y | ***473.239462*** | 237.123369 | 456.212913 | 228.610095 | | | 3 |
| 13 | 1819.802974 | **910.405125** | 1802.776425 | 901.891851 | 1801.792409 | 901.399843 | Y | 310.176133 | 155.591705 | 293.149584 | 147.078430 | | | 2 |
| 14 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of AGEQVTYTCATYYK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 48.3 | 1964.901215 | -0.000863 | AGEQVTYTCATYYK |

**Mascot:** http://www.matrixscience.com/

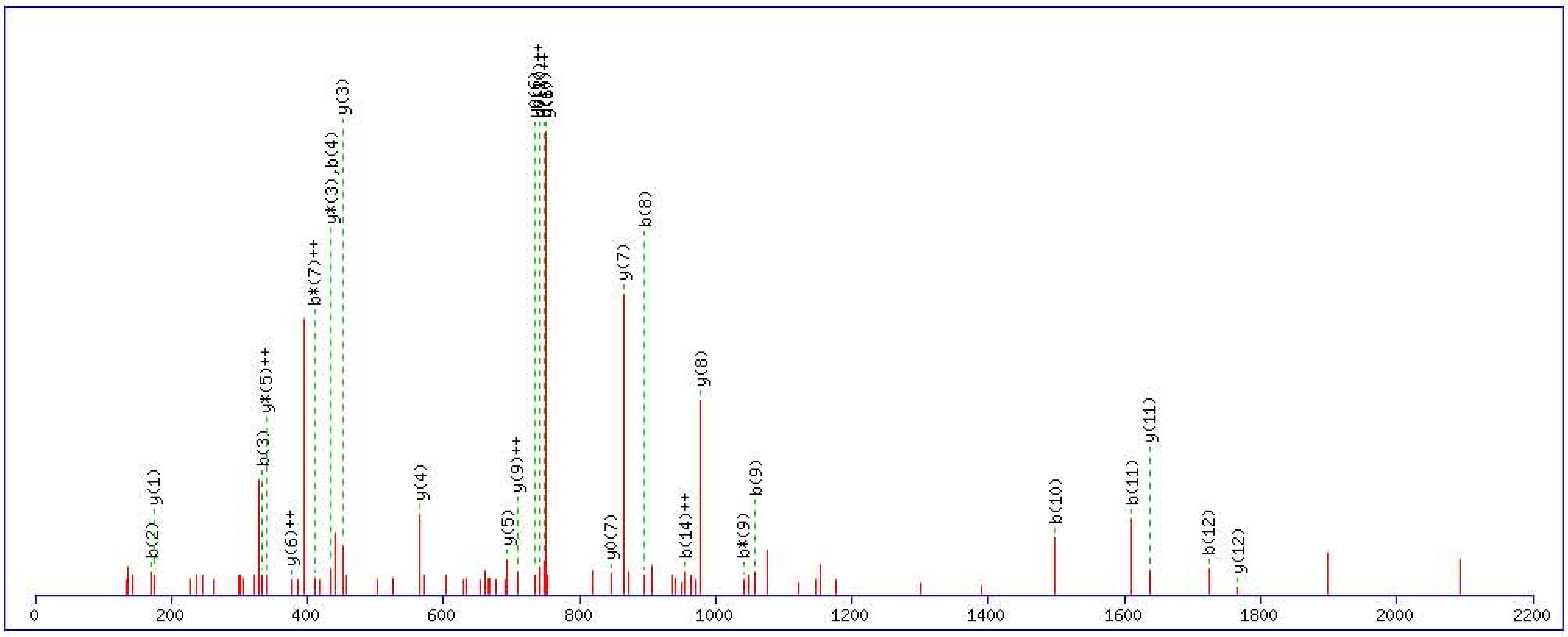
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AVYTCNEGYQLLGEINYR**
Found in **CFAH_HUMAN**, Complement factor H OS=Homo sapiens GN=CFH PE=1 SV=4

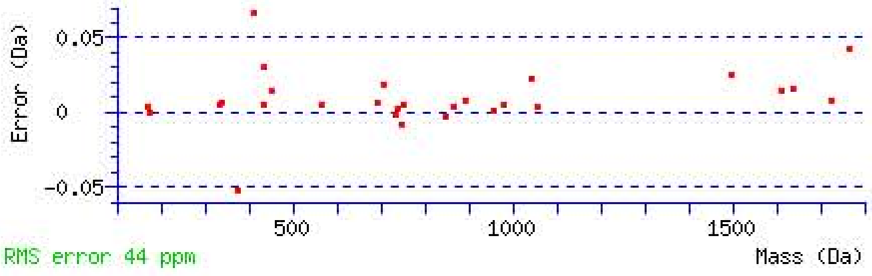
Match to Query 55930: 2473.192812 from(825.404880,3+) rtinseconds(2519) index(24667)
Title: Locus:1.1.1.879.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

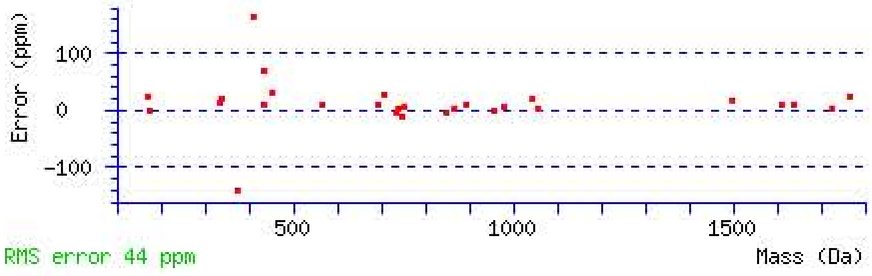
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2473.176971
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 0.00057
Matches : 28/180 fragment ions using 62 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 18 |
| 2 | ***171.112804*** | 86.060040 | | | | | V | 2403.147167 | 1202.077221 | 2386.120618 | 1193.563947 | 2385.136602 | 1193.071939 | 17 |
| 3 | ***334.176133*** | 167.591704 | | | | | Y | 2304.078753 | 1152.543014 | 2287.052204 | 1144.029740 | 2286.068188 | 1143.537732 | 16 |
| 4 | ***435.223812*** | 218.115544 | | | 417.213247 | 209.110262 | T | 2141.015424 | 1071.011350 | 2123.988875 | 1062.498075 | 2123.004859 | 1062.006067 | 15 |
| 5 | 595.254461 | 298.130869 | | | 577.243896 | 289.125586 | C | 2039.967745 | 1020.487511 | 2022.941196 | 1011.974236 | 2021.957180 | 1011.482228 | 14 |
| 6 | 709.297388 | 355.152332 | 692.270839 | 346.639058 | 691.286823 | 346.147050 | N | 1879.937096 | 940.472186 | 1862.910547 | 931.958912 | 1861.926531 | 931.466903 | 13 |
| 7 | 838.339981 | 419.673629 | 821.313432 | 411.160354 | 820.329416 | 410.668346 | E | ***1765.894169*** | 883.450722 | 1748.867620 | 874.937448 | 1747.883604 | 874.445440 | 12 |
| 8 | ***895.361445*** | 448.184361 | 878.334896 | 439.671086 | 877.350880 | 439.179078 | G | ***1636.851576*** | 818.929426 | 1619.825027 | 810.416152 | 1618.841011 | 809.924144 | 11 |
| 9 | ***1058.424774*** | 529.716025 | 1041.398225 | 521.202751 | 1040.414209 | 520.710743 | Y | 1579.830112 | 790.418694 | 1562.803563 | 781.905419 | 1561.819547 | 781.413411 | 10 |
| 10 | ***1497.650100*** | **749.328688** | 1480.623551 | 740.815414 | 1479.639535 | 740.323406 | Q | 1416.766783 | 708.887030 | 1399.740234 | 700.373755 | 1398.756218 | 699.881747 | 9 |
| 11 | ***1610.734164*** | 805.870720 | 1593.707615 | 797.357446 | 1592.723599 | 796.865437 | L | ***977.541457*** | 489.274367 | 960.514908 | 480.761092 | 959.530892 | 480.269084 | 8 |
| 12 | ***1723.818228*** | 862.412752 | 1706.791679 | 853.899477 | 1705.807663 | 853.407469 | L | ***864.457393*** | 432.732335 | 847.430844 | 424.219060 | 846.446828 | 423.727052 | 7 |
| 13 | 1780.839692 | 890.923484 | 1763.813143 | 882.410209 | 1762.829127 | 881.918201 | G | ***751.373329*** | 376.190303 | 734.346780 | 367.677028 | 733.362764 | 367.185020 | 6 |
| 14 | 1909.882285 | **955.444780** | 1892.855736 | 946.931506 | 1891.871720 | 946.439498 | E | ***694.351865*** | 347.679571 | 677.325316 | 339.166296 | 676.341300 | 338.674288 | 5 |
| 15 | 2022.966349 | 1011.986812 | 2005.939800 | 1003.473538 | 2004.955784 | 1002.981530 | I | ***565.309272*** | 283.158274 | 548.282723 | 274.645000 | | | 4 |
| 16 | 2137.009276 | 1069.008276 | 2119.982727 | 1060.495001 | 2118.998711 | 1060.002993 | N | ***452.225208*** | 226.616242 | 435.198659 | 218.102968 | | | 3 |
| 17 | 2300.072605 | 1150.539940 | 2283.046056 | 1142.026666 | 2282.062040 | 1141.534658 | Y | 338.182281 | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AVYTCNEGYQLLGEINYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.2 | 2473.176971 | 0.015841 | AVYTCNEGYQLLGEINYR |
| 10.2 | 2473.192047 | 0.000765 | ECDKAFIYGSQLSEHQRIHR |
| 4.5 | 2473.188065 | 0.004747 | GEAGAQGPMGPSGPAGARGIQGPQGPR |

**Mascot:** http://www.matrixscience.com/

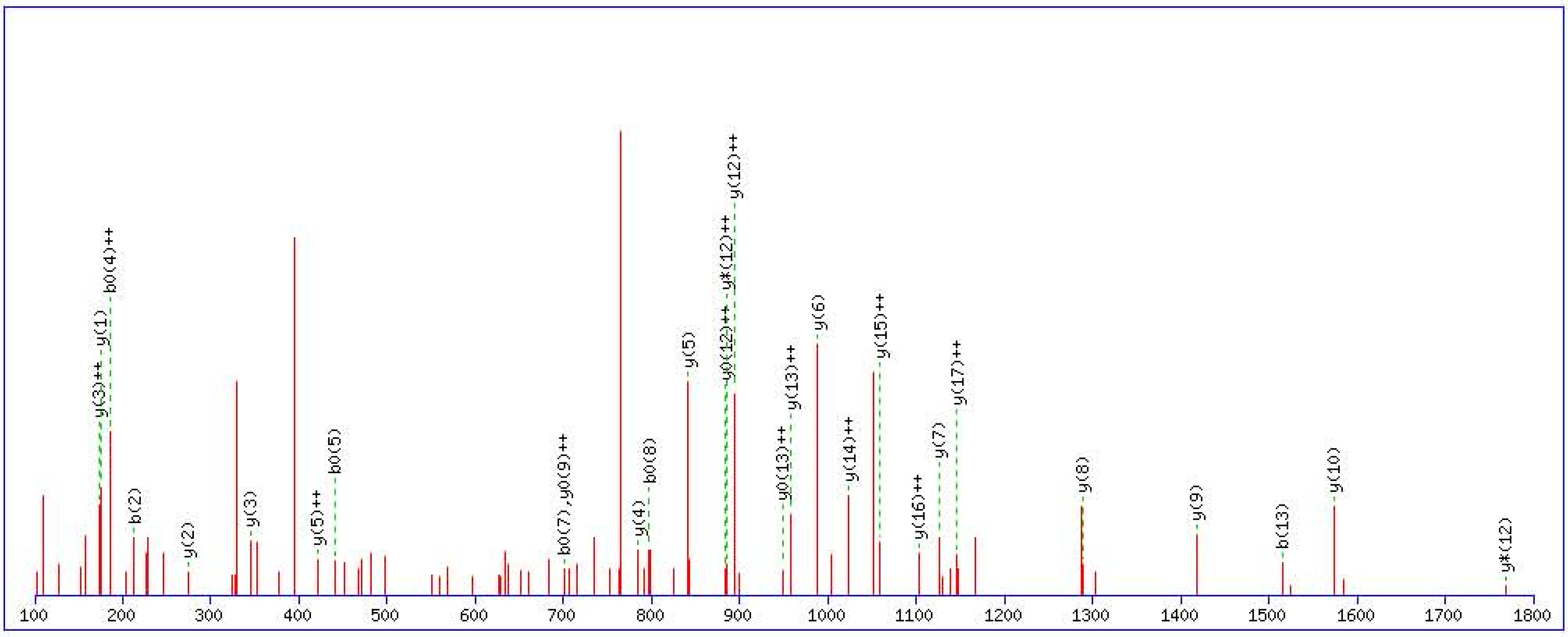
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IVSSAMEPDREYHFGQAVR**
Found in **CFAH_HUMAN**, Complement factor H OS=Homo sapiens GN=CFH PE=1 SV=4

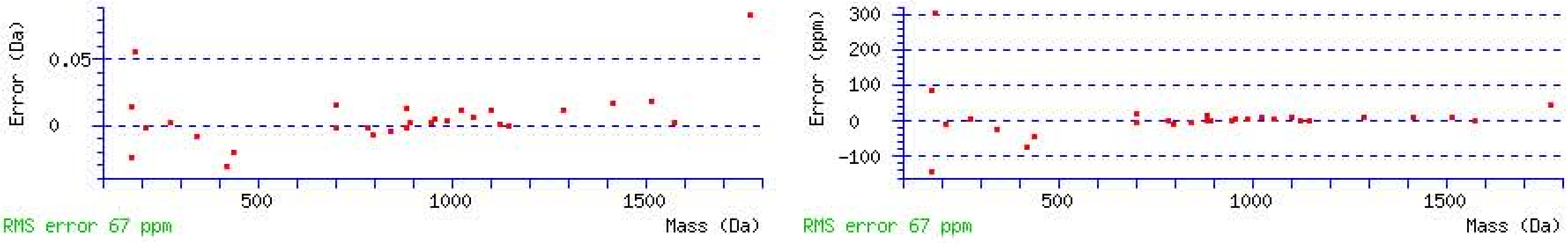
Match to Query 56705: 2502.216456 from(626.561390,4+) rtinseconds(1837) index(20560)
Title: Locus:1.1.1.642.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2502.214767
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 48  Expect: 0.00039
Matches : 29/178 fragment ions using 71 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 19 |
| 2 | **213.159754** | 107.083515 | | | | | V | 2390.137998 | 1195.572637 | 2373.111449 | 1187.059362 | 2372.127433 | 1186.567354 | 18 |
| 3 | 300.191782 | 150.599529 | | | 282.181217 | 141.594247 | S | 2291.069584 | 1146.038430 | 2274.043035 | 1137.525155 | 2273.059019 | 1137.033147 | 17 |
| 4 | 387.223810 | 194.115543 | | | 369.213245 | 185.110261 | S | 2204.037556 | 1102.522416 | 2187.011007 | 1094.009141 | 2186.026991 | 1093.517133 | 16 |
| 5 | 458.260924 | 229.634100 | | | 440.250359 | 220.628818 | A | 2117.005528 | 1059.006402 | 2099.978979 | 1050.493127 | 2098.994963 | 1050.001119 | 15 |
| 6 | 589.301409 | 295.154343 | | | 571.290844 | 286.149060 | M | 2045.968414 | 1023.487845 | 2028.941865 | 1014.974571 | 2027.957849 | 1014.482563 | 14 |
| 7 | 718.344002 | 359.675639 | | | 700.333437 | 350.670357 | E | 1914.927929 | 957.967603 | 1897.901380 | 949.454328 | 1896.917364 | 948.962320 | 13 |
| 8 | 815.396766 | 408.202021 | | | 797.386201 | 399.196739 | P | 1785.885336 | 893.446306 | 1768.858787 | 884.933032 | 1767.874771 | 884.441024 | 12 |
| 9 | 930.423709 | 465.715493 | | | 912.413144 | 456.710210 | D | 1688.832572 | 844.919924 | 1671.806023 | 836.406650 | 1670.822007 | 835.914642 | 11 |
| 10 | 1086.524820 | 543.766048 | 1069.498271 | 535.252774 | 1068.514255 | 534.760766 | R | ***1573.805629*** | 787.406453 | 1556.779080 | 778.893178 | 1555.795064 | 778.401170 | 10 |
| 11 | 1215.567413 | 608.287345 | 1198.540864 | 599.774070 | 1197.556848 | 599.282062 | E | ***1417.704518*** | 709.355897 | 1400.677969 | 700.842623 | 1399.693953 | 700.350615 | 9 |
| 12 | 1378.630742 | 689.819009 | 1361.604193 | 681.305735 | 1360.620177 | 680.813727 | Y | ***1288.661925*** | 644.834601 | 1271.635376 | 636.321326 | | | 8 |
| 13 | **1515.689654** | 758.348465 | 1498.663105 | 749.835191 | 1497.679089 | 749.343183 | H | ***1125.598596*** | 563.302936 | 1108.572047 | 554.789662 | | | 7 |
| 14 | 1662.758068 | 831.882672 | 1645.731519 | 823.369398 | 1644.747503 | 822.877390 | F | ***988.539684*** | 494.773480 | 971.513135 | 486.260206 | | | 6 |
| 15 | 1719.779532 | 860.393404 | 1702.752983 | 851.880130 | 1701.768967 | 851.388122 | G | ***841.471270*** | 421.239273 | 824.444721 | 412.725999 | | | 5 |
| 16 | 2159.004858 | 1080.006067 | 2141.978309 | 1071.492792 | 2140.994293 | 1071.000784 | Q | ***784.449806*** | 392.728541 | 767.423257 | 384.215267 | | | 4 |
| 17 | 2230.041972 | 1115.524624 | 2213.015423 | 1107.011349 | 2212.031407 | 1106.519341 | A | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 18 | 2329.110386 | 1165.058831 | 2312.083837 | 1156.545556 | 2311.099821 | 1156.053548 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084046 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of IVSSAMEPDREYHFGQAVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.7 | 2502.214767 | 0.001689 | IVSSAMEPDREYHFGQAVR |

**Mascot:** http://www.matrixscience.com/

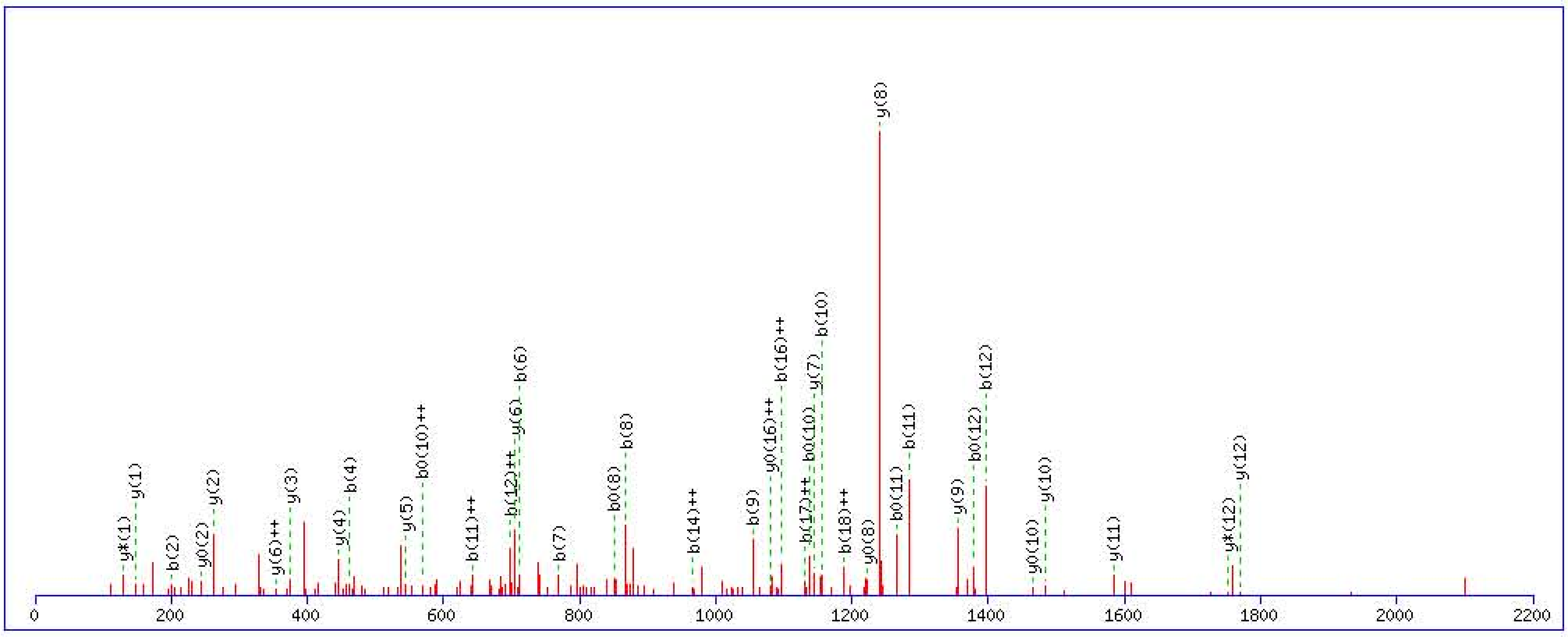
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SITCIHGVWTQLPQCVAIDK**
Found in **CFAH_HUMAN**, Complement factor H OS=Homo sapiens GN=CFH PE=1 SV=4

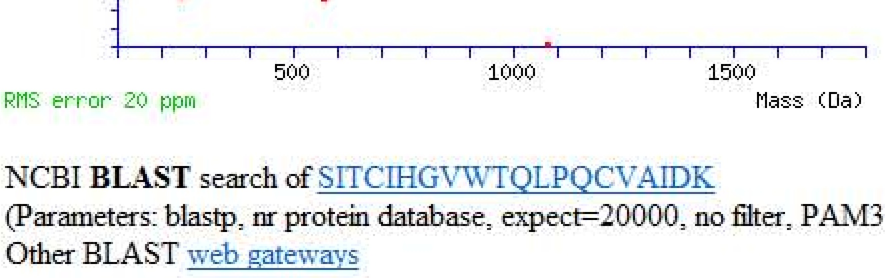
Match to Query 57881: 2636.345712 from(879.789180,3+) rtinseconds(2379) index(23862)
Title: Locus:1.1.1.830.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

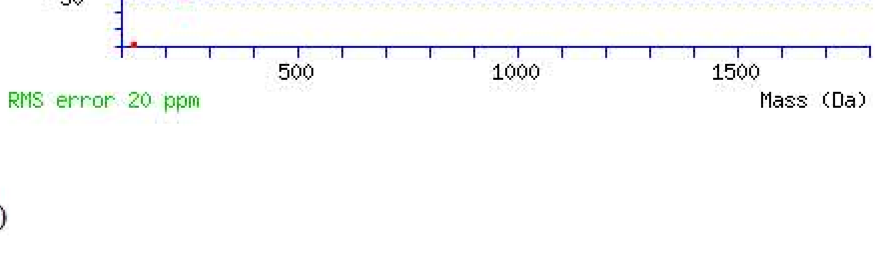
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2636.327728
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14    : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 1.7e-005
Matches : 39/206 fragment ions using 91 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 20 |
| 2 | ***201.123368*** | 101.065322 | | | 183.112803 | 92.060039 | I | 2550.302958 | 1275.655117 | 2533.276409 | 1267.141842 | 2532.292393 | 1266.649834 | 19 |
| 3 | 302.171047 | 151.589161 | | | 284.160482 | 142.583879 | T | 2437.218894 | 1219.113085 | 2420.192345 | 1210.599810 | 2419.208329 | 1210.107802 | 18 |
| 4 | ***462.201696*** | 231.604486 | | | 444.191131 | 222.599204 | C | 2336.171215 | 1168.589245 | 2319.144666 | 1160.075971 | 2318.160650 | 1159.583963 | 17 |
| 5 | 575.285760 | 288.146518 | | | 557.275195 | 279.141236 | I | 2176.140566 | 1088.573921 | 2159.114017 | 1080.060646 | 2158.130001 | 1079.568638 | 16 |
| 6 | ***712.344672*** | 356.675974 | | | 694.334107 | 347.670692 | H | 2063.056502 | 1032.031889 | 2046.029953 | 1023.518614 | 2045.045937 | 1023.026606 | 15 |
| 7 | ***769.366136*** | 385.186706 | | | 751.355571 | 376.181424 | G | 1925.997590 | 963.502433 | 1908.971041 | 954.989159 | 1907.987025 | 954.497151 | 14 |
| 8 | ***868.434550*** | 434.720913 | | | 850.423985 | 425.715631 | V | 1868.976126 | 934.991701 | 1851.949577 | 926.478427 | 1850.965561 | 925.986419 | 13 |
| 9 | ***1054.513863*** | 527.760570 | | | 1036.503298 | 518.755287 | W | ***1769.907712*** | 885.457494 | 1752.881163 | 876.944220 | 1751.897147 | 876.452211 | 12 |
| 10 | ***1155.561542*** | 578.284409 | | | 1137.550977 | 569.279127 | T | ***1583.828399*** | 792.417838 | 1566.801850 | 783.904563 | 1565.817834 | 783.412555 | 11 |
| 11 | ***1283.620120*** | **642.313698** | 1266.593571 | 633.800424 | 1265.609555 | 633.308416 | Q | ***1482.780720*** | 741.893998 | 1465.754171 | 733.380724 | 1464.770155 | 732.888715 | 10 |
| 12 | ***1396.704184*** | **698.855730** | 1379.677635 | 690.342456 | 1378.693619 | 689.850448 | L | ***1354.722142*** | 677.864709 | 1337.695593 | 669.351434 | 1336.711577 | 668.859426 | 9 |
| 13 | 1493.756948 | 747.382112 | 1476.730399 | 738.868838 | 1475.746383 | 738.376830 | P | ***1241.638078*** | 621.322677 | 1224.611529 | 612.809403 | 1223.627513 | 612.317394 | 8 |
| 14 | 1932.982274 | **966.994775** | 1915.955725 | 958.481501 | 1914.971709 | 957.989493 | Q | ***1144.585314*** | 572.796295 | 1127.558765 | 564.283021 | 1126.574749 | 563.791012 | 7 |
| 15 | 2093.012923 | 1047.010099 | 2075.986374 | 1038.496825 | 2075.002358 | 1038.004817 | C | ***705.359988*** | 353.183632 | 688.333439 | 344.670357 | 687.349423 | 344.178349 | 6 |
| 16 | 2192.081337 | **1096.544306** | 2175.054788 | 1088.031032 | 2174.070772 | 1087.539024 | V | ***545.329339*** | 273.168308 | 528.302790 | 264.655033 | 527.318774 | 264.163025 | 5 |
| 17 | 2263.118451 | **1132.062863** | 2246.091902 | 1123.549589 | 2245.107886 | 1123.057581 | A | ***446.260925*** | 223.634101 | 429.234376 | 215.120826 | 428.250360 | 214.628818 | 4 |
| 18 | 2376.202515 | **1188.604895** | 2359.175966 | 1180.091621 | 2358.191950 | 1179.599613 | I | ***375.223811*** | 188.115543 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 19 | 2491.229458 | 1246.118367 | 2474.202909 | 1237.605092 | 2473.218893 | 1237.113084 | D | ***262.139747*** | 131.573511 | 245.113198 | 123.060237 | 244.129182 | 122.568229 | 2 |
| 20 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SITCIHGVWTQLPQCVAIDK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.0 | 2636.327728 | 0.017984 | SITCIHGVWTQLPQCVAIDK |
| 22.7 | 2636.327728 | 0.017984 | SITCIHGVWTQLPQCVAIDK |
| 0.1 | 2636.366592 | -0.020880 | ASKTTDLRIPASVCTMFNVLVDAK |

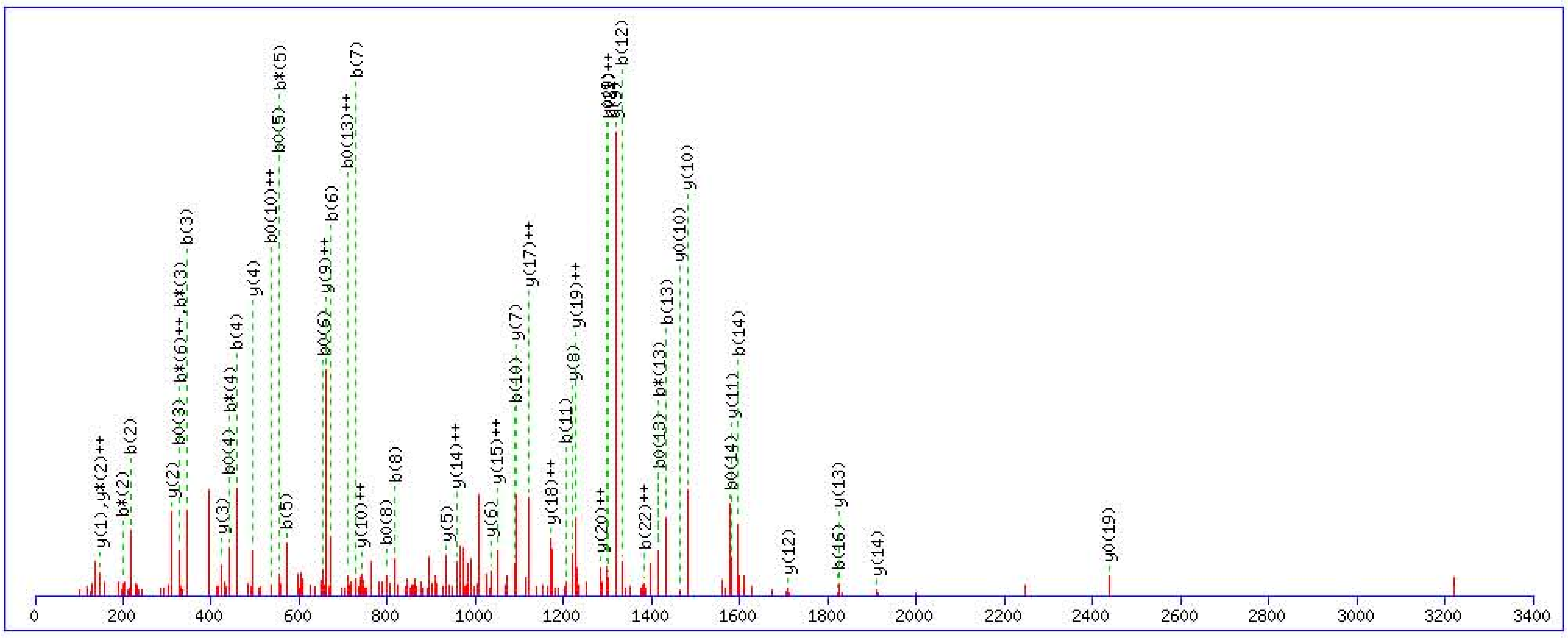
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NTEILTGSWSDQTYPEGTQAIYK**
Found in **CFAH_HUMAN**, Complement factor H OS=Homo sapiens GN=CFH PE=1 SV=4

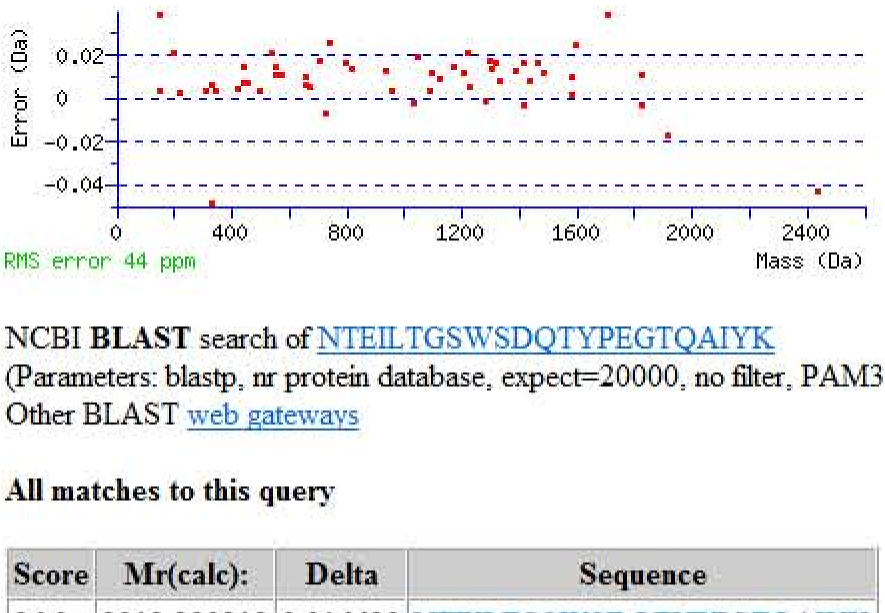
Match to Query 60932: 2912.406852 from(971.809560,3+) rtinseconds(2376) index(23845)
Title: Locus:1.1.1.829.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

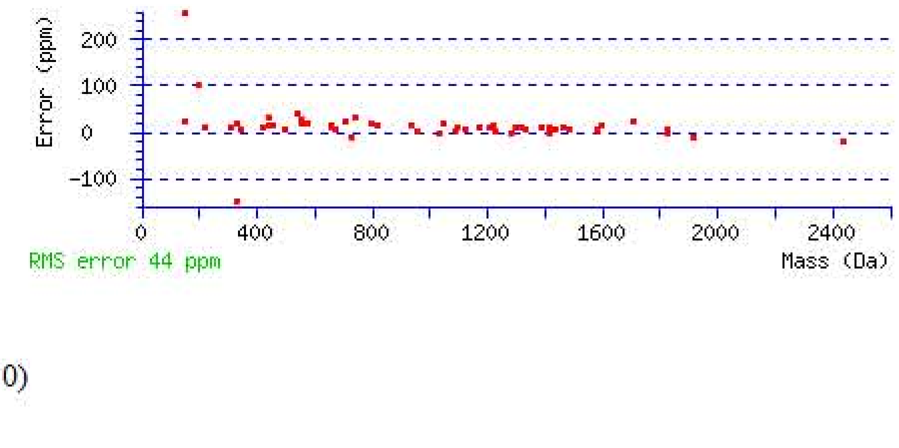
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2912.390213
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q19     : Biotin:Thermo-21345 (Q)
Ions Score: 86  Expect: 6.5e-008
Matches : 56/252 fragment ions using 105 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 23 |
| 2 | ***216.097882*** | 108.552579 | 199.071333 | 100.039305 | 198.087317 | 99.547296 | T | 2799.354578 | 1400.180927 | 2782.328029 | 1391.667652 | 2781.344013 | 1391.175644 | 22 |
| 3 | ***345.140475*** | 173.073875 | 328.113926 | 164.560601 | 327.129910 | 164.068593 | E | 2698.306899 | 1349.657087 | 2681.280350 | 1341.143813 | 2680.296334 | 1340.651805 | 21 |
| 4 | ***458.224539*** | 229.615907 | 441.197990 | 221.102633 | 440.213974 | 220.610625 | I | 2569.264306 | 1285.135791 | 2552.237757 | 1276.622516 | 2551.253741 | 1276.130508 | 20 |
| 5 | ***571.308603*** | 286.157940 | 554.282054 | 277.644665 | 553.298038 | 277.152657 | L | 2456.180242 | 1228.593759 | 2439.153693 | 1220.080484 | 2438.169677 | 1219.588476 | 19 |
| 6 | ***672.356282*** | 336.681779 | 655.329733 | 328.168505 | 654.345717 | 327.676497 | T | 2343.096178 | 1172.051727 | 2326.069629 | 1163.538452 | 2325.085613 | 1163.046444 | 18 |
| 7 | ***729.377746*** | 365.192511 | 712.351197 | 356.679237 | 711.367181 | 356.187229 | G | 2242.048499 | 1121.527887 | 2225.021950 | 1113.014613 | 2224.037934 | 1112.522605 | 17 |
| 8 | ***816.409774*** | 408.708525 | 799.383225 | 400.195251 | 798.399209 | 399.703243 | S | 2185.027035 | 1093.017155 | 2168.000486 | 1084.503881 | 2167.016470 | 1084.011873 | 16 |
| 9 | 1002.489087 | 501.748182 | 985.462538 | 493.234907 | 984.478522 | 492.742899 | W | 2097.995007 | 1049.501141 | 2080.968458 | 1040.987867 | 2079.984442 | 1040.495859 | 15 |
| 10 | ***1089.521115*** | 545.264196 | 1072.494566 | 536.750921 | 1071.510550 | 536.258913 | S | ***1911.915694*** | 956.461485 | 1894.889145 | 947.948211 | 1893.905129 | 947.456203 | 14 |
| 11 | ***1204.548058*** | 602.777667 | 1187.521509 | 594.264393 | 1186.537493 | 593.772385 | D | ***1824.883666*** | 912.945471 | 1807.857117 | 904.432197 | 1806.873101 | 903.940189 | 13 |
| 12 | ***1332.606636*** | 666.806956 | 1315.580087 | 658.293682 | 1314.596071 | 657.801674 | Q | ***1709.856723*** | 855.432000 | 1692.830174 | 846.918725 | 1691.846158 | 846.426717 | 12 |
| 13 | ***1433.654315*** | 717.330796 | 1416.627766 | 708.817521 | 1415.643750 | 708.325513 | T | ***1581.798145*** | 791.402711 | 1564.771596 | 782.889436 | 1563.787580 | 782.397428 | 11 |
| 14 | ***1596.717644*** | 798.862460 | 1579.691095 | 790.349186 | 1578.707079 | 789.857178 | Y | ***1480.750466*** | 740.878871 | 1463.723917 | 732.365597 | 1462.739901 | 731.873589 | 10 |
| 15 | 1693.770408 | 847.388842 | 1676.743859 | 838.875568 | 1675.759843 | 838.383560 | P | ***1317.687137*** | 659.347207 | 1300.660588 | 650.833932 | 1299.676572 | 650.341924 | 9 |
| 16 | ***1822.813001*** | 911.910139 | 1805.786452 | 903.396864 | 1804.802436 | 902.904856 | E | ***1220.634373*** | 610.820825 | 1203.607824 | 602.307550 | 1202.623808 | 601.815542 | 8 |
| 17 | 1879.834465 | 940.420871 | 1862.807916 | 931.907596 | 1861.823900 | 931.415588 | G | ***1091.591780*** | 546.299528 | 1074.565231 | 537.786254 | 1073.581215 | 537.294246 | 7 |
| 18 | 1980.882144 | 990.944710 | 1963.855595 | 982.431436 | 1962.871579 | 981.939428 | T | ***1034.570316*** | 517.788796 | 1017.543767 | 509.275522 | 1016.559751 | 508.783514 | 6 |
| 19 | 2420.107470 | 1210.557373 | 2403.080921 | 1202.044098 | 2402.096905 | 1201.552090 | Q | ***933.522637*** | 467.264957 | 916.496088 | 458.751682 | | | 5 |
| 20 | 2491.144584 | 1246.075930 | 2474.118035 | 1237.562655 | 2473.134019 | 1237.070648 | A | ***494.297311*** | 247.652294 | 477.270762 | 239.139019 | | | 4 |
| 21 | 2604.228648 | **1302.617962** | 2587.202099 | 1294.104688 | 2586.218083 | 1293.612680 | I | ***423.260197*** | 212.133737 | 406.233648 | 203.620462 | | | 3 |
| 22 | 2767.291977 | **1384.149627** | 2750.265428 | 1375.636352 | 2749.281412 | 1375.144344 | Y | ***310.176133*** | 155.591705 | 293.149584 | 147.078430 | | | 2 |
| 23 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of NTEILTGSWSDQTYPEGTQAIYK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 86.0 | 2912.390213 | 0.016639 | NTEILTGSWSDQTYPEGTQAIYK |
| 23.0 | 2912.390213 | 0.016639 | NTEILTGSWSDQTYPEGTQAIYK |

**Mascot:** http://www.matrixscience.com/

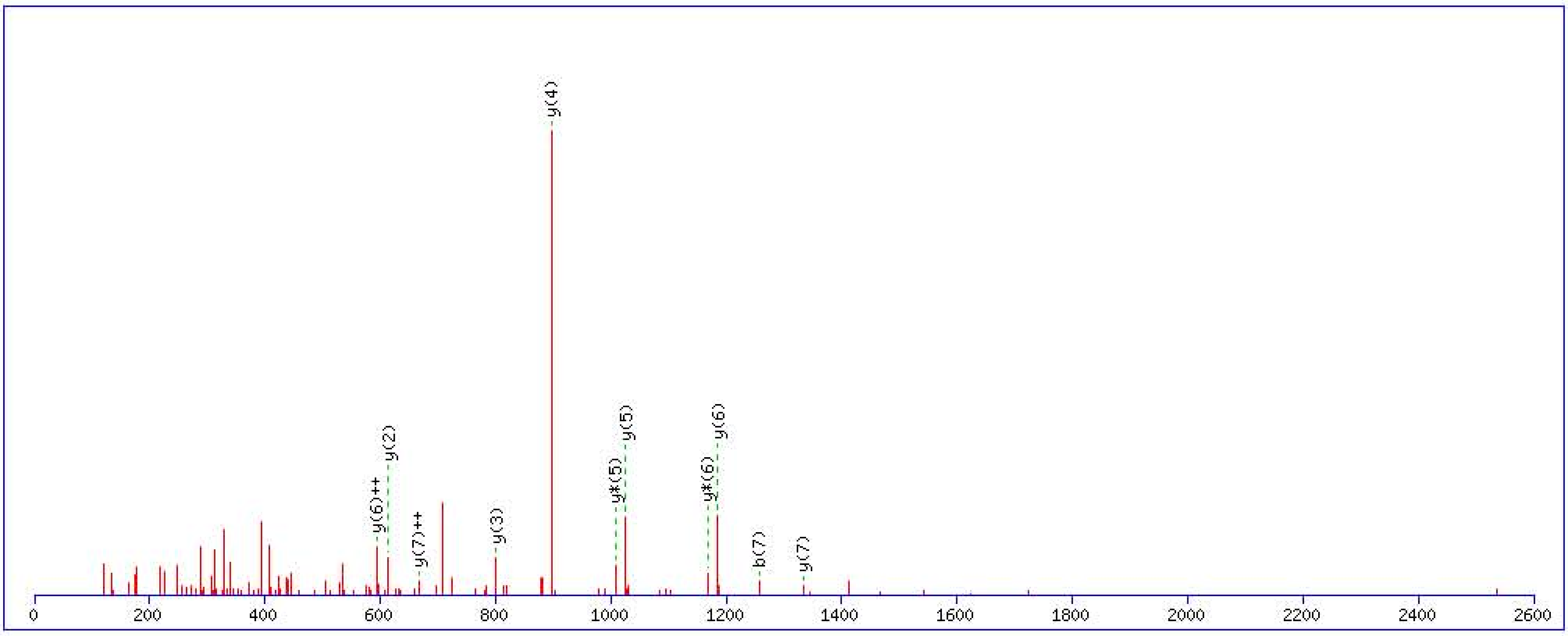
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VFCQPWQR**
Found in **CFAI_HUMAN**, Complement factor I OS=Homo sapiens GN=CFI PE=1 SV=2

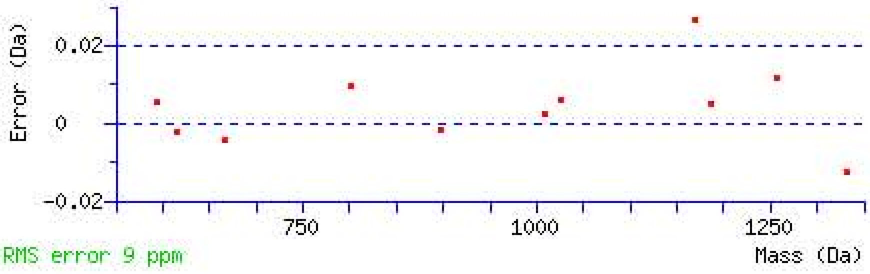
Match to Query 31931: 1430.693868 from(716.354210,2+) rtinseconds(2057) index(69149)
Title: Locus:1.1.1.1653.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

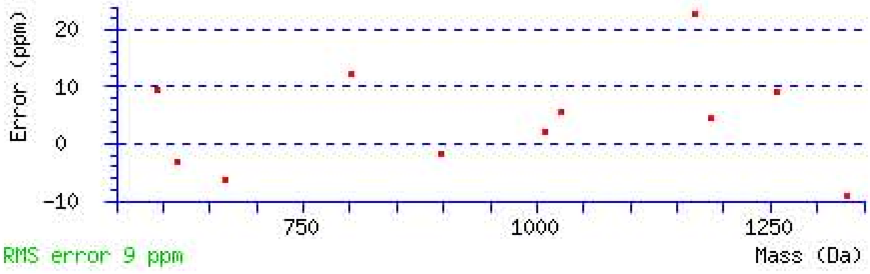
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1430.695145
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 26  Expect: 0.01
Matches : 11/50 fragment ions using 25 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | Seq. | y | y++ | y* | y*++ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | V | | | | | 8 |
| 2 | 247.144104 | 124.075690 | | | F | ***1332.633996*** | 666.820636 | 1315.607447 | 658.307362 | 7 |
| 3 | 407.174753 | 204.091014 | | | C | ***1185.565582*** | 593.286429 | 1168.539033 | 584.773155 | 6 |
| 4 | 535.233331 | 268.120304 | 518.206782 | 259.607029 | Q | ***1025.534933*** | 513.271105 | 1008.508384 | 504.757830 | 5 |
| 5 | 632.286095 | 316.646686 | 615.259546 | 308.133411 | P | ***897.476355*** | 449.241816 | 880.449806 | 440.728541 | 4 |
| 6 | 818.365408 | 409.686342 | 801.338859 | 401.173068 | W | ***800.423591*** | 400.715434 | 783.397042 | 392.202159 | 3 |
| 7 | 1257.590734 | 629.299005 | 1240.564185 | 620.785731 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | 2 |
| 8 | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | 1 |





NCBI **BLAST** search of VFCQPWQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.2 | 1430.695145 | -0.001277 | VFCQPWQR |
| 4.7 | 1430.700989 | -0.007121 | NMPQADAMVLVAR |
| 2.1 | 1430.695145 | -0.001277 | VFCQPWQR |
| 0.5 | 1430.711319 | -0.017451 | RAKAEDENETLR |
| 0.2 | 1430.693619 | 0.000249 | QLQTLSMPGGGGNR |

**Mascot:** http://www.matrixscience.com/

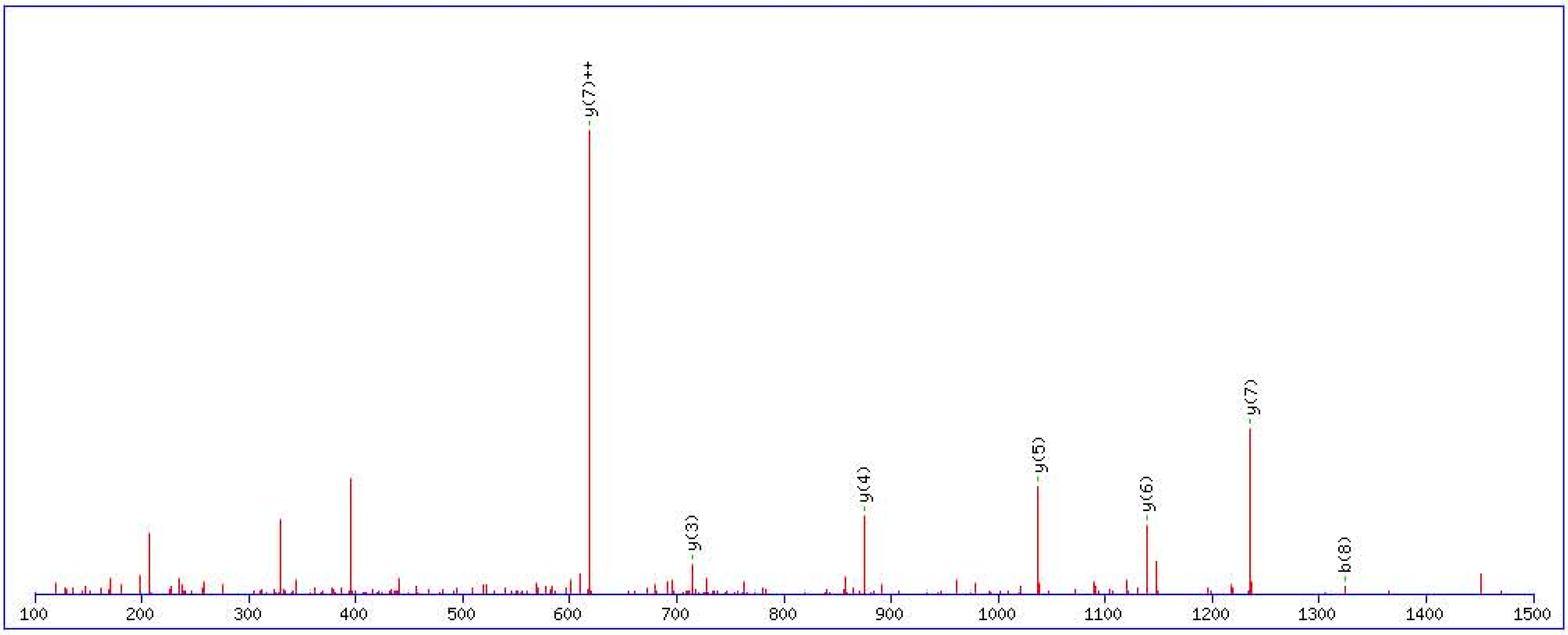
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SFPTYCQQK**
Found in **CFAI_HUMAN**, Complement factor I OS=Homo sapiens GN=CFI PE=1 SV=2

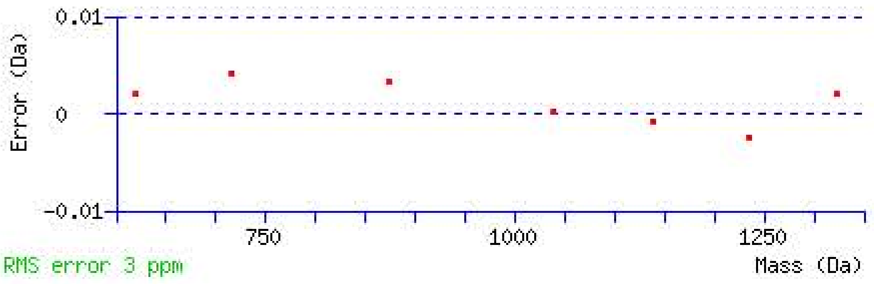
Match to Query 32978: 1468.681388 from(735.347970,2+) rtinseconds(1835) index(67639)
Title: Locus:1.1.1.1576.9 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

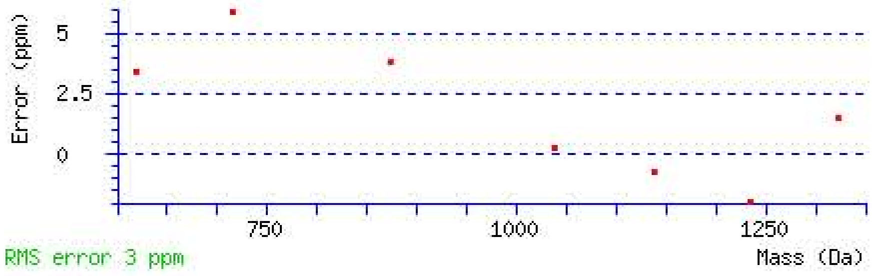
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1468.684296
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q8 : Biotin:Thermo-21345 (Q)
**Ions Score:** 28 **Expect:** 0.0066
**Matches :** 7/74 fragment ions using 14 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 9 |
| 2 | 235.107718 | 118.057497 | | | 217.097153 | 109.052214 | F | 1382.659543 | 691.833410 | 1365.632994 | 683.320135 | 1364.648978 | 682.828127 | 8 |
| 3 | 332.160482 | 166.583879 | | | 314.149917 | 157.578596 | P | ***1235.591129*** | 618.299203 | 1218.564580 | 609.785928 | 1217.580564 | 609.293920 | 7 |
| 4 | 433.208161 | 217.107718 | | | 415.197596 | 208.102436 | T | ***1138.538365*** | 569.772821 | 1121.511816 | 561.259546 | 1120.527800 | 560.767538 | 6 |
| 5 | 596.271490 | 298.639383 | | | 578.260925 | 289.634101 | Y | ***1037.490686*** | 519.248981 | 1020.464137 | 510.735707 | | | 5 |
| 6 | 756.302139 | 378.654708 | | | 738.291574 | 369.649425 | C | ***874.427357*** | 437.717317 | 857.400808 | 429.204042 | | | 4 |
| 7 | 884.360717 | 442.683997 | 867.334168 | 434.170722 | 866.350152 | 433.678714 | Q | ***714.396708*** | 357.701992 | 697.370159 | 349.188718 | | | 3 |
| 8 | 1323.586043 | 662.296660 | 1306.559494 | 653.783385 | 1305.575478 | 653.291377 | Q | 586.338130 | 293.672703 | 569.311581 | 285.159428 | | | 2 |
| 9 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SFPTYCQQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 28.5 | 1468.684296 | -0.002908 | SFPTYCQQK |
| 28.5 | 1468.684296 | -0.002908 | SFPTYCQQK |
| 4.9 | 1468.671524 | 0.009864 | MEAETGSSVETGKK |
| 1.4 | 1468.688126 | -0.006738 | FSIPSMTEHHAGR |
| 0.8 | 1468.680252 | 0.001136 | YAKGNGDCALLCK |

**Mascot:** http://www.matrixscience.com/

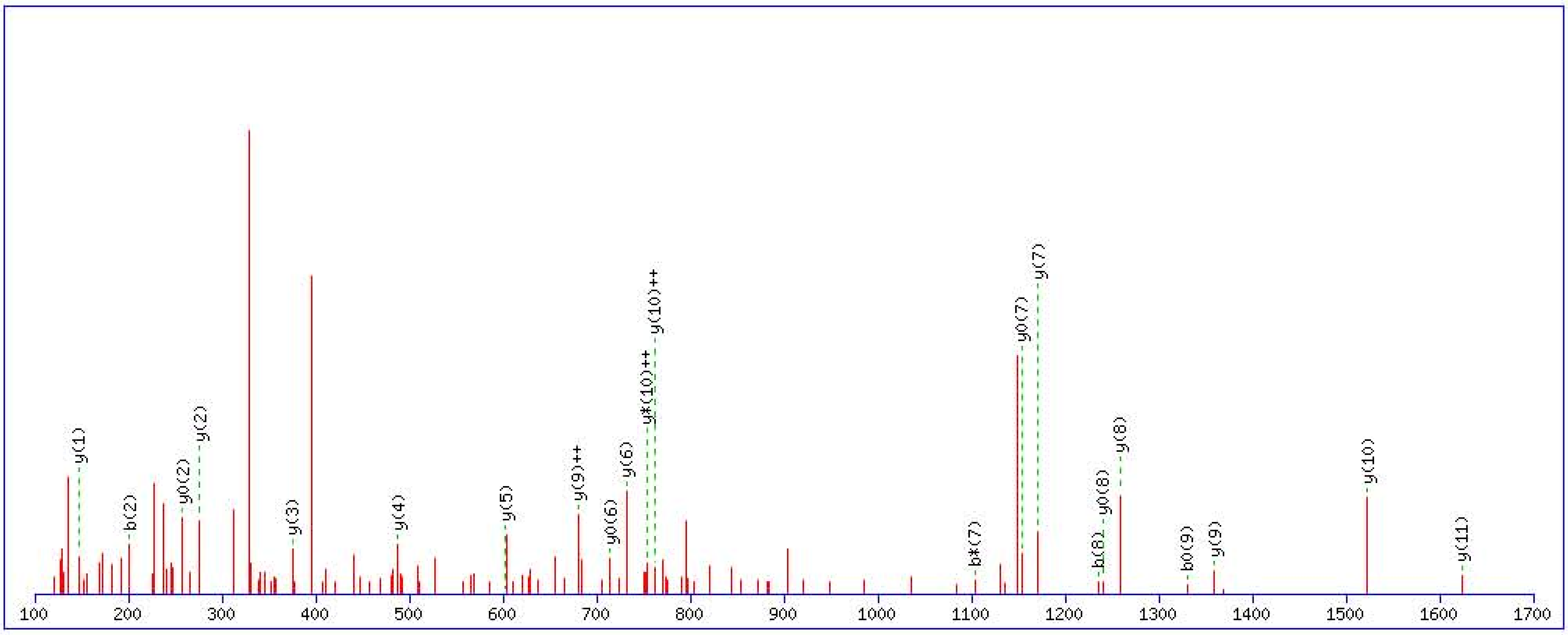
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VTYTSQEDLVEK**
Found in **CFAI_HUMAN**, Complement factor I OS=Homo sapiens GN=CFI PE=1 SV=2

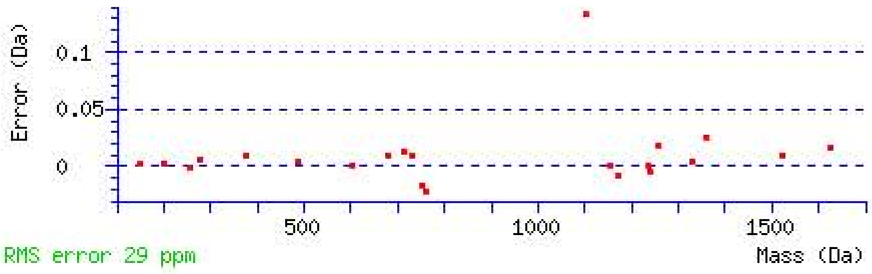
Match to Query 40928: 1721.853882 from(574.958570,3+) rtinseconds(1894) index(67929)
Title: Locus:1.1.1.1597.19 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

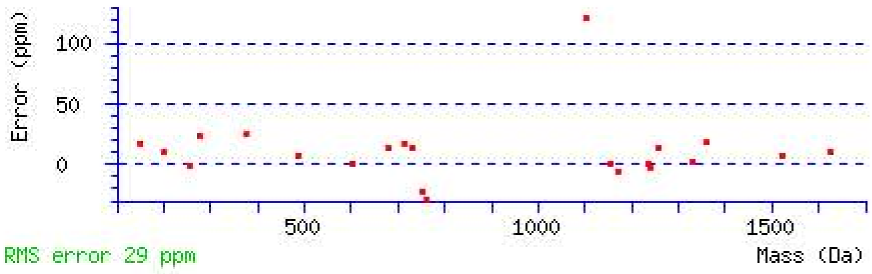
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1721.854584
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 49 **Expect:** 0.00033
**Matches :** 22/118 fragment ions using 60 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 12 |
| 2 | **201.123369** | 101.065322 | | | 183.112804 | 92.060040 | T | ***1623.793452*** | 812.400364 | 1606.766903 | 803.887090 | 1605.782887 | 803.395081 | 11 |
| 3 | 364.186698 | 182.596987 | | | 346.176133 | 173.591705 | Y | ***1522.745773*** | 761.876524 | 1505.719224 | 753.363250 | 1504.735208 | 752.871242 | 10 |
| 4 | 465.234377 | 233.120827 | | | 447.223812 | 224.115544 | T | ***1359.682444*** | 680.344860 | 1342.655895 | 671.831585 | 1341.671879 | 671.339577 | 9 |
| 5 | 552.266405 | 276.636841 | | | 534.255840 | 267.631558 | S | ***1258.634765*** | 629.821021 | 1241.608216 | 621.307746 | 1240.624200 | 620.815738 | 8 |
| 6 | 991.491731 | 496.249504 | 974.465182 | 487.736229 | 973.481166 | 487.244221 | Q | ***1171.602737*** | 586.305006 | 1154.576188 | 577.791732 | 1153.592172 | 577.299724 | 7 |
| 7 | 1120.534324 | 560.770800 | 1103.507775 | 552.257526 | 1102.523759 | 551.765517 | E | ***732.377411*** | 366.692343 | 715.350862 | 358.179069 | 714.366846 | 357.687061 | 6 |
| 8 | **1235.561267** | 618.284272 | 1218.534718 | 609.770997 | 1217.550702 | 609.278989 | D | ***603.334818*** | 302.171047 | 586.308269 | 293.657773 | 585.324253 | 293.165765 | 5 |
| 9 | 1348.645331 | 674.826303 | 1331.618782 | 666.313029 | 1330.634766 | 665.821021 | L | ***488.307875*** | 244.657575 | 471.281326 | 236.144301 | 470.297310 | 235.652293 | 4 |
| 10 | 1447.713745 | 724.360511 | 1430.687196 | 715.847236 | 1429.703180 | 715.355228 | V | ***375.223811*** | 188.115543 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 11 | 1576.756338 | 788.881807 | 1559.729789 | 780.368533 | 1558.745773 | 779.876524 | E | ***276.155397*** | 138.581336 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VTYTSQEDLVEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 48.6 | 1721.854584 | -0.000702 | VTYTSQEDLVEK |

**Mascot:** http://www.matrixscience.com/

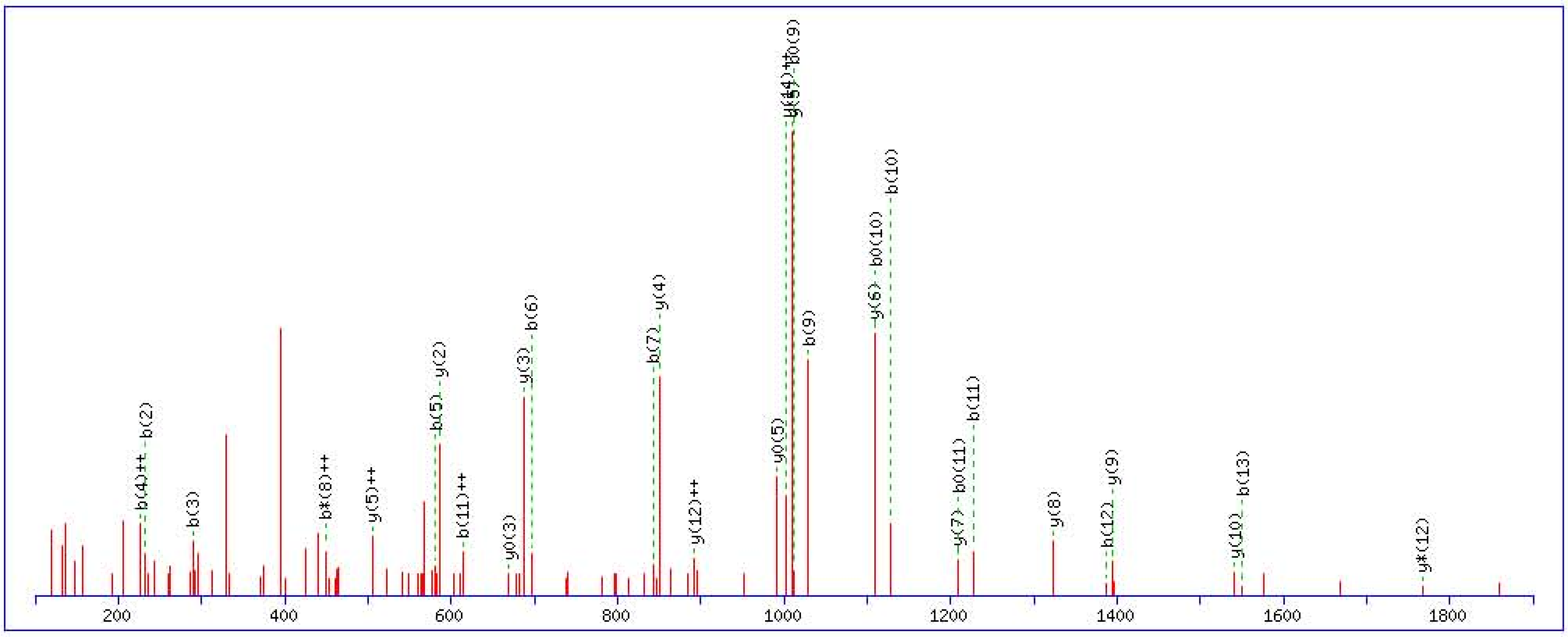
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **TMGYQDFADVVCYTQK**
Found in **CFAI_HUMAN**, Complement factor I OS=Homo sapiens GN=CFI PE=1 SV=2

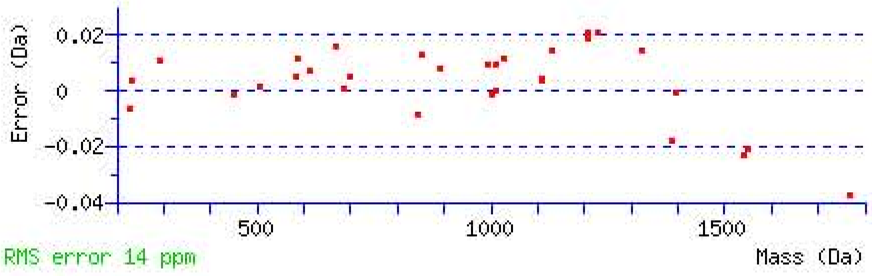
Match to Query 51771: 2236.008102 from(746.343310,3+) rtinseconds(2572) index(71924)
Title: Locus:1.1.1.1833.10 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

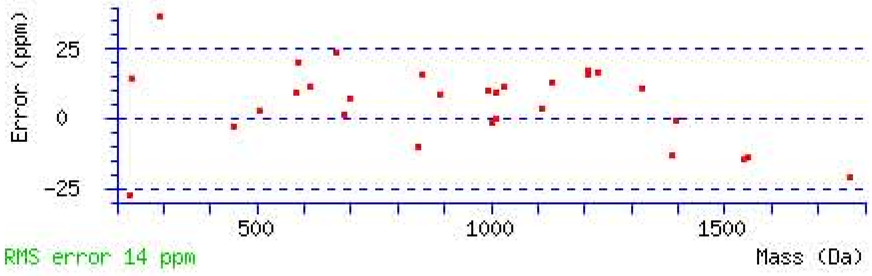
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2236.000305
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q15** : Biotin:Thermo-21345 (Q)
**Ions Score:** 58 **Expect:** 1.4e-005
**Matches :** 31/168 fragment ions using 53 most intense peaks (help)

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 16 |
| 2 | ***233.095440*** | 117.051358 | | | 215.084875 | 108.046076 | M | 2135.959885 | 1068.483580 | 2118.933336 | 1059.970306 | 2117.949320 | 1059.478298 | 15 |
| 3 | ***290.116904*** | 145.562090 | | | 272.106339 | 136.556807 | G | 2004.919400 | 1002.963338 | 1987.892851 | 994.450064 | 1986.908835 | 993.958056 | 14 |
| 4 | 453.180233 | **227.093754** | | | 435.169668 | 218.088472 | Y | 1947.897936 | 974.452606 | 1930.871387 | 965.939332 | 1929.887371 | 965.447324 | 13 |
| 5 | ***581.238811*** | 291.123044 | 564.212262 | 282.609769 | 563.228246 | 282.117761 | Q | 1784.834607 | 892.920942 | 1767.808058 | 884.407667 | 1766.824042 | 883.915659 | 12 |
| 6 | ***696.265754*** | 348.636515 | 679.239205 | 340.123241 | 678.255189 | 339.631233 | D | 1656.776029 | 828.891653 | 1639.749480 | 820.378378 | 1638.765464 | 819.886370 | 11 |
| 7 | ***843.334168*** | 422.170722 | 826.307619 | 413.657447 | 825.323603 | 413.165439 | F | ***1541.749086*** | 771.378181 | 1524.722537 | 762.864907 | 1523.738521 | 762.372899 | 10 |
| 8 | 914.371282 | 457.689279 | 897.344733 | 449.176004 | 896.360717 | 448.683996 | A | ***1394.680672*** | 697.843974 | 1377.654123 | 689.330700 | 1376.670107 | 688.838692 | 9 |
| 9 | ***1029.398225*** | 515.202750 | 1012.371676 | 506.689476 | 1011.387660 | 506.197468 | D | ***1323.643558*** | 662.325417 | 1306.617009 | 653.812143 | 1305.632993 | 653.320135 | 8 |
| 10 | ***1128.466639*** | 564.736958 | 1111.440090 | 556.223683 | 1110.456074 | 555.731675 | V | ***1208.616615*** | 604.811946 | 1191.590066 | 596.298671 | 1190.606050 | 595.806663 | 7 |
| 11 | ***1227.535053*** | **614.271165** | 1210.508504 | 605.757890 | 1209.524488 | 605.265882 | V | ***1109.548201*** | 555.277739 | 1092.521652 | 546.764464 | 1091.537636 | 546.272456 | 6 |
| 12 | ***1387.565702*** | 694.286489 | 1370.539153 | 685.773215 | 1369.555137 | 685.281207 | C | ***1010.479787*** | 505.743532 | 993.453238 | 497.230257 | 992.469222 | 496.738249 | 5 |
| 13 | ***1550.629031*** | 775.818154 | 1533.602482 | 767.304879 | 1532.618466 | 766.812871 | Y | ***850.449138*** | 425.728207 | 833.422589 | 417.214933 | 832.438573 | 416.722925 | 4 |
| 14 | 1651.676710 | 826.341993 | 1634.650161 | 817.828719 | 1633.666145 | 817.336711 | T | ***687.385809*** | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 15 | 2090.902036 | 1045.954656 | 2073.875487 | 1037.441381 | 2072.891471 | 1036.949373 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TMGYQDFADVVCYTQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 58.5 | 2236.000305 | 0.007797 | TMGYQDFADVVCYTQK |

**Mascot:** http://www.matrixscience.com/

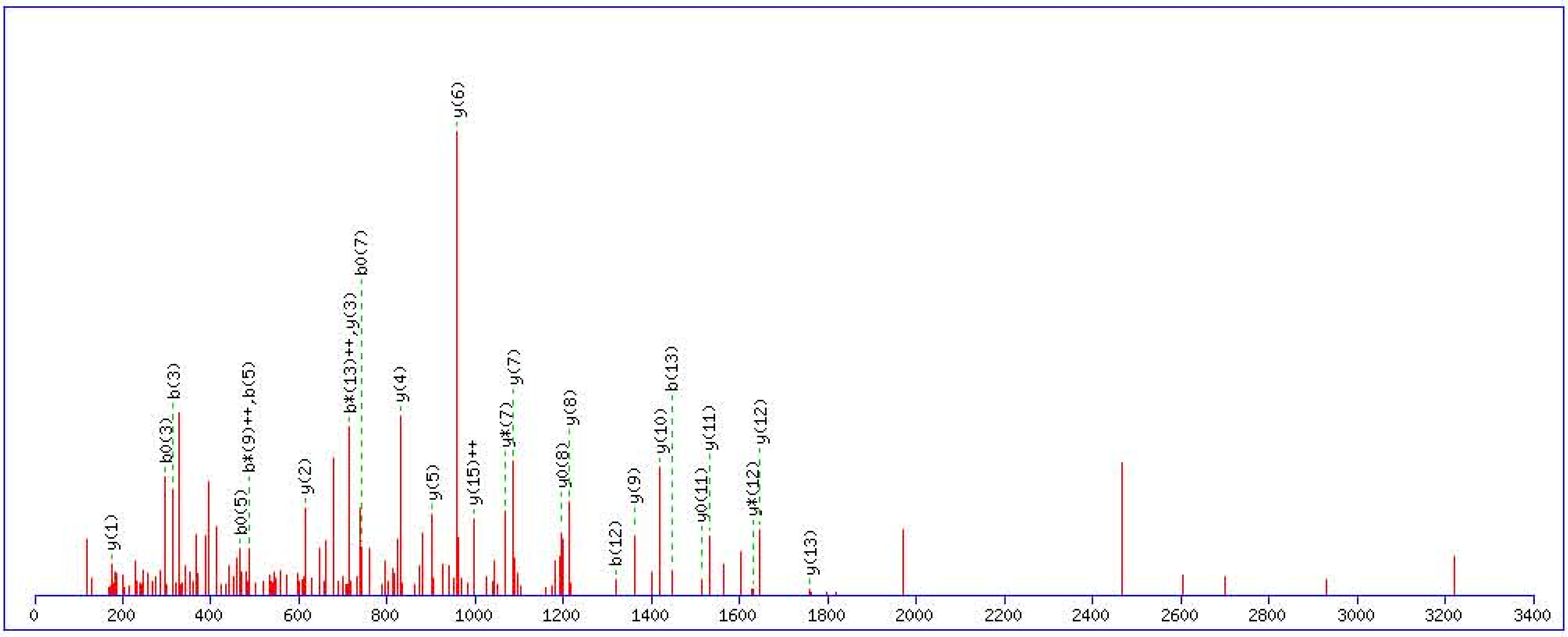
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EANVACLDLGFQQGADTQR**
Found in **CFAI_HUMAN**, Complement factor I OS=Homo sapiens GN=CFI PE=1 SV=2

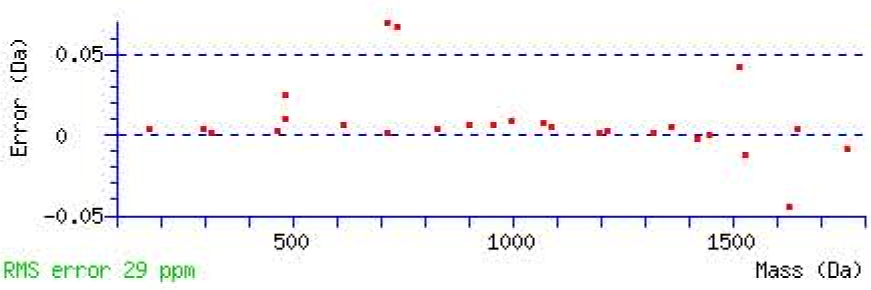
Match to Query 54461: 2403.146562 from(802.056130,3+) rtinseconds(2280) index(70432)
Title: Locus:1.1.1.1731.8 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

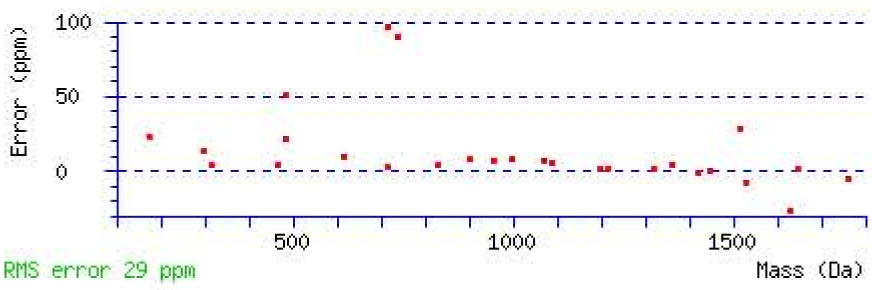
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2403.131119
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18    : Biotin:Thermo-21345 (Q)
Ions Score: 99  Expect: 7.5e-010
Matches : 27/208 fragment ions using 34 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 19 |
| 2 | 201.086983 | 101.047130 | | | 183.076418 | 92.041847 | A | 2275.095801 | 1138.051538 | 2258.069252 | 1129.538264 | 2257.085236 | 1129.046256 | 18 |
| 3 | **315.129910** | 158.068593 | 298.103361 | 149.555319 | 297.119345 | 149.063311 | N | 2204.058687 | 1102.532981 | 2187.032138 | 1094.019707 | 2186.048122 | 1093.527699 | 17 |
| 4 | 414.198324 | 207.602800 | 397.171775 | 199.089526 | 396.187759 | 198.597518 | V | 2090.015760 | 1045.511518 | 2072.989211 | 1036.998243 | 2072.005195 | 1036.506235 | 16 |
| 5 | **485.235438** | 243.121357 | 468.208889 | 234.608082 | 467.224873 | 234.116075 | A | 1990.947346 | 995.977311 | 1973.920797 | 987.464037 | 1972.936781 | 986.972029 | 15 |
| 6 | 645.266087 | 323.136682 | 628.239538 | 314.623407 | 627.255522 | 314.131399 | C | 1919.910232 | 960.458754 | 1902.883683 | 951.945480 | 1901.899667 | 951.453472 | 14 |
| 7 | 758.350151 | 379.678714 | 741.323602 | 371.165439 | 740.339586 | 370.673431 | L | ***1759.879583*** | 880.443430 | 1742.853034 | 871.930155 | 1741.869018 | 871.438147 | 13 |
| 8 | 873.377094 | 437.192185 | 856.350545 | 428.678911 | 855.366529 | 428.186903 | D | ***1646.795519*** | 823.901398 | 1629.768970 | 815.388123 | 1628.784954 | 814.896115 | 12 |
| 9 | 986.461158 | 493.734217 | 969.434609 | 485.220943 | 968.450593 | 484.728935 | L | ***1531.768576*** | 766.387926 | 1514.742027 | 757.874652 | 1513.758011 | 757.382644 | 11 |
| 10 | 1043.482622 | 522.244949 | 1026.456073 | 513.731675 | 1025.472057 | 513.239667 | G | ***1418.684512*** | 709.845894 | 1401.657963 | 701.332620 | 1400.673947 | 700.840612 | 10 |
| 11 | 1190.551036 | 595.779156 | 1173.524487 | 587.265882 | 1172.540471 | 586.773874 | F | ***1361.663048*** | 681.335162 | 1344.636499 | 672.821888 | 1343.652483 | 672.329880 | 9 |
| 12 | **1318.609614** | 659.808445 | 1301.583065 | 651.295171 | 1300.599049 | 650.803163 | Q | ***1214.594634*** | 607.800955 | 1197.568085 | 599.287681 | 1196.584069 | 598.795673 | 8 |
| 13 | **1446.668192** | 723.837734 | 1429.641643 | 715.324460 | 1428.657627 | 714.832452 | Q | ***1086.536056*** | 543.771666 | 1069.509507 | 535.258392 | 1068.525491 | 534.766384 | 7 |
| 14 | 1503.689656 | 752.348466 | 1486.663107 | 743.835192 | 1485.679091 | 743.343184 | G | ***958.477478*** | 479.742377 | 941.450929 | 471.229103 | 940.466913 | 470.737095 | 6 |
| 15 | 1574.726770 | 787.867023 | 1557.700221 | 779.353749 | 1556.716205 | 778.861741 | A | ***901.456014*** | 451.231645 | 884.429465 | 442.718371 | 883.445449 | 442.226363 | 5 |
| 16 | 1689.753713 | 845.380495 | 1672.727164 | 836.867220 | 1671.743148 | 836.375212 | D | ***830.418900*** | 415.713088 | 813.392351 | 407.199814 | 812.408335 | 406.707806 | 4 |
| 17 | 1790.801392 | 895.904334 | 1773.774843 | 887.391060 | 1772.790827 | 886.899052 | T | ***715.391957*** | 358.199617 | 698.365408 | 349.686342 | 697.381392 | 349.194334 | 3 |
| 18 | 2230.026718 | 1115.516997 | 2213.000169 | 1107.003722 | 2212.016153 | 1106.511714 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EANVACLDLGFQQGADTQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 99.2 | 2403.131119 | 0.015443 | EANVACLDLGFQQGADTQR |
| 43.3 | 2403.131119 | 0.015443 | EANVACLDLGFQQGADTQR |
| 37.0 | 2403.131119 | 0.015443 | EANVACLDLGFQQGADTQR |
| 1.8 | 2403.157135 | -0.010573 | QAMMKTDFPGDLGSQR |
| 0.6 | 2403.175339 | -0.028777 | AAEPLVGQRWEAFDVADAMRR |

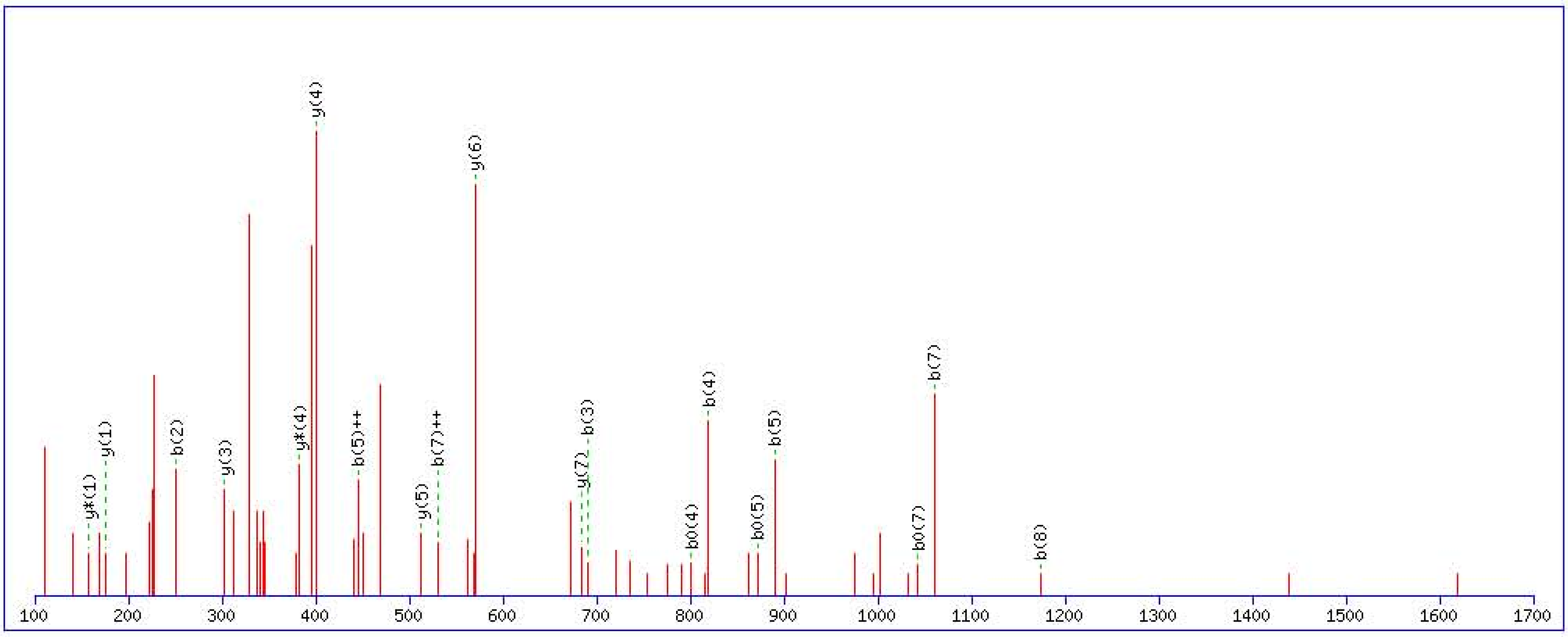
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HLQEALGLPAGR**
Found in **CLC11_HUMAN**, C-type lectin domain family 11 member A OS=Homo sapiens GN=CLEC11A PE=1 SV=1

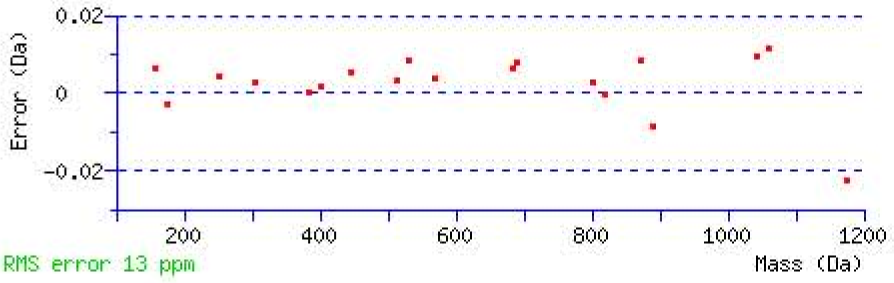
Match to Query 35764: 1571.860902 from(524.960910,3+) rtinseconds(1972) index(52657)
Title: Locus:1.1.1.1302.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

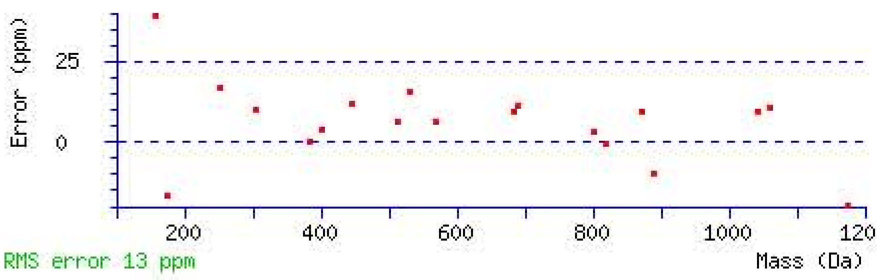
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1571.860596
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.0036
Matches : 19/106 fragment ions using 47 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 12 |
| 2 | ***251.150252*** | 126.078764 | | | | | L | 1435.808983 | 718.408129 | 1418.782434 | 709.894855 | 1417.798418 | 709.402847 | 11 |
| 3 | ***690.375578*** | 345.691427 | 673.349029 | 337.178153 | | | Q | 1322.724919 | 661.866098 | 1305.698370 | 653.352823 | 1304.714354 | 652.860815 | 10 |
| 4 | ***819.418171*** | 410.212724 | 802.391622 | 401.699449 | 801.407606 | 401.207441 | E | 883.499593 | 442.253434 | 866.473044 | 433.740160 | 865.489028 | 433.248152 | 9 |
| 5 | ***890.455285*** | **445.731281** | 873.428736 | 437.218006 | 872.444720 | 436.725998 | A | 754.457000 | 377.732138 | 737.430451 | 369.218863 | | | 8 |
| 6 | 1003.539349 | 502.273313 | 986.512800 | 493.760038 | 985.528784 | 493.268030 | L | ***683.419886*** | 342.213581 | 666.393337 | 333.700306 | | | 7 |
| 7 | ***1060.560813*** | **530.784045** | 1043.534264 | 522.270770 | 1042.550248 | 521.778762 | G | ***570.335822*** | 285.671549 | 553.309273 | 277.158274 | | | 6 |
| 8 | ***1173.644877*** | 587.326077 | 1156.618328 | 578.812802 | 1155.634312 | 578.320794 | L | ***513.314358*** | 257.160817 | 496.287809 | 248.647542 | | | 5 |
| 9 | 1270.697641 | 635.852459 | 1253.671092 | 627.339184 | 1252.687076 | 626.847176 | P | ***400.230294*** | 200.618785 | 383.203745 | 192.105510 | | | 4 |
| 10 | 1341.734755 | 671.371016 | 1324.708206 | 662.857741 | 1323.724190 | 662.365733 | A | ***303.177530*** | 152.092403 | 286.150981 | 143.579128 | | | 3 |
| 11 | 1398.756219 | 699.881747 | 1381.729670 | 691.368473 | 1380.745654 | 690.876465 | G | 232.140416 | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of HLQEALGLPAGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.8 | 1571.860596 | 0.000306 | HLQEALGLPAGR |
| 1.6 | 1571.857224 | 0.003678 | VNWLGSKEGLRWK |
| 0.8 | 1571.863098 | -0.002196 | TQGLINGALNKTTNK |

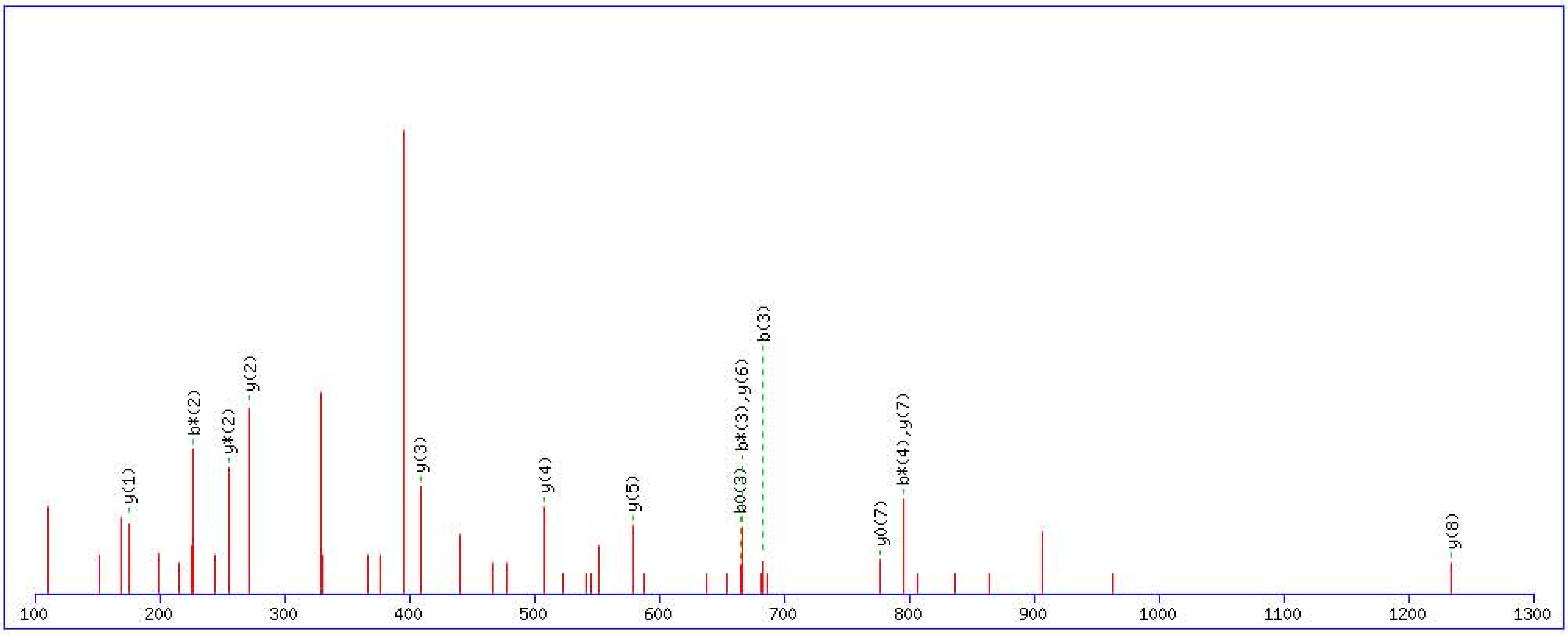
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NEQESAVHPR**
Found in **DBNL_HUMAN**, Drebrin-like protein OS=Homo sapiens GN=DBNL PE=1 SV=1

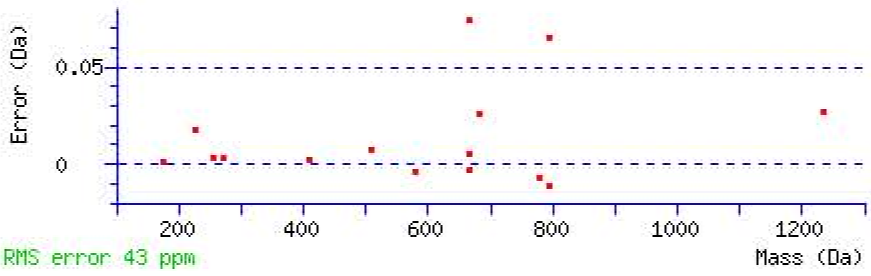
Match to Query 33212: 1476.719592 from(493.247140,3+) rtinseconds(1312) index(48324)
Title: Locus:1.1.1.1072.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

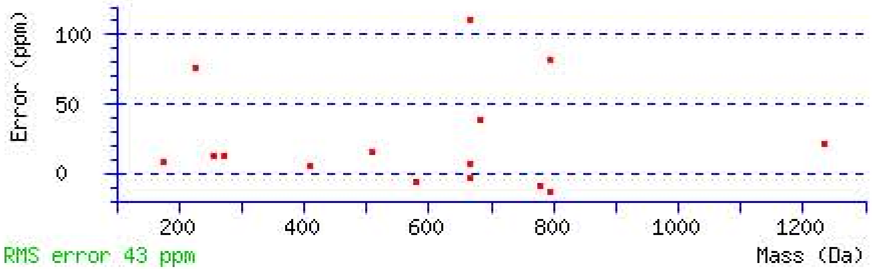
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1476.714325
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.0002
Matches : 15/96 fragment ions using 26 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 10 |
| 2 | 244.092796 | 122.550036 | 227.066247 | 114.036762 | 226.082231 | 113.544754 | E | 1363.678696 | 682.342986 | 1346.652147 | 673.829712 | 1345.668131 | 673.337704 | 9 |
| 3 | 683.318122 | 342.162699 | 666.291573 | 333.649425 | 665.307557 | 333.157417 | Q | ***1234.636103*** | 617.821690 | 1217.609554 | 609.308415 | 1216.625538 | 608.816407 | 8 |
| 4 | 812.360715 | 406.683996 | 795.334166 | 398.170721 | 794.350150 | 397.678713 | E | ***795.410777*** | 398.209027 | 778.384228 | 389.695752 | 777.400212 | 389.203744 | 7 |
| 5 | 899.392743 | 450.200010 | 882.366194 | 441.686735 | 881.382178 | 441.194727 | S | ***666.368184*** | 333.687730 | 649.341635 | 325.174456 | 648.357619 | 324.682448 | 6 |
| 6 | 970.429857 | 485.718567 | 953.403308 | 477.205292 | 952.419292 | 476.713284 | A | ***579.336156*** | 290.171716 | 562.309607 | 281.658442 | | | 5 |
| 7 | 1069.498271 | 535.252774 | 1052.471722 | 526.739499 | 1051.487706 | 526.247491 | V | ***508.299042*** | 254.653159 | 491.272493 | 246.139884 | | | 4 |
| 8 | 1206.557183 | 603.782230 | 1189.530634 | 595.268955 | 1188.546618 | 594.776947 | H | ***409.230628*** | 205.118952 | 392.204079 | 196.605677 | | | 3 |
| 9 | 1303.609947 | 652.308612 | 1286.583398 | 643.795337 | 1285.599382 | 643.303329 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of NEQESAVHPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.3 | 1476.714325 | 0.005267 | NEQESAVHPR |
| 0.9 | 1476.712982 | 0.006610 | DQDAIETDAMIKK |

**Mascot:** http://www.matrixscience.com/

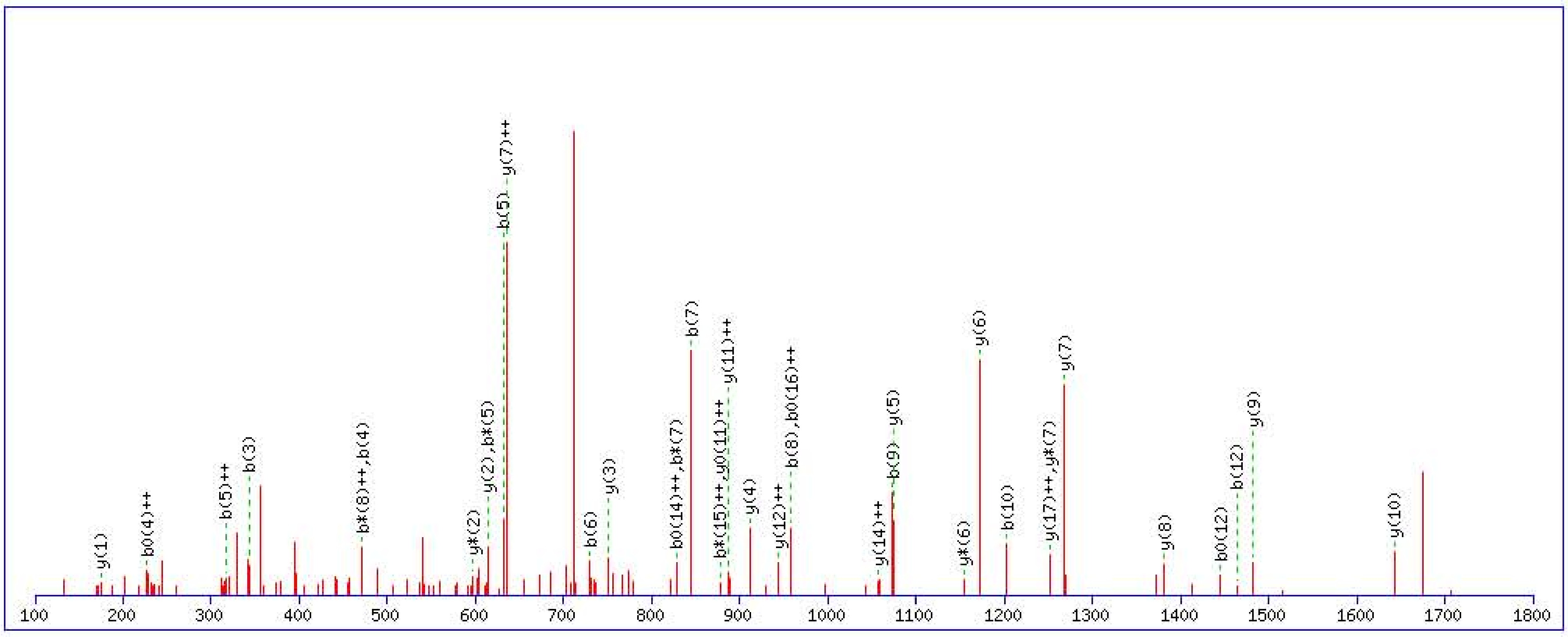
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RGEQCVDIDECTIPPYCHQR**
Found in **FBLN3_HUMAN**, EGF-containing fibulin-like extracellular matrix protein 1 OS=Homo sapiens GN=EFEMP1 PE=1 SV=2

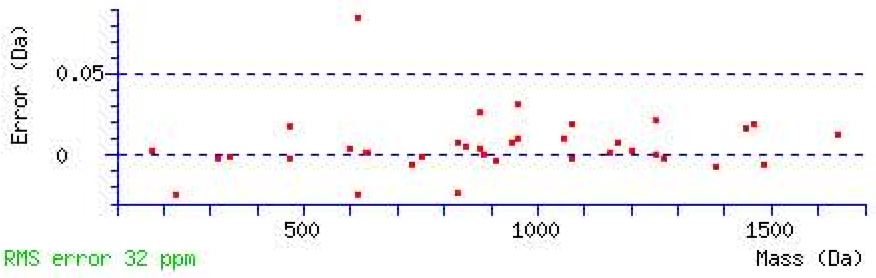
Match to Query 59972: 2843.261736 from(711.822710,4+) rtinseconds(1760) index(34832)
Title: Locus:1.1.1.3032.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

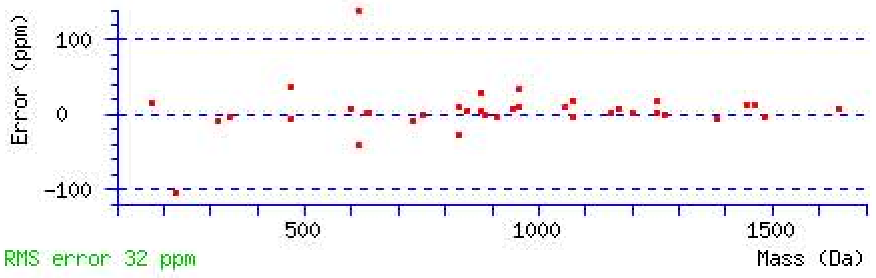
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2843.261169
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q19     : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 1.1e-005
Matches : 37/208 fragment ions using 67 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 |  |  | R |  |  |  |  |  |  | 20 |
| 2 | 214.129851 | 107.568564 | 197.103302 | 99.055289 |  |  | G | 2688.167329 | 1344.587302 | 2671.140780 | 1336.074028 | 2670.156764 | 1335.582020 | 19 |
| 3 | ***343.172444*** | 172.089860 | 326.145895 | 163.576585 | 325.161879 | 163.084577 | E | 2631.145865 | 1316.076570 | 2614.119316 | 1307.563296 | 2613.135300 | 1307.071288 | 18 |
| 4 | ***471.231022*** | 236.119149 | 454.204473 | 227.605875 | 453.220457 | 227.113867 | Q | 2502.103272 | 1251.555274 | 2485.076723 | 1243.041999 | 2484.092707 | 1242.549991 | 17 |
| 5 | ***631.261671*** | 316.134474 | 614.235122 | 307.621199 | 613.251106 | 307.129191 | C | 2374.044694 | 1187.525985 | 2357.018145 | 1179.012710 | 2356.034129 | 1178.520702 | 16 |
| 6 | ***730.330085*** | 365.668681 | 713.303536 | 357.155406 | 712.319520 | 356.663398 | V | 2214.014045 | 1107.510660 | 2196.987496 | 1098.997386 | 2196.003480 | 1098.505378 | 15 |
| 7 | ***845.357028*** | 423.182152 | 828.330479 | 414.668878 | 827.346463 | 414.176870 | D | 2114.945631 | 1057.976453 | 2097.919082 | 1049.463179 | 2096.935066 | 1048.971171 | 14 |
| 8 | ***958.441092*** | 479.724184 | 941.414543 | 471.210910 | 940.430527 | 470.718902 | I | 1999.918688 | 1000.462982 | 1982.892139 | 991.949708 | 1981.908123 | 991.457700 | 13 |
| 9 | ***1073.468035*** | 537.237656 | 1056.441486 | 528.724381 | 1055.457470 | 528.232373 | D | 1886.834624 | 943.920950 | 1869.808075 | 935.407676 | 1868.824059 | 934.915668 | 12 |
| 10 | ***1202.510628*** | 601.758952 | 1185.484079 | 593.245678 | 1184.500063 | 592.753670 | E | 1771.807681 | 886.407479 | 1754.781132 | 877.894204 | 1753.797116 | 877.402196 | 11 |
| 11 | 1362.541277 | 681.774277 | 1345.514728 | 673.261002 | 1344.530712 | 672.768994 | C | ***1642.765088*** | 821.886182 | 1625.738539 | 813.372908 | 1624.754523 | 812.880900 | 10 |
| 12 | ***1463.588956*** | 732.298116 | 1446.562407 | 723.784842 | 1445.578391 | 723.292834 | T | ***1482.734439*** | 741.870858 | 1465.707890 | 733.357583 | 1464.723874 | 732.865575 | 9 |
| 13 | 1576.673020 | 788.840148 | 1559.646471 | 780.326874 | 1558.662455 | 779.834866 | I | ***1381.686760*** | 691.347018 | 1364.660211 | 682.833744 |  |  | 8 |
| 14 | 1673.725784 | 837.366530 | 1656.699235 | 828.853256 | 1655.715219 | 828.361248 | P | ***1268.602696*** | 634.804986 | 1251.576147 | 626.291712 |  |  | 7 |
| 15 | 1770.778548 | 885.892912 | 1753.751999 | 877.379638 | 1752.767983 | 876.887630 | P | ***1171.549932*** | 586.278604 | 1154.523383 | 577.765330 |  |  | 6 |
| 16 | 1933.841877 | 967.424577 | 1916.815328 | 958.911302 | 1915.831312 | 958.419294 | Y | ***1074.497168*** | 537.752222 | 1057.470619 | 529.238948 |  |  | 5 |
| 17 | 2093.872526 | 1047.439901 | 2076.845977 | 1038.926626 | 2075.861961 | 1038.434618 | C | ***911.433839*** | 456.220558 | 894.407290 | 447.707283 |  |  | 4 |
| 18 | 2230.931438 | 1115.969357 | 2213.904889 | 1107.456082 | 2212.920873 | 1106.964074 | H | ***751.403190*** | 376.205233 | 734.376641 | 367.691959 |  |  | 3 |
| 19 | 2670.156764 | 1335.582020 | 2653.130215 | 1327.068746 | 2652.146199 | 1326.576738 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 |  |  | 2 |
| 20 |  |  |  |  |  |  | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 |  |  | 1 |





NCBI **BLAST** search of RGEQCVDIDECTIPPYCHQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.5 | 2843.261169 | 0.000567 | RGEQCVDIDECTIPPYCHQR |

**Mascot:** http://www.matrixscience.com/

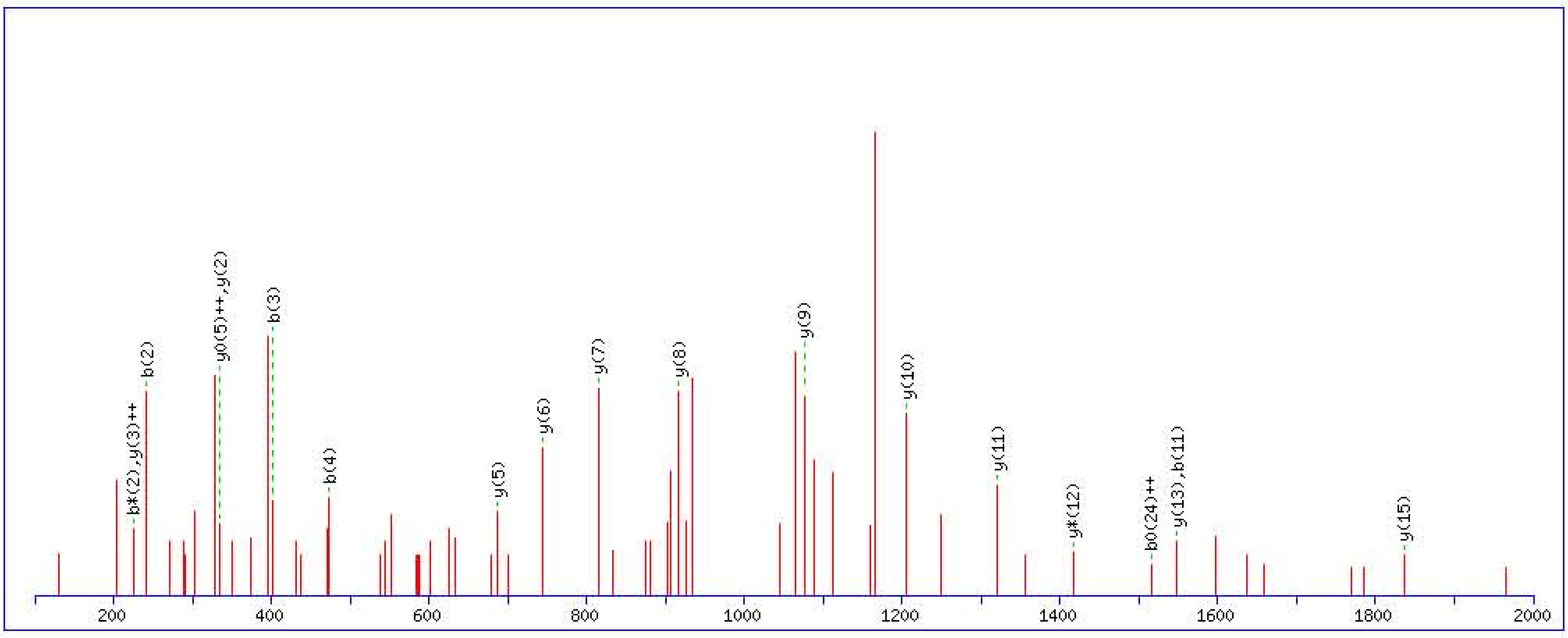
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IQCAAGYEQSEHNVCQDIDECTAGTHNCR**
Found in **FBLN3_HUMAN**, EGF-containing fibulin-like extracellular matrix protein 1 OS=Homo sapiens GN=EFEMP1 PE=1 SV=2

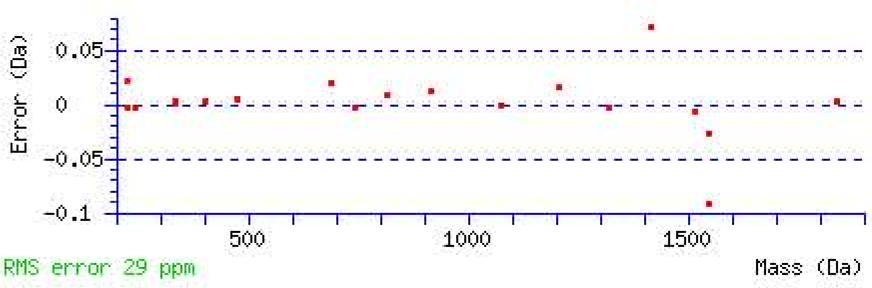
Match to Query 68555: 3733.547456 from(934.394140,4+) rtinseconds(1738) index(34682)
Title: Locus:1.1.1.3024.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

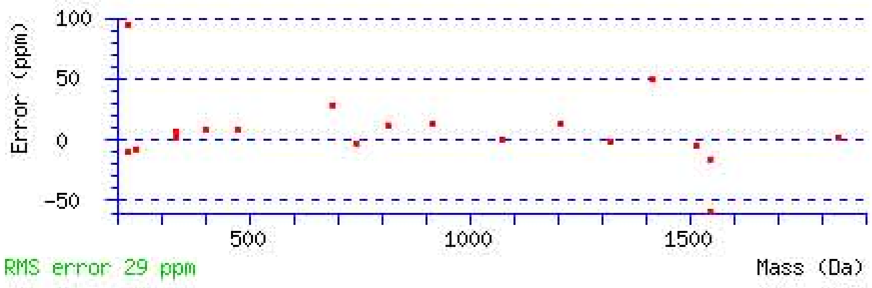
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3733.543625
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.0014
Matches : 19/312 fragment ions using 43 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 29 |
| 2 | **242.149918** | 121.578597 | 225.123369 | 113.065323 | | | Q | 3621.466836 | 1811.237056 | 3604.440287 | 1802.723781 | 3603.456271 | 1802.231773 | 28 |
| 3 | **402.180567** | 201.593922 | 385.154018 | 193.080647 | | | C | 3493.408258 | 1747.207767 | 3476.381709 | 1738.694492 | 3475.397693 | 1738.202484 | 27 |
| 4 | **473.217681** | 237.112479 | 456.191132 | 228.599204 | | | A | 3333.377609 | 1667.192442 | 3316.351060 | 1658.679168 | 3315.367044 | 1658.187160 | 26 |
| 5 | 544.254795 | 272.631036 | 527.228246 | 264.117761 | | | A | 3262.340495 | 1631.673885 | 3245.313946 | 1623.160611 | 3244.329930 | 1622.668603 | 25 |
| 6 | 601.276259 | 301.141768 | 584.249710 | 292.628493 | | | G | 3191.303381 | 1596.155328 | 3174.276832 | 1587.642054 | 3173.292816 | 1587.150046 | 24 |
| 7 | 764.339588 | 382.673432 | 747.313039 | 374.160158 | | | Y | 3134.281917 | 1567.644596 | 3117.255368 | 1559.131322 | 3116.271352 | 1558.639314 | 23 |
| 8 | 893.382181 | 447.194729 | 876.355632 | 438.681454 | 875.371616 | 438.189446 | E | 2971.218588 | 1486.112932 | 2954.192039 | 1477.599657 | 2953.208023 | 1477.107649 | 22 |
| 9 | 1332.607507 | 666.807391 | 1315.580958 | 658.294117 | 1314.596942 | 657.802109 | Q | 2842.175995 | 1421.591635 | 2825.149446 | 1413.078361 | 2824.165430 | 1412.586353 | 21 |
| 10 | 1419.639535 | 710.323406 | 1402.612986 | 701.810131 | 1401.628970 | 701.318123 | S | 2402.950669 | 1201.978972 | 2385.924120 | 1193.465698 | 2384.940104 | 1192.973690 | 20 |
| 11 | **1548.682128** | 774.844702 | 1531.655579 | 766.331428 | 1530.671563 | 765.839420 | E | 2315.918641 | 1158.462958 | 2298.892092 | 1149.949684 | 2297.908076 | 1149.457676 | 19 |
| 12 | 1685.741040 | 843.374158 | 1668.714491 | 834.860884 | 1667.730475 | 834.368876 | H | 2186.876048 | 1093.941662 | 2169.849499 | 1085.428387 | 2168.865483 | 1084.936379 | 18 |
| 13 | 1799.783967 | 900.395622 | 1782.757418 | 891.882347 | 1781.773402 | 891.390339 | N | 2049.817136 | 1025.412206 | 2032.790587 | 1016.898931 | 2031.806571 | 1016.406923 | 17 |
| 14 | 1898.852381 | 949.929829 | 1881.825832 | 941.416554 | 1880.841816 | 940.924546 | V | 1935.774209 | 968.390742 | 1918.747660 | 959.877468 | 1917.763644 | 959.385460 | 16 |
| 15 | 2058.883030 | 1029.945153 | 2041.856481 | 1021.431879 | 2040.872465 | 1020.939871 | C | ***1836.705795*** | 918.856535 | 1819.679246 | 910.343261 | 1818.695230 | 909.851253 | 15 |
| 16 | 2186.941608 | 1093.974442 | 2169.915059 | 1085.461167 | 2168.931043 | 1084.969159 | Q | 1676.675146 | 838.841211 | 1659.648597 | 830.327936 | 1658.664581 | 829.835928 | 14 |
| 17 | 2301.968551 | 1151.487913 | 2284.942002 | 1142.974639 | 2283.957986 | 1142.482631 | D | ***1548.616568*** | 774.811922 | 1531.590019 | 766.298647 | 1530.606003 | 765.806639 | 13 |
| 18 | 2415.052615 | 1208.029945 | 2398.026066 | 1199.516671 | 2397.042050 | 1199.024663 | I | 1433.589625 | 717.298450 | 1416.563076 | 708.785176 | 1415.579060 | 708.293168 | 12 |
| 19 | 2530.079558 | 1265.543417 | 2513.053009 | 1257.030142 | 2512.068993 | 1256.538134 | D | ***1320.505561*** | 660.756418 | 1303.479012 | 652.243144 | 1302.494996 | 651.751136 | 11 |
| 20 | 2659.122151 | 1330.064713 | 2642.095602 | 1321.551439 | 2641.111586 | 1321.059431 | E | ***1205.478618*** | 603.242947 | 1188.452069 | 594.729672 | 1187.468053 | 594.237664 | 10 |
| 21 | 2819.152800 | 1410.080038 | 2802.126251 | 1401.566763 | 2801.142235 | 1401.074755 | C | ***1076.436025*** | 538.721650 | 1059.409476 | 530.208376 | 1058.425460 | 529.716368 | 9 |
| 22 | 2920.200479 | 1460.603877 | 2903.173930 | 1452.090603 | 2902.189914 | 1451.598595 | T | ***916.405376*** | 458.706326 | 899.378827 | 450.193051 | 898.394811 | 449.701043 | 8 |
| 23 | 2991.237593 | 1496.122434 | 2974.211044 | 1487.609160 | 2973.227028 | 1487.117152 | A | ***815.357697*** | 408.182486 | 798.331148 | 399.669212 | 797.347132 | 399.177204 | 7 |
| 24 | 3048.259057 | 1524.633166 | 3031.232508 | 1516.119892 | 3030.248492 | 1515.627884 | G | ***744.320583*** | 372.663929 | 727.294034 | 364.150655 | 726.310018 | 363.658647 | 6 |
| 25 | 3149.306736 | 1575.157006 | 3132.280187 | 1566.643731 | 3131.296171 | 1566.151723 | T | ***687.299119*** | 344.153197 | 670.272570 | 335.639923 | 669.288554 | 335.147915 | 5 |
| 26 | 3286.365648 | 1643.686462 | 3269.339099 | 1635.173187 | 3268.355083 | 1634.681179 | H | 586.251440 | 293.629358 | 569.224891 | 285.116083 | | | 4 |
| 27 | 3400.408575 | 1700.707925 | 3383.382026 | 1692.194651 | 3382.398010 | 1691.702643 | N | 449.192528 | 225.099902 | 432.165979 | 216.586627 | | | 3 |
| 28 | 3560.439224 | 1780.723250 | 3543.412675 | 1772.209975 | 3542.428659 | 1771.717967 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 29 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of IQCAAGYEQSEHNVCQDIDECTAGTHNCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.2 | 3733.543625 | 0.003831 | IQCAAGYEQSEHNVCQDIDECTAGTHNCR |
| 23.2 | 3733.543625 | 0.003831 | IQCAAGYEQSEHNVCQDIDECTAGTHNCR |
| 22.1 | 3733.543625 | 0.003831 | IQCAAGYEQSEHNVCQDIDECTAGTHNCR |

**Mascot:** http://www.matrixscience.com/

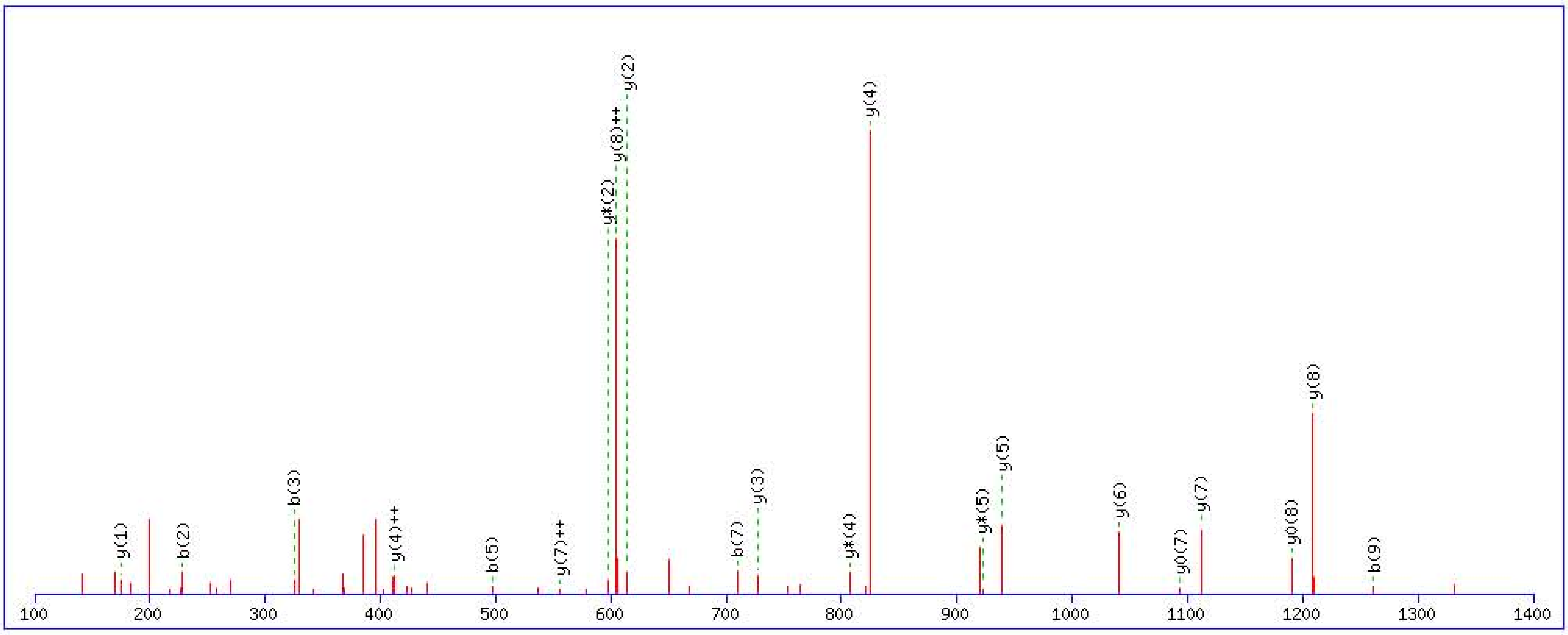
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NLPATDPLQR**
Found in **ECM1_HUMAN**, Extracellular matrix protein 1 OS=Homo sapiens GN=ECM1 PE=1 SV=2

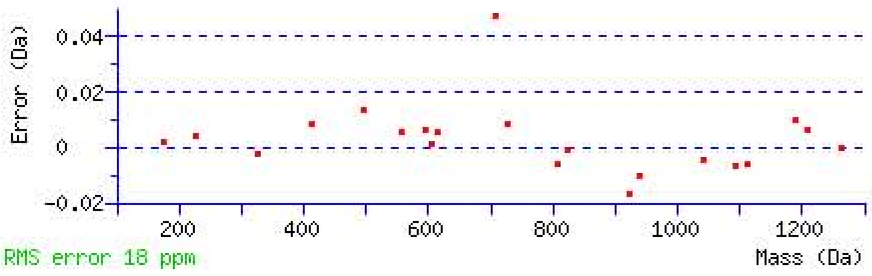
Match to Query 32096: 1434.769908 from(718.392230,2+) rtinseconds(1979) index(5751)
Title: Locus:1.1.1.1498.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

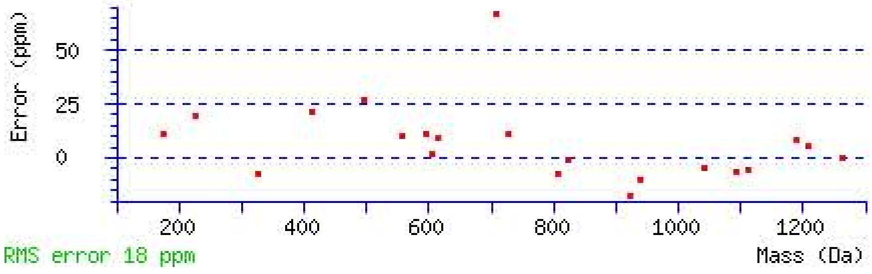
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1434.765305
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.00044
Matches : 21/92 fragment ions using 43 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 10 |
| 2 | **228.134267** | 114.570771 | 211.107718 | 106.057497 | | | L | 1321.729670 | 661.368473 | 1304.703121 | 652.855199 | 1303.719105 | 652.363190 | 9 |
| 3 | **325.187031** | 163.097153 | 308.160482 | 154.583879 | | | P | ***1208.645606*** | 604.826441 | 1191.619057 | 596.313166 | 1190.635041 | 595.821158 | 8 |
| 4 | 396.224145 | 198.615710 | 379.197596 | 190.102436 | | | A | ***1111.592842*** | 556.300059 | 1094.566293 | 547.786784 | 1093.582277 | 547.294776 | 7 |
| 5 | **497.271824** | 249.139550 | 480.245275 | 240.626275 | 479.261259 | 240.134267 | T | ***1040.555728*** | 520.781502 | 1023.529179 | 512.268227 | 1022.545163 | 511.776220 | 6 |
| 6 | 612.298767 | 306.653022 | 595.272218 | 298.139747 | 594.288202 | 297.647739 | D | ***939.508049*** | 470.257662 | 922.481500 | 461.744388 | 921.497484 | 461.252380 | 5 |
| 7 | **709.351531** | 355.179404 | 692.324982 | 346.666129 | 691.340966 | 346.174121 | P | ***824.481106*** | 412.744191 | 807.454557 | 404.230916 | | | 4 |
| 8 | 822.435595 | 411.721436 | 805.409046 | 403.208161 | 804.425030 | 402.716153 | L | ***727.428342*** | 364.217809 | 710.401793 | 355.704534 | | | 3 |
| 9 | **1261.660921** | 631.334098 | 1244.634372 | 622.820824 | 1243.650356 | 622.328816 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162502 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of NLPATDPLQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.1 | 1434.765305 | 0.004603 | NLPATDPLQR |
| 7.8 | 1434.757889 | 0.012019 | NLIRQISSGEYR |
| 4.2 | 1434.757919 | 0.011989 | VQQAELHTGSLPR |
| 0.5 | 1434.754074 | 0.015834 | VKPFMTGAAEQIK |

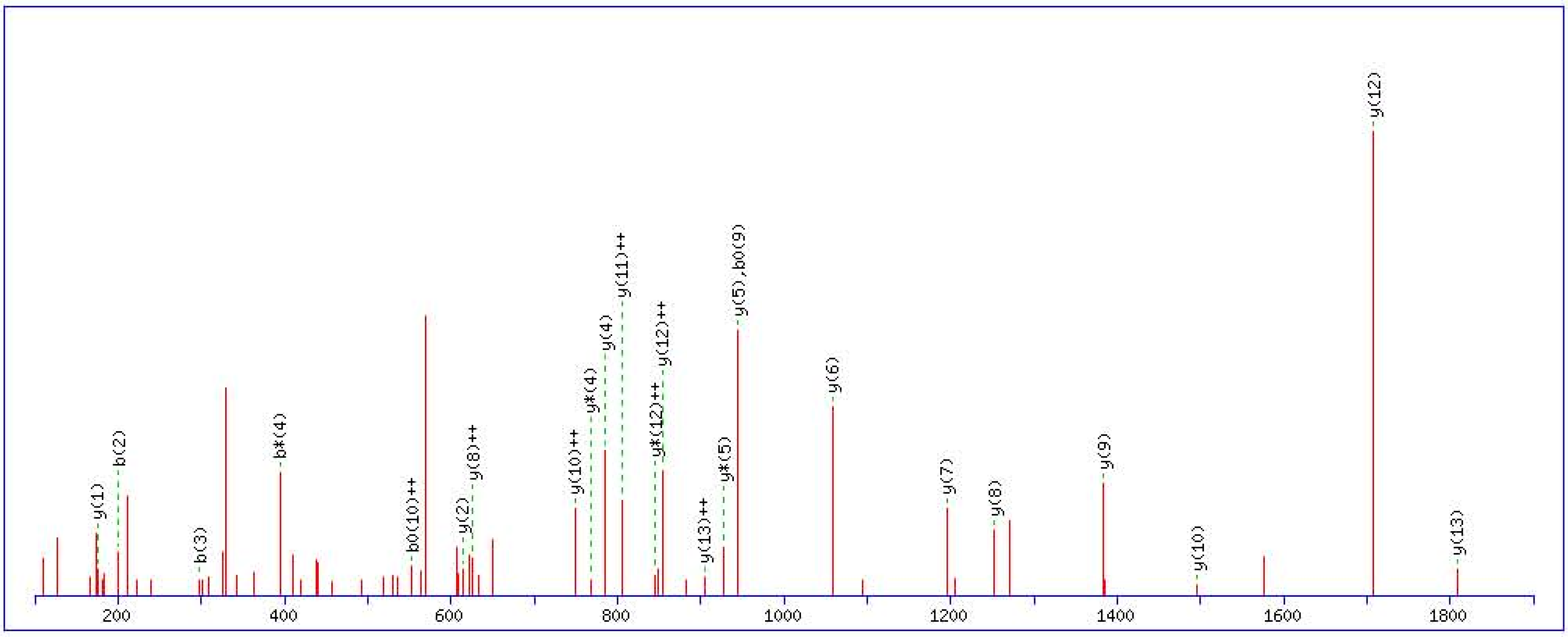
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VTPNLMGHLCGNQR**
Found in **ECM1_HUMAN**, Extracellular matrix protein 1 OS=Homo sapiens GN=ECM1 PE=1 SV=2

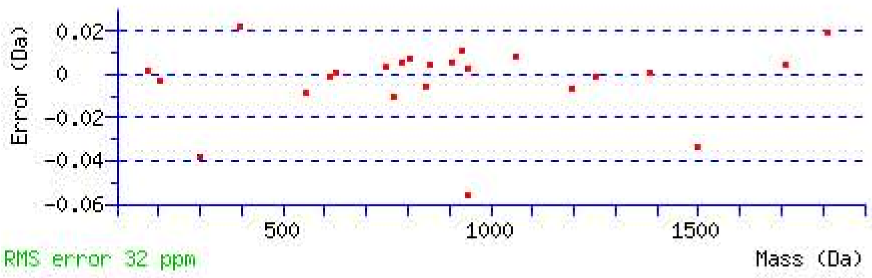
Match to Query 44693: 1906.928322 from(636.650050,3+) rtinseconds(1892) index(35592)
Title: Locus:1.1.1.3078.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

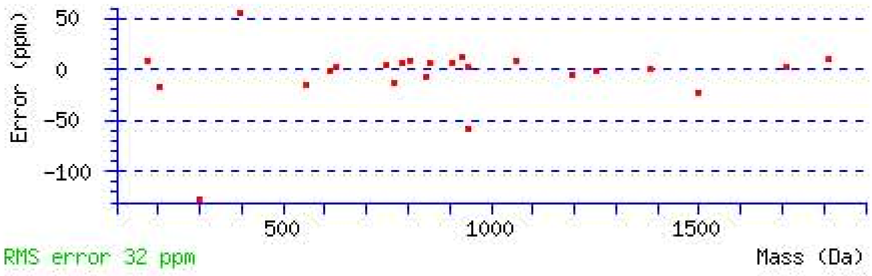
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1906.932816
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 53  Expect: 0.00011
Matches : 24/124 fragment ions using 56 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 14 |
| 2 | **201.123369** | 101.065322 | | | 183.112804 | 92.060040 | T | ***1808.871677*** | 904.939477 | 1791.845128 | 896.426202 | 1790.861112 | 895.934194 | 13 |
| 3 | **298.176133** | 149.591704 | | | 280.165568 | 140.586422 | P | ***1707.823998*** | 854.415637 | 1690.797449 | 845.902363 | | | 12 |
| 4 | 412.219060 | 206.613168 | 395.192511 | 198.099894 | 394.208495 | 197.607886 | N | 1610.771234 | 805.889255 | 1593.744685 | 797.375981 | | | 11 |
| 5 | 525.303124 | 263.155200 | 508.276575 | 254.641926 | 507.292559 | 254.149918 | L | ***1496.728307*** | 748.867792 | 1479.701758 | 740.354517 | | | 10 |
| 6 | 656.343609 | 328.675443 | 639.317060 | 320.162168 | 638.333044 | 319.670160 | M | ***1383.644243*** | 692.325760 | 1366.617694 | 683.812485 | | | 9 |
| 7 | 713.365073 | 357.186175 | 696.338524 | 348.672900 | 695.354508 | 348.180892 | G | ***1252.603758*** | 626.805517 | 1235.577209 | 618.292243 | | | 8 |
| 8 | 850.423985 | 425.715631 | 833.397436 | 417.202356 | 832.413420 | 416.710348 | H | ***1195.582294*** | 598.294785 | 1178.555745 | 589.781511 | | | 7 |
| 9 | 963.508049 | 482.257663 | 946.481500 | 473.744388 | 945.497484 | 473.252380 | L | ***1058.523382*** | 529.765329 | 1041.496833 | 521.252055 | | | 6 |
| 10 | 1123.538698 | 562.272987 | 1106.512149 | 553.759713 | 1105.528133 | 553.267705 | C | ***945.439318*** | 473.223297 | 928.412769 | 464.710023 | | | 5 |
| 11 | 1180.560162 | 590.783719 | 1163.533613 | 582.270445 | 1162.549597 | 581.778437 | G | ***785.408669*** | 393.207973 | 768.382120 | 384.694698 | | | 4 |
| 12 | 1294.603089 | 647.805183 | 1277.576540 | 639.291908 | 1276.592524 | 638.799900 | N | 728.387205 | 364.697241 | 711.360656 | 356.183966 | | | 3 |
| 13 | 1733.828415 | 867.417846 | 1716.801866 | 858.904571 | 1715.817850 | 858.412563 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 14 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VTPNLMGHLCGNQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.9 | 1906.932816 | -0.004494 | VTPNLMGHLCGNQR |

**Mascot:** http://www.matrixscience.com/

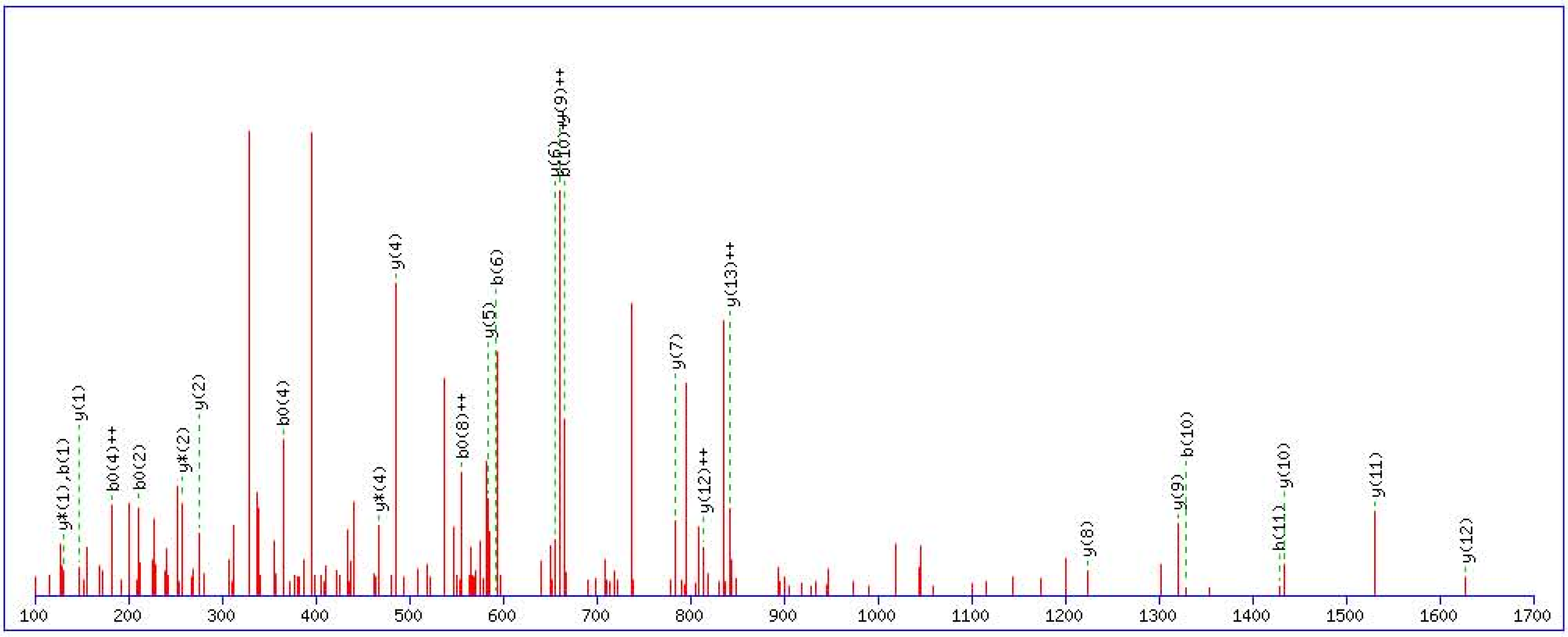
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EVGPPLPQEAVPLQK**
Found in **ECM1_HUMAN**, Extracellular matrix protein 1 OS=Homo sapiens GN=ECM1 PE=1 SV=2

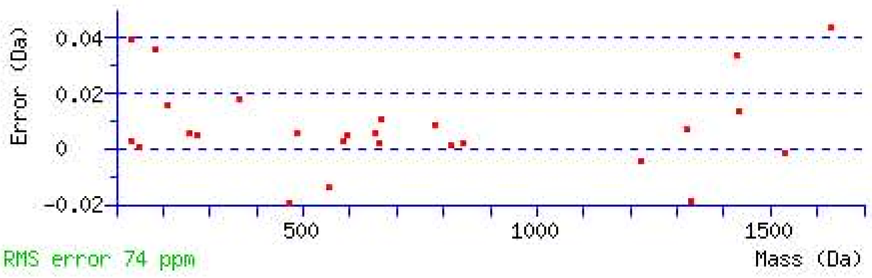
Match to Query 44850: 1912.053552 from(638.358460,3+) rtinseconds(2213) index(7086)
Title: Locus:1.1.1.1580.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

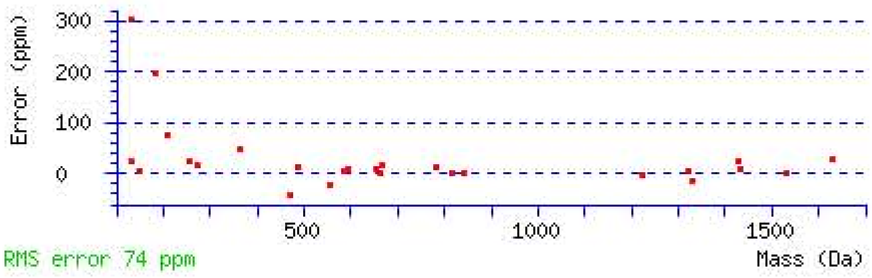
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1912.049194
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q8 : Biotin:Thermo-21345 (Q)
**Ions Score:** 34 **Expect:** 0.0064
**Matches :** 26/142 fragment ions using 82 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **130.049869** | 65.528572 | | | 112.039304 | 56.523290 | **E** | | | | | | | **15** |
| **2** | 229.118283 | 115.062780 | | | 211.107718 | 106.057497 | **V** | 1784.013891 | 892.510583 | 1766.987342 | 883.997309 | 1766.003326 | 883.505301 | **14** |
| **3** | 286.139747 | 143.573512 | | | 268.129182 | 134.568229 | **G** | 1684.945477 | 842.976377 | 1667.918928 | 834.463102 | 1666.934912 | 833.971094 | **13** |
| **4** | 383.192511 | 192.099894 | | | 365.181946 | 183.094611 | **P** | ***1627.924013*** | 814.465645 | 1610.897464 | 805.952370 | 1609.913448 | 805.460362 | **12** |
| **5** | 480.245275 | 240.626276 | | | 462.234710 | 231.620993 | **P** | ***1530.871249*** | 765.939263 | 1513.844700 | 757.425988 | 1512.860684 | 756.933980 | **11** |
| **6** | **593.329339** | 297.168308 | | | 575.318774 | 288.163025 | **L** | ***1433.818485*** | 717.412881 | 1416.791936 | 708.899606 | 1415.807920 | 708.407598 | **10** |
| **7** | 690.382103 | 345.694690 | | | 672.371538 | 336.689407 | **P** | ***1320.734421*** | 660.870848 | 1303.707872 | 652.357574 | 1302.723856 | 651.865566 | **9** |
| **8** | 1129.607429 | 565.307353 | 1112.580880 | 556.794078 | 1111.596864 | 556.302070 | **Q** | ***1223.681657*** | 612.344466 | 1206.655108 | 603.831192 | 1205.671092 | 603.339184 | **8** |
| **9** | 1258.650022 | 629.828649 | 1241.623473 | 621.315375 | 1240.639457 | 620.823367 | **E** | ***784.456331*** | 392.731803 | 767.429782 | 384.218529 | 766.445766 | 383.726521 | **7** |
| **10** | **1329.687136** | 665.347206 | 1312.660587 | 656.833932 | 1311.676571 | 656.341924 | **A** | ***655.413738*** | 328.210507 | 638.387189 | 319.697232 | | | **6** |
| **11** | **1428.755550** | 714.881413 | 1411.729001 | 706.368139 | 1410.744985 | 705.876131 | **V** | ***584.376624*** | 292.691950 | 567.350075 | 284.178676 | | | **5** |
| **12** | 1525.808314 | 763.407795 | 1508.781765 | 754.894521 | 1507.797749 | 754.402513 | **P** | ***485.308210*** | 243.157743 | 468.281661 | 234.644468 | | | **4** |
| **13** | 1638.892378 | 819.949827 | 1621.865829 | 811.436553 | 1620.881813 | 810.944545 | **L** | 388.255446 | 194.631361 | 371.228897 | 186.118086 | | | **3** |
| **14** | 1766.950956 | 883.979116 | 1749.924407 | 875.465842 | 1748.940391 | 874.973833 | **Q** | ***275.171382*** | 138.089329 | 258.144833 | 129.576054 | | | **2** |
| **15** | | | | | | | **K** | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | **1** |





NCBI **BLAST** search of EVGPPLPQEAVPLQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

## All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 34.2 | 1912.049194 | 0.004358 | EVGPPLPQEAVPLQK |
| 21.6 | 1912.049194 | 0.004358 | EVGPPLPQEAVPLQK |

**Mascot:** http://www.matrixscience.com/

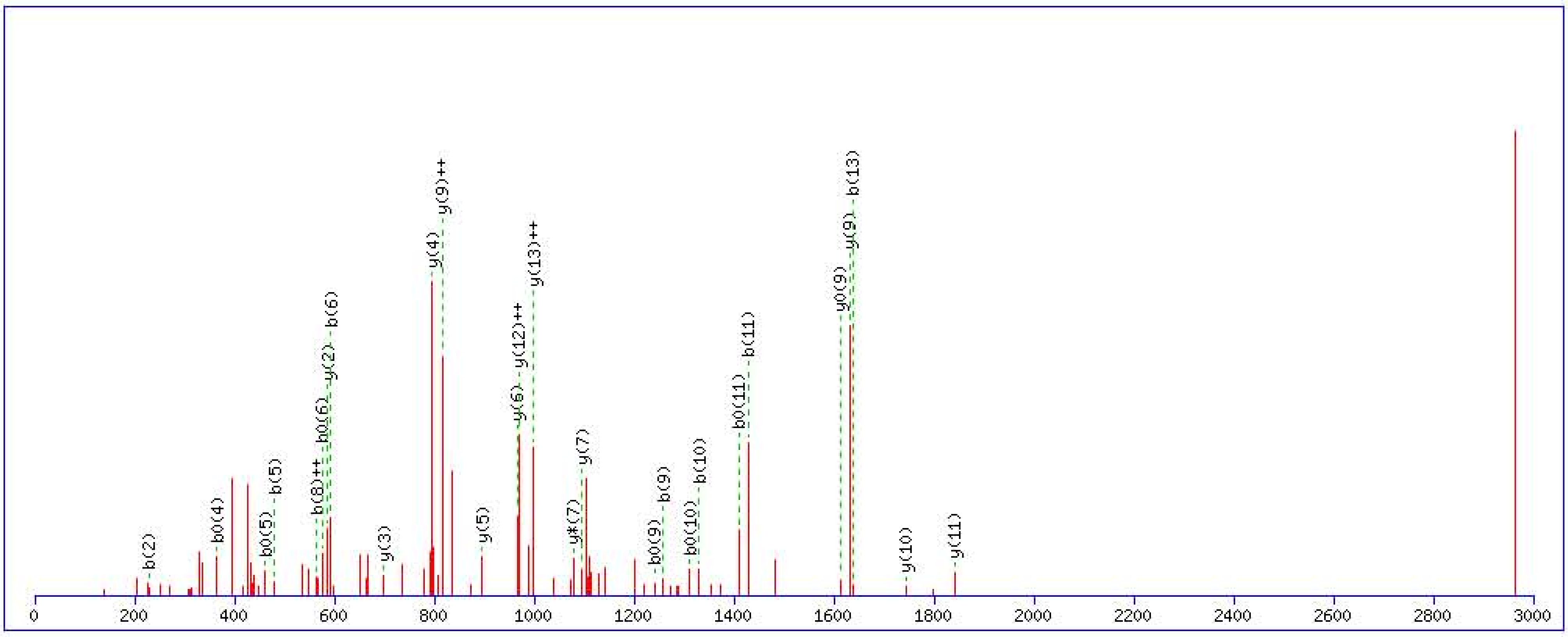
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EVGPPLPQEAVPLQK**
Found in **ECM1_HUMAN**, Extracellular matrix protein 1 OS=Homo sapiens GN=ECM1 PE=1 SV=2

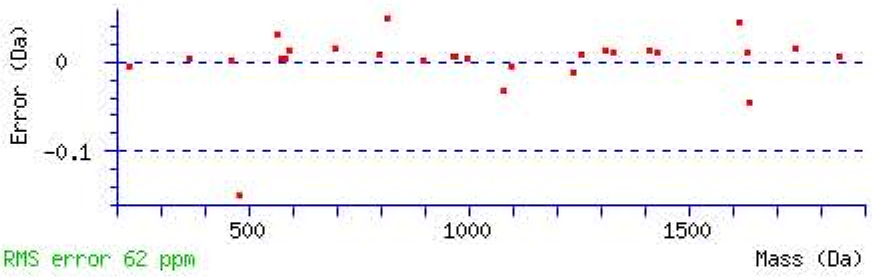
Match to Query 51543: 2223.225068 from(1112.619810,2+) rtinseconds(2442) index(24155)
Title: Locus:1.1.1.852.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

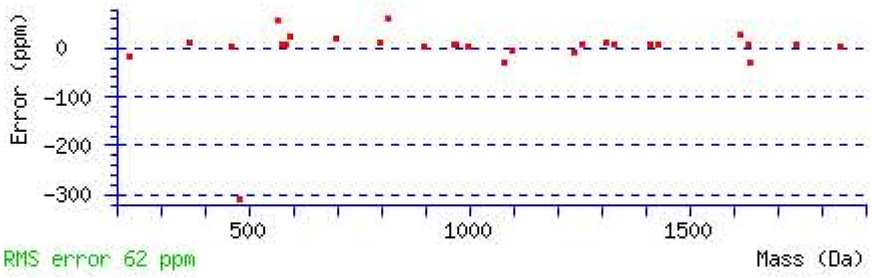
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2223.215942
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.0081
Matches : 28/142 fragment ions using 67 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 15 |
| 2 | **229.118283** | 115.062780 | | | 211.107718 | 106.057497 | V | 2095.180639 | 1048.093957 | 2078.154090 | 1039.580683 | 2077.170074 | 1039.088675 | 14 |
| 3 | 286.139747 | 143.573512 | | | 268.129182 | 134.568229 | G | 1996.112225 | 998.559751 | 1979.085676 | 990.046476 | 1978.101660 | 989.554468 | 13 |
| 4 | 383.192511 | 192.099894 | | | 365.181946 | 183.094611 | P | 1939.090761 | 970.049019 | 1922.064212 | 961.535744 | 1921.080196 | 961.043736 | 12 |
| 5 | **480.245275** | 240.626276 | | | 462.234710 | 231.620993 | P | ***1842.037997*** | 921.522637 | 1825.011448 | 913.009362 | 1824.027432 | 912.517354 | 11 |
| 6 | **593.329339** | 297.168308 | | | 575.318774 | 288.163025 | L | ***1744.985233*** | 872.996255 | 1727.958684 | 864.482980 | 1726.974668 | 863.990972 | 10 |
| 7 | 690.382103 | 345.694690 | | | 672.371538 | 336.689407 | P | ***1631.901169*** | 816.454223 | 1614.874620 | 807.940948 | 1613.890604 | 807.448940 | 9 |
| 8 | 1129.607429 | 565.307353 | 1112.580880 | 556.794078 | 1111.596864 | 556.302070 | Q | 1534.848405 | 767.927841 | 1517.821856 | 759.414566 | 1516.837840 | 758.922558 | 8 |
| 9 | **1258.650022** | 629.828649 | 1241.623473 | 621.315375 | 1240.639457 | 620.823367 | E | ***1095.623079*** | 548.315178 | 1078.596530 | 539.801903 | 1077.612514 | 539.309895 | 7 |
| 10 | **1329.687136** | 665.347206 | 1312.660587 | 656.833932 | 1311.676571 | 656.341924 | A | ***966.580486*** | 483.793881 | 949.553937 | 475.280607 | | | 6 |
| 11 | **1428.755550** | 714.881413 | 1411.729001 | 706.368139 | 1410.744985 | 705.876131 | V | ***895.543372*** | 448.275324 | 878.516823 | 439.762050 | | | 5 |
| 12 | 1525.808314 | 763.407795 | 1508.781765 | 754.894521 | 1507.797749 | 754.402513 | P | ***796.474958*** | 398.741117 | 779.448409 | 390.227843 | | | 4 |
| 13 | **1638.892378** | 819.949827 | 1621.865829 | 811.436553 | 1620.881813 | 810.944545 | L | ***699.422194*** | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 14 | 2078.117704 | 1039.562490 | 2061.091155 | 1031.049215 | 2060.107139 | 1030.557207 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 15 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EVGPPLPQEAVPLQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.6 | 2223.215942 | 0.009126 | EVGPPLPQEAVPLQK |

**Mascot:** http://www.matrixscience.com/

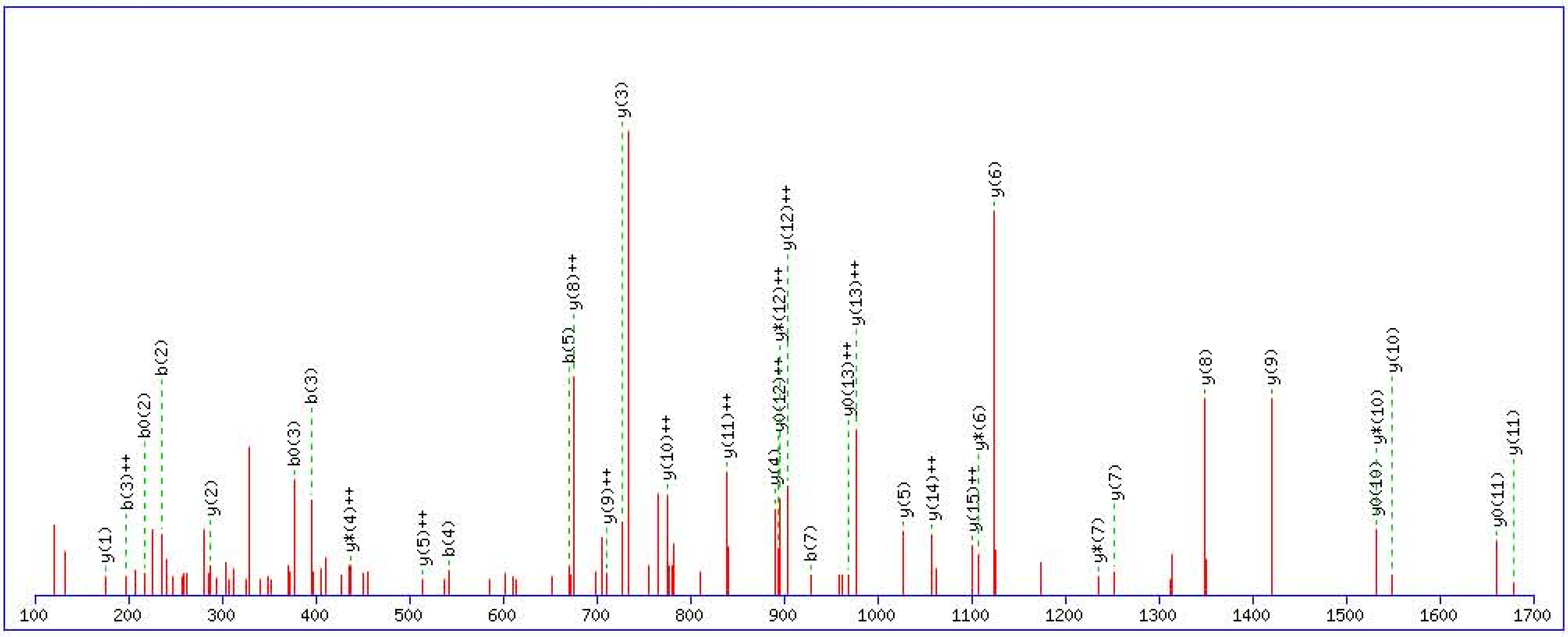
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **FSCFQEEAPQPHYQLR**
Found in **ECM1_HUMAN**, Extracellular matrix protein 1 OS=Homo sapiens GN=ECM1 PE=1 SV=2

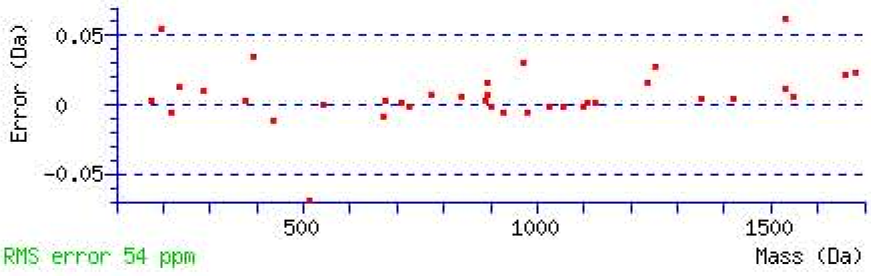
Match to Query 53728: 2347.088202 from(783.370010,3+) rtinseconds(1939) index(5537)
Title: Locus:1.1.1.1484.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

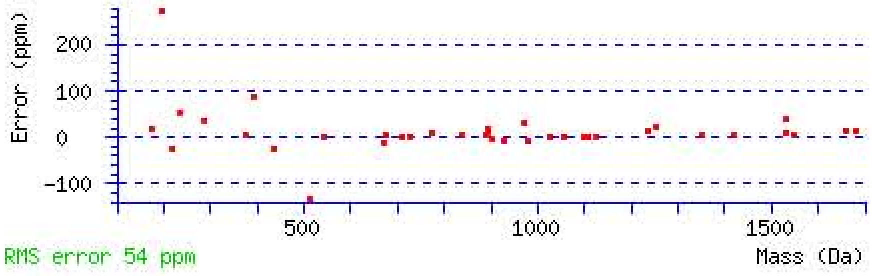
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2347.087784
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 9.8e-006
Matches : 37/152 fragment ions using 80 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 16 |
| 2 | **235.107718** | 118.057497 | | | 217.097153 | 109.052214 | S | 2201.026658 | 1101.016967 | 2184.000109 | 1092.503692 | 2183.016093 | 1092.011684 | 15 |
| 3 | **395.138367** | 198.072821 | | | 377.127802 | 189.067539 | C | 2113.994630 | 1057.500953 | 2096.968081 | 1048.987678 | 2095.984065 | 1048.495670 | 14 |
| 4 | **542.206781** | 271.607029 | | | 524.196216 | 262.601746 | F | 1953.963981 | 977.485629 | 1936.937432 | 968.972354 | 1935.953416 | 968.480346 | 13 |
| 5 | **670.265359** | 335.636318 | 653.238810 | 327.123043 | 652.254794 | 326.631035 | Q | 1806.895567 | 903.951422 | 1789.869018 | 895.438147 | 1788.885002 | 894.946139 | 12 |
| 6 | 799.307952 | 400.157614 | 782.281403 | 391.644340 | 781.297387 | 391.152332 | E | ***1678.836989*** | 839.922133 | 1661.810440 | 831.408858 | 1660.826424 | 830.916850 | 11 |
| 7 | **928.350545** | 464.678911 | 911.323996 | 456.165636 | 910.339980 | 455.673628 | E | ***1549.794396*** | 775.400836 | 1532.767847 | 766.887562 | 1531.783831 | 766.395554 | 10 |
| 8 | 999.387659 | 500.197468 | 982.361110 | 491.684193 | 981.377094 | 491.192185 | A | ***1420.751803*** | 710.879540 | 1403.725254 | 702.366265 | | | 9 |
| 9 | 1096.440423 | 548.723850 | 1079.413874 | 540.210575 | 1078.429858 | 539.718567 | P | ***1349.714689*** | 675.360983 | 1332.688140 | 666.847708 | | | 8 |
| 10 | 1224.499001 | 612.753138 | 1207.472452 | 604.239864 | 1206.488436 | 603.747856 | Q | ***1252.661925*** | 626.834601 | 1235.635376 | 618.321326 | | | 7 |
| 11 | 1321.551765 | 661.279520 | 1304.525216 | 652.766246 | 1303.541200 | 652.274238 | P | ***1124.603347*** | 562.805312 | 1107.576798 | 554.292037 | | | 6 |
| 12 | 1458.610677 | 729.808976 | 1441.584128 | 721.295702 | 1440.600112 | 720.803694 | H | ***1027.550583*** | 514.278930 | 1010.524034 | 505.765655 | | | 5 |
| 13 | 1621.674006 | 811.340641 | 1604.647457 | 802.827367 | 1603.663441 | 802.335358 | Y | ***890.491671*** | 445.749474 | 873.465122 | 437.236199 | | | 4 |
| 14 | 2060.899332 | 1030.953304 | 2043.872783 | 1022.440030 | 2042.888767 | 1021.948022 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 15 | 2173.983396 | 1087.495336 | 2156.956847 | 1078.982061 | 2155.972831 | 1078.490053 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 16 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FSCFQEEAPQPHYQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 53.9 | 2347.087784 | 0.000418 | FSCFQEEAPQPHYQLR |
| 26.8 | 2347.087784 | 0.000418 | FSCFQEEAPQPHYQLR |
| 0.5 | 2347.077271 | 0.010931 | RCPCCAVDTTQAPGKVWWR |
| 0.2 | 2347.087784 | 0.000418 | FSCFQEEAPQPHYQLR |

**Mascot:** http://www.matrixscience.com/

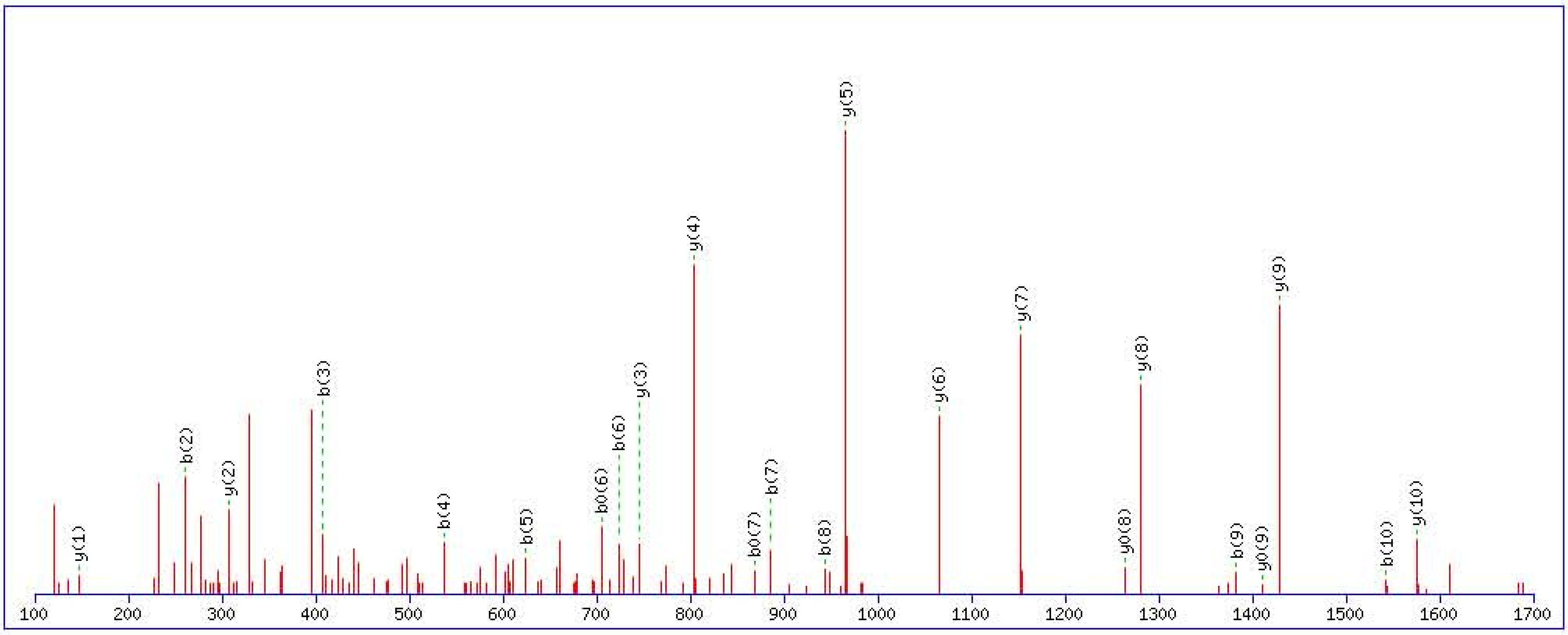
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IFFESVYGQCK**
Found in **FETUB_HUMAN**, Fetuin-B OS=Homo sapiens GN=FETUB PE=1 SV=2

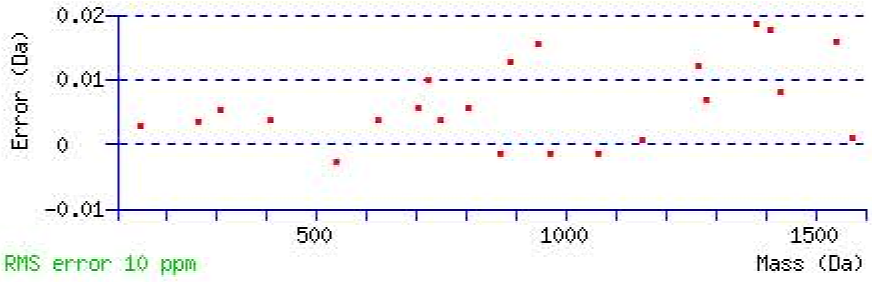
Match to Query 40215: 1687.814788 from(844.914670,2+) rtinseconds(2332) index(70692)
Title: Locus:1.1.1.1749.18 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

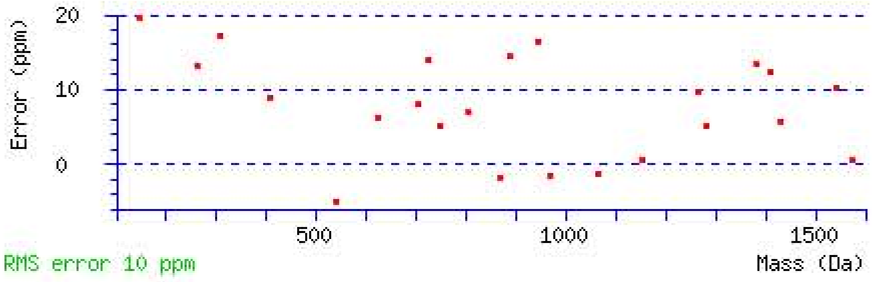
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1687.810226
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9     : Biotin:Thermo-21345 (Q)
Ions Score: 63  Expect: 1e-005
Matches : 23/86 fragment ions using 41 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 11 |
| 2 | **261.159754** | 131.083515 | | | | | F | ***1575.733435*** | 788.370356 | 1558.706886 | 779.857081 | 1557.722870 | 779.365073 | 10 |
| 3 | **408.228168** | 204.617722 | | | | | F | ***1428.665021*** | 714.836149 | 1411.638472 | 706.322874 | 1410.654456 | 705.830866 | 9 |
| 4 | **537.270761** | 269.139019 | | | 519.260196 | 260.133736 | E | ***1281.596607*** | 641.301942 | 1264.570058 | 632.788667 | 1263.586042 | 632.296659 | 8 |
| 5 | **624.302789** | 312.655033 | | | 606.292224 | 303.649750 | S | ***1152.554014*** | 576.780645 | 1135.527465 | 568.267371 | 1134.543449 | 567.775363 | 7 |
| 6 | **723.371203** | 362.189239 | | | 705.360638 | 353.183957 | V | ***1065.521986*** | 533.264631 | 1048.495437 | 524.751357 | | | 6 |
| 7 | **886.434532** | 443.720904 | | | 868.423967 | 434.715622 | Y | ***966.453572*** | 483.730424 | 949.427023 | 475.217150 | | | 5 |
| 8 | **943.455996** | 472.231636 | | | 925.445431 | 463.226354 | G | ***803.390243*** | 402.198760 | 786.363694 | 393.685485 | | | 4 |
| 9 | **1382.681322** | 691.844299 | 1365.654773 | 683.331025 | 1364.670757 | 682.839017 | Q | ***746.368779*** | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 10 | **1542.711971** | 771.859624 | 1525.685422 | 763.346349 | 1524.701406 | 762.854341 | C | ***307.143453*** | 154.075365 | 290.116904 | 145.562090 | | | 2 |
| 11 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IFFESVYGQCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.0 | 1687.810226 | 0.004562 | IFFESVYGQCK |

**Mascot:** http://www.matrixscience.com/

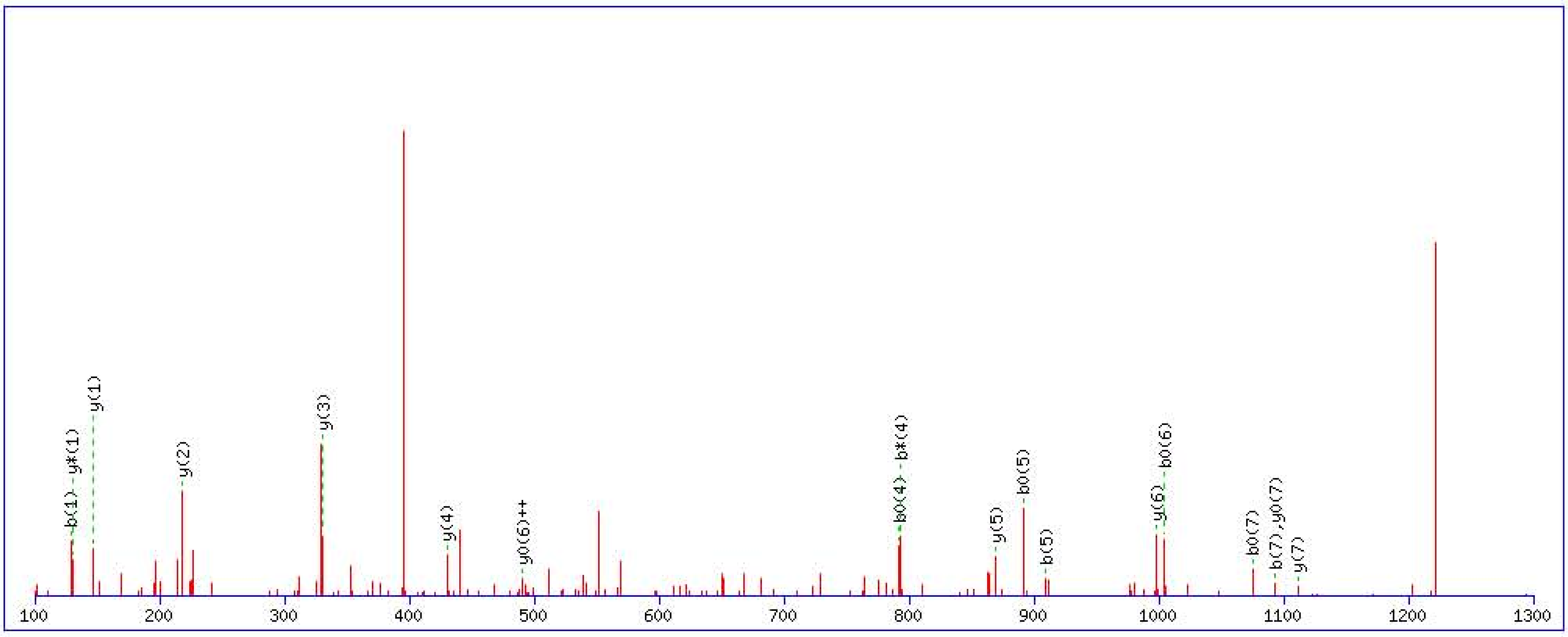
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QLEQVIAK**
Found in **FIBA_HUMAN**, Fibrinogen alpha chain OS=Homo sapiens GN=FGA PE=1 SV=2

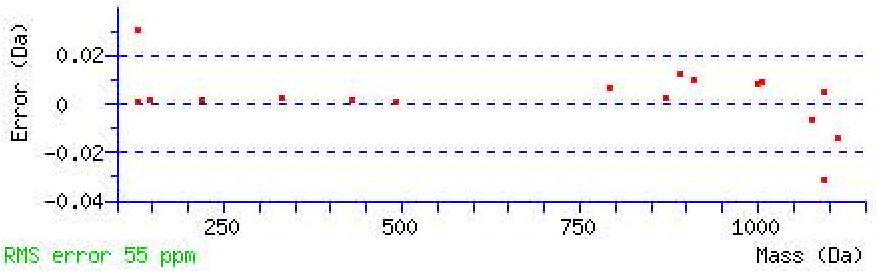
Match to Query 24327: 1238.703788 from(620.359170,2+) rtinseconds(1748) index(20039)
Title: Locus:1.1.1.611.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

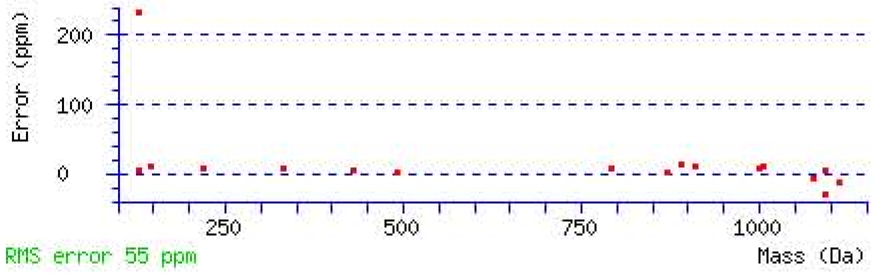
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1238.705658
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.0025
Matches : 18/70 fragment ions using 36 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.065854** | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 8 |
| 2 | 242.149918 | 121.578597 | 225.123369 | 113.065323 | | | L | ***1111.654379*** | 556.330828 | 1094.627830 | 547.817553 | 1093.643814 | 547.325545 | 7 |
| 3 | 371.192511 | 186.099894 | 354.165962 | 177.586619 | 353.181946 | 177.094611 | E | ***998.570315*** | 499.788796 | 981.543766 | 491.275521 | 980.559750 | 490.783513 | 6 |
| 4 | 810.417837 | 405.712557 | 793.391288 | 397.199282 | 792.407272 | 396.707274 | Q | ***869.527722*** | 435.267499 | 852.501173 | 426.754225 | | | 5 |
| 5 | **909.486251** | 455.246764 | 892.459702 | 446.733489 | 891.475686 | 446.241481 | V | ***430.302396*** | 215.654836 | 413.275847 | 207.141562 | | | 4 |
| 6 | 1022.570315 | 511.788796 | 1005.543766 | 503.275521 | 1004.559750 | 502.783513 | I | ***331.233982*** | 166.120629 | 314.207433 | 157.607355 | | | 3 |
| 7 | **1093.607429** | 547.307353 | 1076.580880 | 538.794078 | 1075.596864 | 538.302070 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065323 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QLEQVIAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.1 | 1238.705658 | -0.001870 | QLEQVIAK |
| 16.4 | 1238.698257 | 0.005531 | IHADASSKVLAK |
| 14.8 | 1238.705658 | -0.001870 | QLEQVIAK |
| 13.1 | 1238.687027 | 0.016761 | KEETQPPVALK |
| 8.4 | 1238.716904 | -0.013116 | DRVQVAIK |
| 7.5 | 1238.691040 | 0.012748 | LYKEFIDLAK |
| 5.6 | 1238.702301 | 0.001487 | DVFKKGFSIAK |
| 5.2 | 1238.716888 | -0.013100 | KRILCPLDPK |
| 3.7 | 1238.695572 | 0.008216 | SHSRVRAIASR |
| 3.3 | 1238.709473 | -0.005685 | NDLRPANKLAK |

**Mascot:** http://www.matrixscience.com/

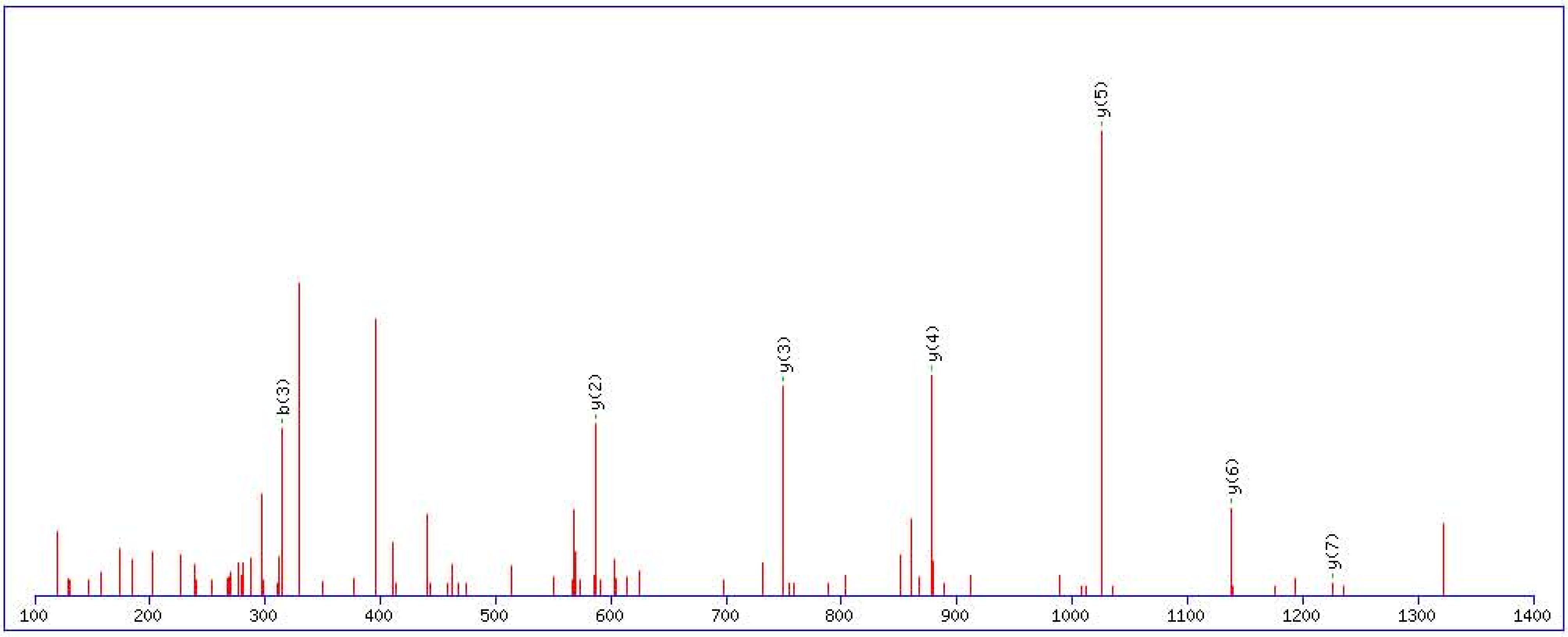
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NSLFEYQK**
Found in **FIBA_HUMAN**, Fibrinogen alpha chain OS=Homo sapiens GN=FGA PE=1 SV=2

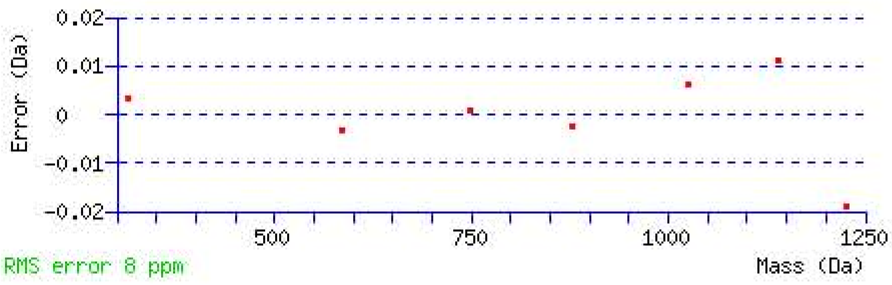
Match to Query 26939: 1338.666948 from(670.340750,2+) rtinseconds(2062) index(6226)
Title: Locus:1.1.1.1527.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

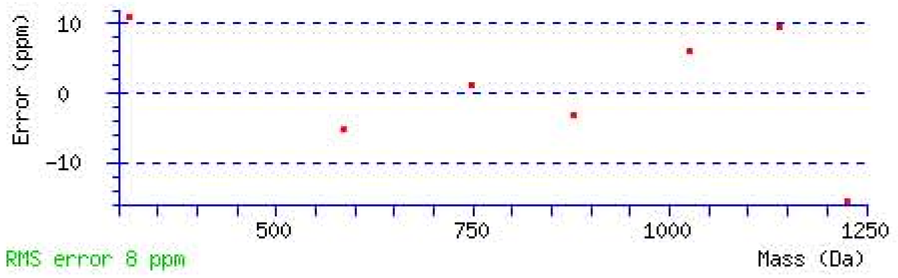
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1338.664185
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.0018
Matches : 7/76 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 8 |
| 2 | 202.082231 | 101.544753 | 185.055682 | 93.031479 | 184.071666 | 92.539471 | S | ***1225.628558*** | 613.317917 | 1208.602009 | 604.804643 | 1207.617993 | 604.312635 | 7 |
| 3 | **315.166295** | 158.086785 | 298.139746 | 149.573511 | 297.155730 | 149.081503 | L | ***1138.596530*** | 569.801903 | 1121.569981 | 561.288629 | 1120.585965 | 560.796621 | 6 |
| 4 | 462.234709 | 231.620993 | 445.208160 | 223.107718 | 444.224144 | 222.615710 | F | ***1025.512466*** | 513.259871 | 1008.485917 | 504.746597 | 1007.501901 | 504.254589 | 5 |
| 5 | 591.277302 | 296.142289 | 574.250753 | 287.629015 | 573.266737 | 287.137007 | E | ***878.444052*** | 439.725664 | 861.417503 | 431.212390 | 860.433487 | 430.720382 | 4 |
| 6 | 754.340631 | 377.673954 | 737.314082 | 369.160679 | 736.330066 | 368.668671 | Y | ***749.401459*** | 375.204368 | 732.374910 | 366.691093 | | | 3 |
| 7 | 1193.565957 | 597.286617 | 1176.539408 | 588.773342 | 1175.555392 | 588.281334 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 8 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of NSLFEYQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.9 | 1338.664185 | 0.002763 | NSLFEYQK |
| 12.3 | 1338.660172 | 0.006776 | NSMFTAGKGVAEK |
| 7.4 | 1338.660172 | 0.006776 | BTVYLQMBSLR |
| 5.3 | 1338.686188 | -0.019240 | TVKMMYQK |
| 3.8 | 1338.682632 | -0.015684 | NLSRMQSRFGK |
| 1.2 | 1338.666672 | 0.000276 | ESIKDLADYASK |
| 0.9 | 1338.652283 | 0.014665 | DAKSLAEMLMSK |
| 0.8 | 1338.652283 | 0.014665 | DAKSLAEMLMSK |

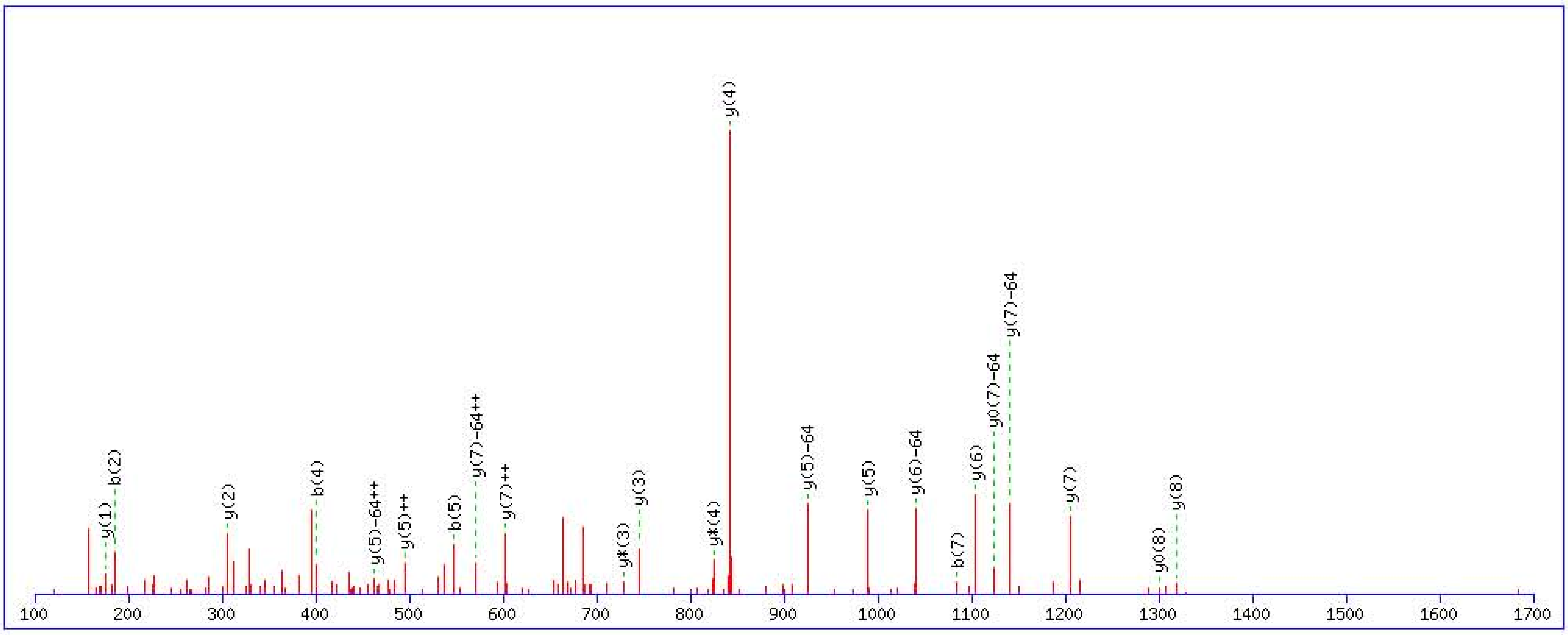
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ALTDMPQMR**
Found in **FIBA_HUMAN**, Fibrinogen alpha chain OS=Homo sapiens GN=FGA PE=1 SV=2

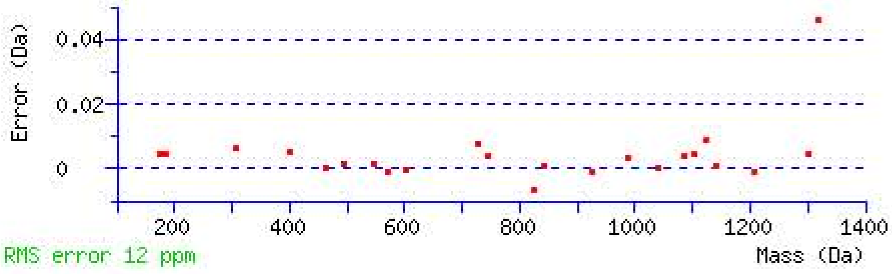
Match to Query 29637: 1388.657228 from(695.335890,2+) rtinseconds(1677) index(3911)
Title: Locus:1.1.1.1393.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●

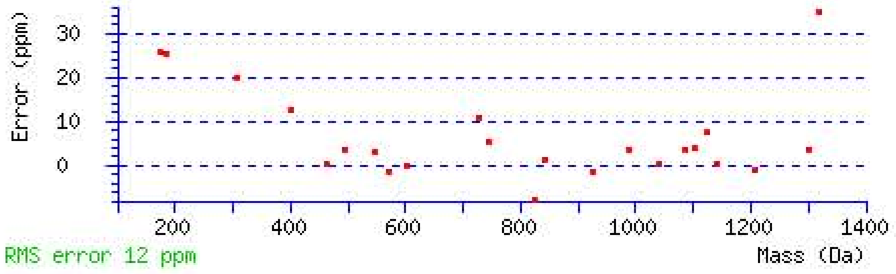


**Monoisotopic mass of neutral peptide Mr(calc):** 1388.661438
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**M5** : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 58 **Expect:** 1.1e-005
**Matches** : 23/112 fragment ions using 37 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 9 |
| 2 | **185.128454** | 93.067865 | | | | | L | ***1318.631613*** | 659.819445 | 1301.605064 | 651.306170 | 1300.621048 | 650.814162 | 8 |
| 3 | 286.176133 | 143.591704 | | | 268.165568 | 134.586422 | T | ***1205.547549*** | 603.277413 | 1188.521000 | 594.764138 | 1187.536984 | 594.272130 | 7 |
| 4 | **401.203076** | 201.105176 | | | 383.192511 | 192.099894 | D | ***1104.499870*** | 552.753573 | 1087.473321 | 544.240298 | 1086.489305 | 543.748290 | 6 |
| 5 | **548.238476** | 274.622876 | | | 530.227911 | 265.617594 | M | ***989.472927*** | 495.240102 | 972.446378 | 486.726827 | | | 5 |
| 6 | 645.291240 | 323.149258 | | | 627.280675 | 314.143976 | P | ***842.437527*** | 421.722402 | 825.410978 | 413.209127 | | | 4 |
| 7 | **1084.516566** | 542.761921 | 1067.490017 | 534.248647 | 1066.506001 | 533.756639 | Q | ***745.384763*** | 373.196020 | 728.358214 | 364.682745 | | | 3 |
| 8 | 1215.557051 | 608.282164 | 1198.530502 | 599.768889 | 1197.546486 | 599.276881 | M | ***306.159437*** | 153.583356 | 289.132888 | 145.070082 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 12 ppm



RMS error 12 ppm

NCBI **BLAST** search of ALTDMPQMR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 58.0 | 1388.661438 | -0.004210 | ALTDMPQMR |
| 20.2 | 1388.661438 | -0.004210 | ALTDMPQMR |
| 4.8 | 1388.660568 | -0.003340 | SEMTASPLVGPER |
| 0.8 | 1388.646637 | 0.010591 | DREAGSMLPAGNR |

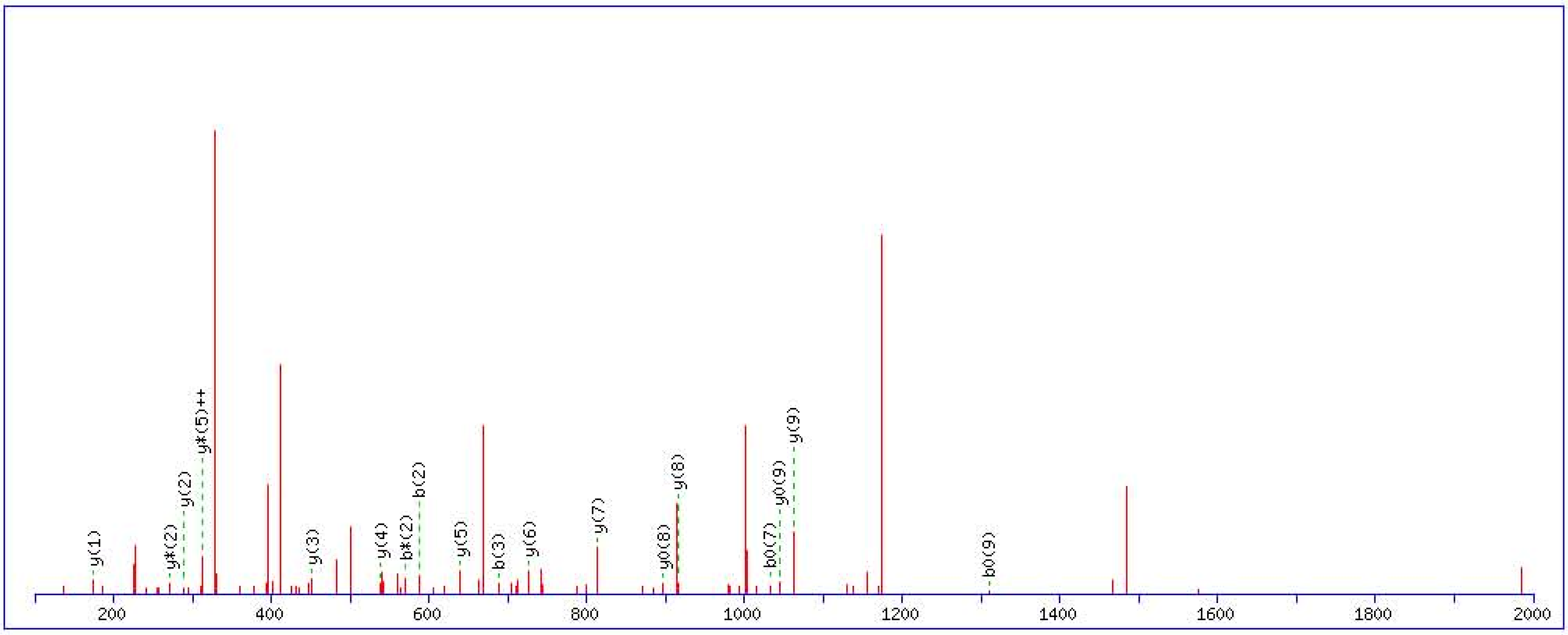
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QFTSSTSYNR**
Found in **FIBA_HUMAN**, Fibrinogen alpha chain OS=Homo sapiens GN=FGA PE=1 SV=2

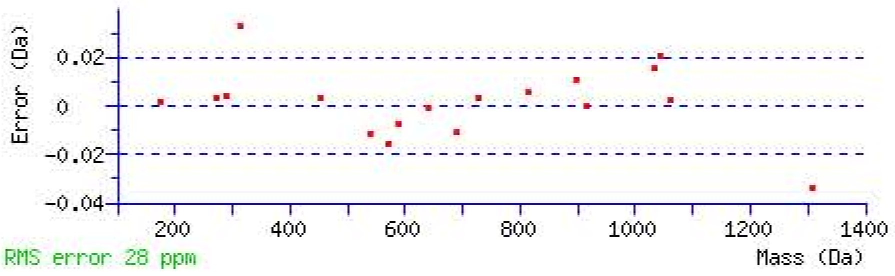
Match to Query 33800: 1500.697808 from(751.356180,2+) rtinseconds(1583) index(66376)
Title: Locus:1.1.1.1488.16 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

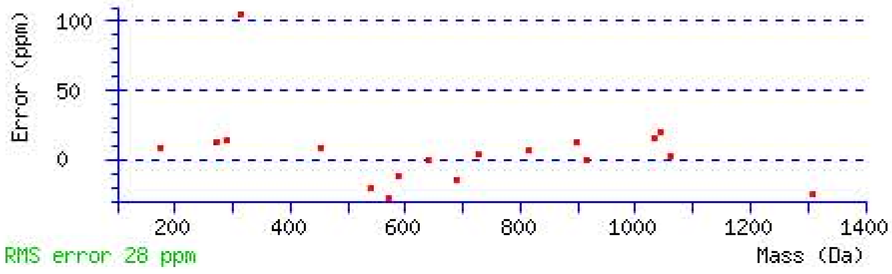
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1500.703110
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q1** : Biotin:Thermo-21345 (Q)
**Ions Score:** 29 **Expect:** 0.017
**Matches :** 18/98 fragment ions using 70 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 10 |
| 2 | **587.301016** | 294.154146 | 570.274467 | 285.640872 | | | F | ***1062.485064*** | 531.746170 | 1045.458515 | 523.232896 | 1044.474499 | 522.740887 | 9 |
| 3 | **688.348695** | 344.677986 | 671.322146 | 336.164711 | 670.338130 | 335.672703 | T | ***915.416650*** | 458.211963 | 898.390101 | 449.698689 | 897.406085 | 449.206681 | 8 |
| 4 | 775.380723 | 388.194000 | 758.354174 | 379.680725 | 757.370158 | 379.188717 | S | ***814.368971*** | 407.688124 | 797.342422 | 399.174849 | 796.358406 | 398.682841 | 7 |
| 5 | 862.412751 | 431.710014 | 845.386202 | 423.196739 | 844.402186 | 422.704731 | S | ***727.336943*** | 364.172110 | 710.310394 | 355.658835 | 709.326378 | 355.166827 | 6 |
| 6 | 963.460430 | 482.233853 | 946.433881 | 473.720578 | 945.449865 | 473.228570 | T | ***640.304915*** | 320.656096 | 623.278366 | 312.142821 | 622.294350 | 311.650813 | 5 |
| 7 | 1050.492458 | 525.749867 | 1033.465909 | 517.236593 | 1032.481893 | 516.744584 | S | ***539.257236*** | 270.132256 | 522.230687 | 261.618982 | 521.246671 | 261.126974 | 4 |
| 8 | 1213.555787 | 607.281532 | 1196.529238 | 598.768257 | 1195.545222 | 598.276249 | Y | ***452.225208*** | 226.616242 | 435.198659 | 218.102967 | | | 3 |
| 9 | 1327.598714 | 664.302995 | 1310.572165 | 655.789721 | 1309.588149 | 655.297712 | N | ***289.161879*** | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QFTSSTSYNR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 28.5 | 1500.703110 | -0.005302 | QFTSSTSYNR |

**Mascot:** http://www.matrixscience.com/

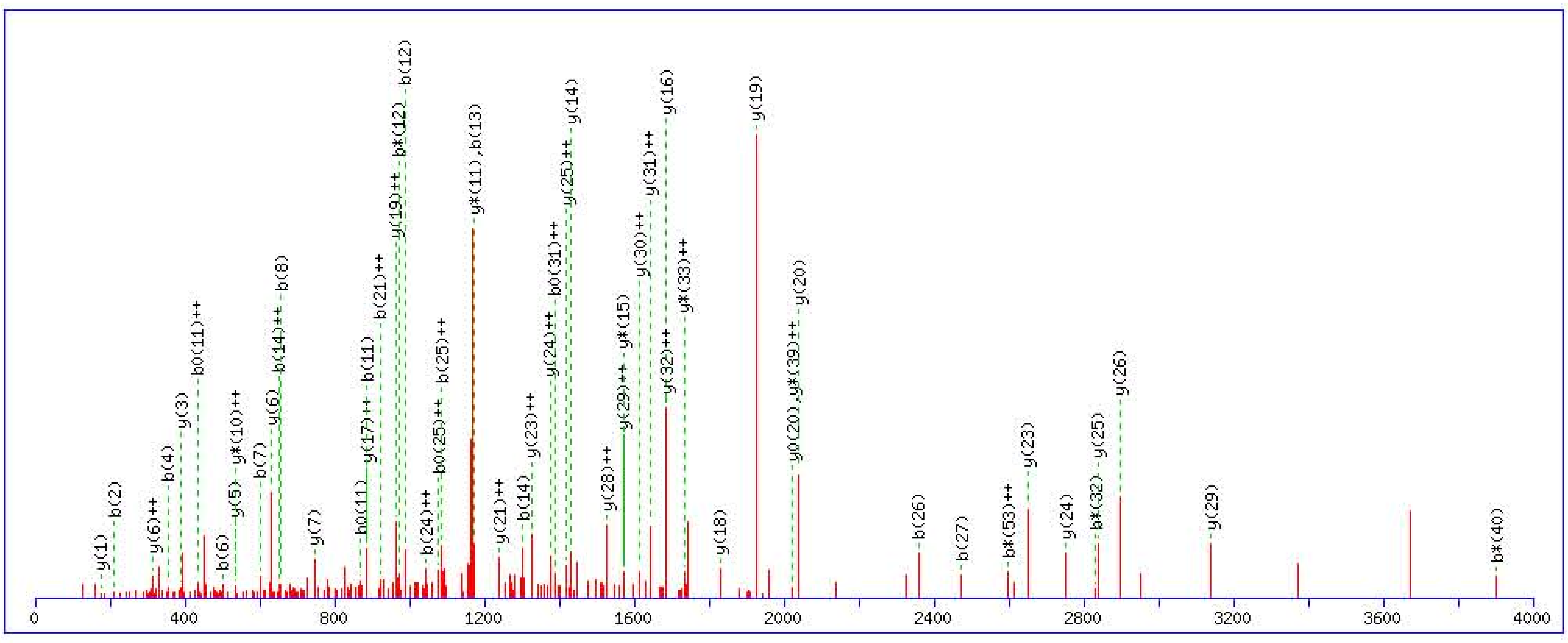
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NPGSSGTGGTATWKPGSSGPGSTGSWNSGSSGTGSTGNQNPGSPRPGSTGTWNPGSSER**
Found in **FIBA_HUMAN**, Fibrinogen alpha chain OS=Homo sapiens GN=FGA PE=1 SV=2

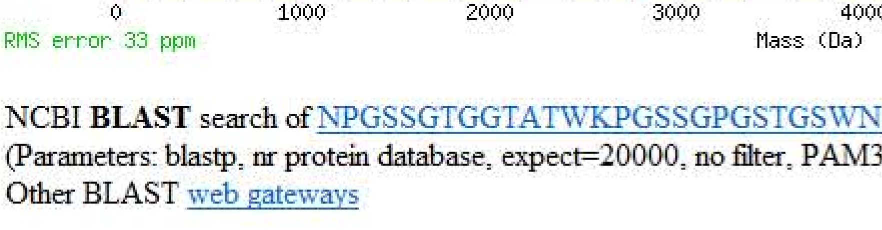
Match to Query 76594: 5844.577670 from(1169.922810,5+) rtinseconds(1798) index(4642)
Title: Locus:1.1.1.1435.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 4000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 5844.608032
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q39 : Biotin:Thermo-21345 (Q)
**Ions Score:** 81 **Expect:** 2.3e-008
**Matches :** 56/688 fragment ions using 95 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 59 |
| 2 | ***212.102967*** | 106.555121 | 195.076418 | 98.041847 | | | P | 5731.572302 | 2866.289789 | 5714.545753 | 2857.776515 | 5713.561737 | 2857.284507 | 58 |
| 3 | 269.124431 | 135.065853 | 252.097882 | 126.552579 | | | G | 5634.519538 | 2817.763407 | 5617.492989 | 2809.250133 | 5616.508973 | 2808.758125 | 57 |
| 4 | ***356.156459*** | 178.581867 | 339.129910 | 170.068593 | 338.145894 | 169.576585 | S | 5577.498074 | 2789.252675 | 5560.471525 | 2780.739401 | 5559.487509 | 2780.247393 | 56 |
| 5 | 443.188487 | 222.097881 | 426.161938 | 213.584607 | 425.177922 | 213.092599 | S | 5490.466046 | 2745.736661 | 5473.439497 | 2737.223387 | 5472.455481 | 2736.731379 | 55 |
| 6 | ***500.209951*** | 250.608613 | 483.183402 | 242.095339 | 482.199386 | 241.603331 | G | 5403.434018 | 2702.220647 | 5386.407469 | 2693.707373 | 5385.423453 | 2693.215365 | 54 |
| 7 | ***601.257630*** | 301.132453 | 584.231081 | 292.619178 | 583.247065 | 292.127170 | T | 5346.412554 | 2673.709915 | 5329.386005 | 2665.196641 | 5328.401989 | 2664.704633 | 53 |
| 8 | ***658.279094*** | 329.643185 | 641.252545 | 321.129910 | 640.268529 | 320.637903 | G | 5245.364875 | 2623.186076 | 5228.338326 | 2614.672801 | 5227.354310 | 2614.180793 | 52 |
| 9 | 715.300558 | 358.153917 | 698.274009 | 349.640643 | 697.289993 | 349.148635 | G | 5188.343411 | 2594.675344 | 5171.316862 | 2586.162069 | 5170.332846 | 2585.670061 | 51 |
| 10 | 816.348237 | 408.677757 | 799.321688 | 400.164482 | 798.337672 | 399.672474 | T | 5131.321947 | 2566.164612 | 5114.295398 | 2557.651337 | 5113.311382 | 2557.159329 | 50 |
| 11 | ***887.385351*** | 444.196314 | 870.358802 | 435.683039 | 869.374786 | 435.191031 | A | 5030.274268 | 2515.640772 | 5013.247719 | 2507.127498 | 5012.263703 | 2506.635490 | 49 |
| 12 | ***988.433030*** | 494.720153 | 971.406481 | 486.206879 | 970.422465 | 485.714871 | T | 4959.237154 | 2480.122215 | 4942.210605 | 2471.608941 | 4941.226589 | 2471.116933 | 48 |
| 13 | ***1174.512343*** | 587.759810 | 1157.485794 | 579.246535 | 1156.501778 | 578.754527 | W | 4858.189475 | 2429.598376 | 4841.162926 | 2421.085101 | 4840.178910 | 2420.593093 | 47 |
| 14 | ***1302.607306*** | **651.807291** | 1285.580757 | 643.294017 | 1284.596741 | 642.802009 | K | 4672.110162 | 2336.558719 | 4655.083613 | 2328.045445 | 4654.099597 | 2327.553437 | 46 |
| 15 | 1399.660070 | 700.333673 | 1382.633521 | 691.820399 | 1381.649505 | 691.328391 | P | 4544.015199 | 2272.511238 | 4526.988650 | 2263.997963 | 4526.004634 | 2263.505955 | 45 |
| 16 | 1456.681534 | 728.844405 | 1439.654985 | 720.331131 | 1438.670969 | 719.839123 | G | 4446.962435 | 2223.984856 | 4429.935886 | 2215.471581 | 4428.951870 | 2214.979573 | 44 |
| 17 | 1543.713562 | 772.360419 | 1526.687013 | 763.847145 | 1525.702997 | 763.355137 | S | 4389.940971 | 2195.474124 | 4372.914422 | 2186.960849 | 4371.930406 | 2186.468841 | 43 |
| 18 | 1630.745590 | 815.876433 | 1613.719041 | 807.363159 | 1612.735025 | 806.871151 | S | 4302.908943 | 2151.958110 | 4285.882394 | 2143.444835 | 4284.898378 | 2142.952827 | 42 |
| 19 | 1687.767054 | 844.387165 | 1670.740505 | 835.873891 | 1669.756489 | 835.381883 | G | 4215.876915 | 2108.442096 | 4198.850366 | 2099.928821 | 4197.866350 | 2099.436813 | 41 |
| 20 | 1784.819818 | 892.913547 | 1767.793269 | 884.400273 | 1766.809253 | 883.908265 | P | 4158.855451 | 2079.931364 | 4141.828902 | 2071.418089 | 4140.844886 | 2070.926081 | 40 |
| 21 | 1841.841282 | **921.424279** | 1824.814733 | 912.911005 | 1823.830717 | 912.418997 | G | 4061.802687 | 2031.404982 | 4044.776138 | 2022.891707 | 4043.792122 | 2022.399699 | 39 |
| 22 | 1928.873310 | 964.940293 | 1911.846761 | 956.427019 | 1910.862745 | 955.935011 | S | 4004.781223 | 2002.894250 | 3987.754674 | 1994.380975 | 3986.770658 | 1993.888967 | 38 |
| 23 | 2029.920989 | 1015.464133 | 2012.894440 | 1006.950858 | 2011.910424 | 1006.458850 | T | 3917.749195 | 1959.378236 | 3900.722646 | 1950.864961 | 3899.738630 | 1950.372953 | 37 |
| 24 | 2086.942453 | **1043.974865** | 2069.915904 | 1035.461590 | 2068.931888 | 1034.969582 | G | 3816.701516 | 1908.854396 | 3799.674967 | 1900.341122 | 3798.690951 | 1899.849114 | 36 |
| 25 | 2173.974481 | **1087.490879** | 2156.947932 | 1078.977604 | 2155.963916 | 1078.485596 | S | 3759.680052 | 1880.343664 | 3742.653503 | 1871.830389 | 3741.669487 | 1871.338382 | 35 |
| 26 | ***2360.053794*** | 1180.530535 | 2343.027245 | 1172.017261 | 2342.043229 | 1171.525253 | W | 3672.648024 | 1836.827650 | 3655.621475 | 1828.314375 | 3654.637459 | 1827.822367 | 34 |
| 27 | ***2474.096721*** | 1237.551999 | 2457.070172 | 1229.038724 | 2456.086156 | 1228.546716 | N | 3486.568711 | 1743.787993 | 3469.542162 | 1735.274719 | 3468.558146 | 1734.782711 | 33 |
| 28 | 2561.128749 | 1281.068013 | 2544.102200 | 1272.554738 | 2543.118184 | 1272.062730 | S | 3372.525784 | 1686.766530 | 3355.499235 | 1678.253255 | 3354.515219 | 1677.761247 | 32 |
| 29 | 2618.150213 | 1309.578745 | 2601.123664 | 1301.065470 | 2600.139648 | 1300.573462 | G | 3285.493756 | 1643.250516 | 3268.467207 | 1634.737241 | 3267.483191 | 1634.245233 | 31 |
| 30 | 2705.182241 | 1353.094759 | 2688.155692 | 1344.581484 | 2687.171676 | 1344.089476 | S | 3228.472292 | 1614.739784 | 3211.445743 | 1606.226509 | 3210.461727 | 1605.734501 | 30 |
| 31 | 2792.214269 | 1396.610773 | 2775.187720 | 1388.097498 | 2774.203704 | 1387.605490 | S | ***3141.440264*** | 1571.223770 | 3124.413715 | 1562.710495 | 3123.429699 | 1562.218487 | 29 |
| 32 | 2849.235733 | 1425.121505 | 2832.209184 | 1416.608230 | 2831.225168 | 1416.116222 | G | 3054.408236 | 1527.707756 | 3037.381687 | 1519.194481 | 3036.397671 | 1518.702473 | 28 |
| 33 | 2950.283412 | 1475.645344 | 2933.256863 | 1467.132069 | 2932.272847 | 1466.640062 | T | 2997.386772 | 1499.197024 | 2980.360223 | 1490.683749 | 2979.376207 | 1490.191741 | 27 |
| 34 | 3007.304876 | 1504.156076 | 2990.278327 | 1495.642801 | 2989.294311 | 1495.150794 | G | ***2896.339093*** | 1448.673184 | 2879.312544 | 1440.159910 | 2878.328528 | 1439.667902 | 26 |
| 35 | 3094.336904 | 1547.672090 | 3077.310355 | 1539.158815 | 3076.326339 | 1538.666808 | S | ***2839.317629*** | 1420.162453 | 2822.291080 | 1411.649178 | 2821.307064 | 1411.157170 | 25 |
| 36 | 3195.384583 | 1598.195929 | 3178.358034 | 1589.682655 | 3177.374018 | 1589.190647 | T | ***2752.285601*** | 1376.646438 | 2735.259052 | 1368.133164 | 2734.275036 | 1367.641156 | 24 |
| 37 | 3252.406047 | 1626.706661 | 3235.379498 | 1618.193387 | 3234.395482 | 1617.701379 | G | ***2651.237922*** | 1326.122599 | 2634.211373 | 1317.609325 | 2633.227357 | 1317.117317 | 23 |
| 38 | 3366.448974 | 1683.728125 | 3349.422425 | 1675.214850 | 3348.438409 | 1674.722842 | N | 2594.216458 | 1297.611867 | 2577.189909 | 1289.098593 | 2576.205893 | 1288.606585 | 22 |
| 39 | 3805.674300 | 1903.340788 | 3788.647751 | 1894.827513 | 3787.663735 | 1894.335506 | Q | 2480.173531 | 1240.590404 | 2463.146982 | 1232.077129 | 2462.162966 | 1231.585121 | 21 |
| 40 | 3919.717227 | 1960.362252 | 3902.690678 | 1951.848977 | 3901.706662 | 1951.356969 | N | ***2040.948205*** | 1020.977741 | 2023.921656 | 1012.464466 | 2022.937640 | 1011.972458 | 20 |
| 41 | 4016.769991 | 2008.888634 | 3999.743442 | 2000.375359 | 3998.759426 | 1999.883351 | P | ***1926.905278*** | 963.956277 | 1909.878729 | 955.443003 | 1908.894713 | 954.950995 | 19 |
| 42 | 4073.791455 | 2037.399365 | 4056.764906 | 2028.886091 | 4055.780890 | 2028.394083 | G | ***1829.852514*** | 915.429895 | 1812.825965 | 906.916621 | 1811.841949 | 906.424613 | 18 |
| 43 | 4160.823483 | 2080.915380 | 4143.796934 | 2072.402105 | 4142.812918 | 2071.910097 | S | 1772.831050 | 886.919163 | 1755.804501 | 878.405889 | 1754.820485 | 877.913881 | 17 |
| 44 | 4257.876247 | 2129.441762 | 4240.849698 | 2120.928487 | 4239.865682 | 2120.436479 | P | ***1685.799022*** | 843.403149 | 1668.772473 | 834.889875 | 1667.788457 | 834.397867 | 16 |
| 45 | 4413.977358 | 2207.492317 | 4396.950809 | 2198.979043 | 4395.966793 | 2198.487035 | R | 1588.746258 | 794.876767 | 1571.719709 | 786.363493 | 1570.735693 | 785.871485 | 15 |
| 46 | 4511.030122 | 2256.018699 | 4494.003573 | 2247.505425 | 4493.019557 | 2247.013417 | P | ***1432.645147*** | 716.826212 | 1415.618598 | 708.312937 | 1414.634582 | 707.820929 | 14 |
| 47 | 4568.051586 | 2284.529431 | 4551.025037 | 2276.016157 | 4550.041021 | 2275.524149 | G | 1335.592383 | 668.299830 | 1318.565834 | 659.786555 | 1317.581818 | 659.294547 | 13 |
| 48 | 4655.083614 | 2328.045445 | 4638.057065 | 2319.532171 | 4637.073049 | 2319.040163 | S | 1278.570919 | 639.789098 | 1261.544370 | 631.275823 | 1260.560354 | 630.783815 | 12 |
| 49 | 4756.131293 | 2378.569285 | 4739.104744 | 2370.056010 | 4738.120728 | 2369.564002 | T | 1191.538891 | 596.273084 | 1174.512342 | 587.759809 | 1173.528326 | 587.267801 | 11 |
| 50 | 4813.152757 | 2407.080017 | 4796.126208 | 2398.566742 | 4795.142192 | 2398.074734 | G | 1090.491212 | 545.749244 | 1073.464663 | 537.235970 | 1072.480647 | 536.743962 | 10 |
| 51 | 4914.200436 | 2457.603856 | 4897.173887 | 2449.090582 | 4896.189871 | 2448.598574 | T | 1033.469748 | 517.238512 | 1016.443199 | 508.725238 | 1015.459183 | 508.233230 | 9 |
| 52 | 5100.279749 | 2550.643513 | 5083.253200 | 2542.130238 | 5082.269184 | 2541.638230 | W | 932.422069 | 466.714673 | 915.395520 | 458.201398 | 914.411504 | 457.709390 | 8 |
| 53 | 5214.322676 | 2607.664976 | 5197.296127 | 2599.151702 | 5196.312111 | 2598.659694 | N | ***746.342756*** | 373.675016 | 729.316207 | 365.161742 | 728.332191 | 364.669734 | 7 |
| 54 | 5311.375440 | 2656.191358 | 5294.348891 | 2647.678084 | 5293.364875 | 2647.186076 | P | ***632.299829*** | 316.653552 | 615.273280 | 308.140278 | 614.289264 | 307.648270 | 6 |
| 55 | 5368.396904 | 2684.702090 | 5351.370355 | 2676.188816 | 5350.386339 | 2675.696808 | G | ***535.247065*** | 268.127170 | 518.220516 | 259.613896 | 517.236500 | 259.121888 | 5 |
| 56 | 5455.428932 | 2728.218104 | 5438.402383 | 2719.704830 | 5437.418367 | 2719.212822 | S | 478.225601 | 239.616438 | 461.199052 | 231.103164 | 460.215036 | 230.611156 | 4 |
| 57 | 5542.460960 | 2771.734118 | 5525.434411 | 2763.220844 | 5524.450395 | 2762.728836 | S | ***391.193573*** | 196.100424 | 374.167024 | 187.587150 | 373.183008 | 187.095142 | 3 |
| 58 | 5671.503553 | 2836.255415 | 5654.477004 | 2827.742140 | 5653.492988 | 2827.250132 | E | 304.161545 | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 59 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of NPGSSGTGGTATWKPGSSGPGSTGSWNSGSSGTGSTGNQNPGSPRPGSTGTWNPGSSER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 81.1 | 5844.608032 | -0.030362 | NPGSSGTGGTATWKPGSSGPGSTGSWNSGSSGTGSTGNQNPGSPRPGSTGTWNPGSSER |

**Mascot:** http://www.matrixscience.com/

# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GSAGHWTSESSVSGSTGQWHSESGSFRPDSPGSGNARPNNPDWGTFEEVSGNVSPGTR**
Found in **FIBA_HUMAN**, Fibrinogen alpha chain OS=Homo sapiens GN=FGA PE=1 SV=2

Match to Query 76912: 6284.810244 from(1048.475650,6+) rtinseconds(2112) index(6520)
Title: Locus:1.1.1.1544.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 200 to 4000 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 6284.792847
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18    : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.0051
Matches : 18/646 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 58 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | S | 6228.778603 | 3114.892940 | 6211.752054 | 3106.379665 | 6210.768038 | 3105.887657 | 57 |
| 3 | 216.097882 | 108.552579 | | | 198.087317 | 99.547296 | A | 6141.746575 | 3071.376926 | 6124.720026 | 3062.863651 | 6123.736010 | 3062.371643 | 56 |
| 4 | 273.119346 | 137.063311 | | | 255.108781 | 128.058029 | G | 6070.709461 | 3035.858369 | 6053.682912 | 3027.345094 | 6052.698896 | 3026.853086 | 55 |
| 5 | 410.178258 | 205.592767 | | | 392.167693 | 196.587484 | H | 6013.687997 | 3007.347637 | 5996.661448 | 2998.834362 | 5995.677432 | 2998.342354 | 54 |
| 6 | 596.257571 | 298.632424 | | | 578.247006 | 289.627141 | W | 5876.629085 | 2938.818181 | 5859.602536 | 2930.304906 | 5858.618520 | 2929.812898 | 53 |
| 7 | **697.305250** | 349.156263 | | | 679.294685 | 340.150981 | T | 5690.549772 | 2845.778524 | 5673.523223 | 2837.265250 | 5672.539207 | 2836.773242 | 52 |
| 8 | 784.337278 | 392.672277 | | | 766.326713 | 383.666995 | S | 5589.502093 | 2795.254685 | 5572.475544 | 2786.741410 | 5571.491528 | 2786.249402 | 51 |
| 9 | **913.379871** | 457.193574 | | | 895.369306 | 448.188291 | E | 5502.470065 | 2751.738671 | 5485.443516 | 2743.225396 | 5484.459500 | 2742.733388 | 50 |
| 10 | 1000.411899 | 500.709588 | | | 982.401334 | 491.704305 | S | 5373.427472 | 2687.217374 | 5356.400923 | 2678.704100 | 5355.416907 | 2678.212092 | 49 |
| 11 | 1087.443927 | 544.225602 | | | 1069.433362 | 535.220319 | S | 5286.395444 | 2643.701360 | 5269.368895 | 2635.188086 | 5268.384879 | 2634.696078 | 48 |
| 12 | 1186.512341 | 593.759809 | | | 1168.501776 | 584.754526 | V | 5199.363416 | 2600.185346 | 5182.336867 | 2591.672072 | 5181.352851 | 2591.180064 | 47 |
| 13 | 1273.544369 | 637.275823 | | | 1255.533804 | 628.270540 | S | 5100.295002 | 2550.651139 | 5083.268453 | 2542.137865 | 5082.284437 | 2541.645857 | 46 |
| 14 | 1330.565833 | 665.786555 | | | 1312.555268 | 656.781272 | G | 5013.262974 | 2507.135125 | 4996.236425 | 2498.621851 | 4995.252409 | 2498.129843 | 45 |
| 15 | 1417.597861 | 709.302569 | | | 1399.587296 | 700.297286 | S | 4956.241510 | 2478.624393 | 4939.214961 | 2470.111119 | 4938.230945 | 2469.619111 | 44 |
| 16 | 1518.645540 | 759.826408 | | | 1500.634975 | 750.821126 | T | 4869.209482 | 2435.108379 | 4852.182933 | 2426.595105 | 4851.198917 | 2426.103097 | 43 |
| 17 | 1575.667004 | 788.337140 | | | 1557.656439 | 779.331858 | G | 4768.161803 | 2384.584540 | 4751.135254 | 2376.071265 | 4750.151238 | 2375.579257 | 42 |
| 18 | 2014.892330 | **1007.949803** | 1997.865781 | 999.436529 | 1996.881765 | 998.944521 | Q | 4711.140339 | 2356.073808 | 4694.113790 | 2347.560533 | 4693.129774 | 2347.068525 | 41 |
| 19 | 2200.971643 | 1100.989460 | 2183.945094 | 1092.476185 | 2182.961078 | 1091.984177 | W | 4271.915013 | 2136.461145 | 4254.888464 | 2127.947870 | 4253.904448 | 2127.455862 | 40 |
| 20 | 2338.030555 | 1169.518916 | 2321.004006 | 1161.005641 | 2320.019990 | 1160.513633 | H | 4085.835700 | 2043.421488 | 4068.809151 | 2034.908214 | 4067.825135 | 2034.416206 | 39 |
| 21 | 2425.062583 | 1213.034930 | 2408.036034 | 1204.521655 | 2407.052018 | 1204.029647 | S | 3948.776788 | 1974.892032 | 3931.750239 | 1966.378758 | 3930.766223 | 1965.886750 | 38 |
| 22 | 2554.105176 | 1277.556226 | 2537.078627 | 1269.042952 | 2536.094611 | 1268.550944 | E | 3861.744760 | 1931.376018 | 3844.718211 | 1922.862744 | 3843.734195 | 1922.370736 | 37 |
| 23 | 2641.137204 | 1321.072240 | 2624.110655 | 1312.558966 | 2623.126639 | 1312.066958 | S | 3732.702167 | 1866.854722 | 3715.675618 | 1858.341447 | 3714.691602 | 1857.849439 | 36 |
| 24 | 2698.158668 | 1349.582972 | 2681.132119 | 1341.069698 | 2680.148103 | 1340.577690 | G | 3645.670139 | 1823.338708 | 3628.643590 | 1814.825433 | 3627.659574 | 1814.333425 | 35 |
| 25 | 2785.190696 | 1393.098986 | 2768.164147 | 1384.585712 | 2767.180131 | 1384.093704 | S | 3588.648675 | 1794.827976 | 3571.622126 | 1786.314701 | 3570.638110 | 1785.822693 | 34 |
| 26 | 2932.259110 | 1466.633193 | 2915.232561 | 1458.119919 | 2914.248545 | 1457.627911 | F | 3501.616647 | 1751.311962 | 3484.590098 | 1742.798687 | 3483.606082 | 1742.306679 | 33 |
| 27 | 3088.360221 | 1544.683749 | 3071.333672 | 1536.170474 | 3070.349656 | 1535.678466 | R | 3354.548233 | 1677.777755 | 3337.521684 | 1669.264480 | 3336.537668 | 1668.772472 | 32 |
| 28 | 3185.412985 | 1593.210131 | 3168.386436 | 1584.696856 | 3167.402420 | 1584.204848 | P | 3198.447122 | 1599.727199 | 3181.420573 | 1591.213925 | 3180.436557 | 1590.721917 | 31 |
| 29 | 3300.439928 | 1650.723602 | 3283.413379 | 1642.210327 | 3282.429363 | 1641.718320 | D | 3101.394358 | 1551.200817 | 3084.367809 | 1542.687543 | 3083.383793 | 1542.195535 | 30 |
| 30 | 3387.471956 | 1694.239616 | 3370.445407 | 1685.726342 | 3369.461391 | 1685.234334 | S | 2986.367415 | 1493.687346 | 2969.340866 | 1485.174071 | 2968.356850 | 1484.682063 | 29 |
| 31 | 3484.524720 | 1742.765998 | 3467.498171 | 1734.252724 | 3466.514155 | 1733.760716 | P | 2899.335387 | 1450.171332 | 2882.308838 | 1441.658057 | 2881.324822 | 1441.166049 | 28 |
| 32 | 3541.546184 | 1771.276730 | 3524.519635 | 1762.763456 | 3523.535619 | 1762.271448 | G | 2802.282623 | 1401.644950 | 2785.256074 | 1393.131675 | 2784.272058 | 1392.639667 | 27 |
| 33 | 3628.578212 | 1814.792744 | 3611.551663 | 1806.279470 | 3610.567647 | 1805.787462 | S | 2745.261159 | 1373.134218 | 2728.234610 | 1364.620943 | 2727.250594 | 1364.128935 | 26 |
| 34 | 3685.599676 | 1843.303476 | 3668.573127 | 1834.790202 | 3667.589111 | 1834.298194 | G | 2658.229131 | 1329.618204 | 2641.202582 | 1321.104929 | 2640.218566 | 1320.612921 | 25 |
| 35 | 3799.642603 | 1900.324940 | 3782.616054 | 1891.811665 | 3781.632038 | 1891.319657 | N | 2601.207667 | 1301.107472 | 2584.181118 | 1292.594197 | 2583.197102 | 1292.102189 | 24 |
| 36 | 3870.679717 | **1935.843497** | 3853.653168 | 1927.330222 | 3852.669152 | 1926.838214 | A | ***2487.164740*** | 1244.086008 | 2470.138191 | 1235.572734 | 2469.154175 | 1235.080726 | 23 |
| 37 | 4026.780828 | 2013.894052 | 4009.754279 | 2005.380778 | 4008.770263 | 2004.888770 | R | 2416.127626 | 1208.567451 | 2399.101077 | 1200.054177 | 2398.117061 | 1199.562169 | 22 |
| 38 | 4123.833592 | 2062.420434 | 4106.807043 | 2053.907160 | 4105.823027 | 2053.415152 | P | 2260.026515 | 1130.516896 | 2242.999966 | 1122.003621 | 2242.015950 | 1121.511613 | 21 |
| 39 | 4237.876519 | 2119.441898 | 4220.849970 | 2110.928623 | 4219.865954 | 2110.436615 | N | 2162.973751 | 1081.990514 | 2145.947202 | 1073.477239 | 2144.963186 | 1072.985231 | 20 |
| 40 | 4351.919446 | 2176.463361 | 4334.892897 | 2167.950087 | 4333.908881 | 2167.458079 | N | 2048.930824 | 1024.969050 | 2031.904275 | 1016.455776 | 2030.920259 | 1015.963768 | 19 |
| 41 | 4448.972210 | 2224.989743 | 4431.945661 | 2216.476469 | 4430.961645 | 2215.984461 | P | 1934.887897 | 967.947587 | 1917.861348 | 959.434312 | 1916.877332 | 958.942304 | 18 |
| 42 | 4563.999153 | 2282.503215 | 4546.972604 | 2273.989940 | 4545.988588 | 2273.497932 | D | 1837.835133 | 919.421205 | 1820.808584 | 910.907930 | 1819.824568 | 910.415922 | 17 |
| 43 | 4750.078466 | 2375.542871 | 4733.051917 | 2367.029597 | 4732.067901 | 2366.537589 | W | ***1722.808190*** | 861.907733 | 1705.781641 | 853.394459 | 1704.797625 | 852.902451 | 16 |
| 44 | 4807.099930 | 2404.053603 | 4790.073381 | 2395.540329 | 4789.089365 | 2395.048321 | G | ***1536.728877*** | 768.868077 | 1519.702328 | 760.354802 | 1518.718312 | 759.862794 | 15 |
| 45 | 4908.147609 | 2454.577443 | 4891.121060 | 2446.064168 | 4890.137044 | 2445.572160 | T | 1479.707413 | 740.357345 | 1462.680864 | 731.844070 | 1461.696848 | 731.352062 | 14 |
| 46 | 5055.216023 | 2528.111650 | 5038.189474 | 2519.598375 | 5037.205458 | 2519.106367 | F | 1378.659734 | 689.833505 | 1361.633185 | 681.320231 | 1360.649169 | 680.828223 | 13 |
| 47 | 5184.258616 | 2592.632946 | 5167.232067 | 2584.119672 | 5166.248051 | 2583.627664 | E | 1231.591320 | 616.299298 | 1214.564771 | 607.786024 | 1213.580755 | 607.294016 | 12 |
| 48 | 5313.301209 | 2657.154243 | 5296.274660 | 2648.640968 | 5295.290644 | 2648.148960 | E | 1102.548727 | 551.778002 | 1085.522178 | 543.264727 | 1084.538162 | 542.772719 | 11 |
| 49 | 5412.369623 | 2706.688450 | 5395.343074 | 2698.175175 | 5394.359058 | 2697.683167 | V | ***973.506134*** | 487.256705 | 956.479585 | 478.743431 | 955.495569 | 478.251423 | 10 |
| 50 | 5499.401651 | 2750.204464 | 5482.375102 | 2741.691189 | 5481.391086 | 2741.199181 | S | ***874.437720*** | 437.722498 | 857.411171 | 429.209224 | 856.427155 | 428.717216 | 9 |
| 51 | 5556.423115 | 2778.715196 | 5539.396566 | 2770.201921 | 5538.412550 | 2769.709913 | G | ***787.405692*** | 394.206484 | 770.379143 | 385.693210 | 769.395127 | 385.201202 | 8 |
| 52 | 5670.466042 | 2835.736659 | 5653.439493 | 2827.223385 | 5652.455477 | 2826.731377 | N | ***730.384228*** | 365.695752 | 713.357679 | 357.182478 | 712.373663 | 356.690470 | 7 |
| 53 | 5769.534456 | 2885.270866 | 5752.507907 | 2876.757592 | 5751.523891 | 2876.265584 | V | ***616.341301*** | 308.674289 | 599.314752 | 300.161014 | 598.330736 | 299.669006 | 6 |
| 54 | 5856.566484 | 2928.786880 | 5839.539935 | 2920.273606 | 5838.555919 | 2919.781598 | S | ***517.272887*** | 259.140082 | 500.246338 | 250.626807 | 499.262322 | 250.134799 | 5 |
| 55 | 5953.619248 | 2977.313262 | 5936.592699 | 2968.799988 | 5935.608683 | 2968.307980 | P | ***430.240859*** | 215.624068 | 413.214310 | 207.110793 | 412.230294 | 206.618785 | 4 |
| 56 | 6010.640712 | 3005.823994 | 5993.614163 | 2997.310720 | 5992.630147 | 2996.818712 | G | 333.188095 | 167.097686 | 316.161546 | 158.584411 | 315.177530 | 158.092403 | 3 |
| 57 | 6111.688391 | 3056.347834 | 6094.661842 | 3047.834559 | 6093.677826 | 3047.342551 | T | 276.166631 | 138.586954 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 58 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |

NCBI **BLAST** search of GSAGHWTSESSVSGSTGQWHSESGSFRPDSPGSGNARPNNPDWGTFEEVSGNVSPGTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.3 | 6284.792847 | 0.017397 | GSAGHWTSESSVSGSTGQWHSESGSFRPDSPGSGNARPNNPDWGTFEEVSGNVSPGTR |

**Mascot:** http://www.matrixscience.com/

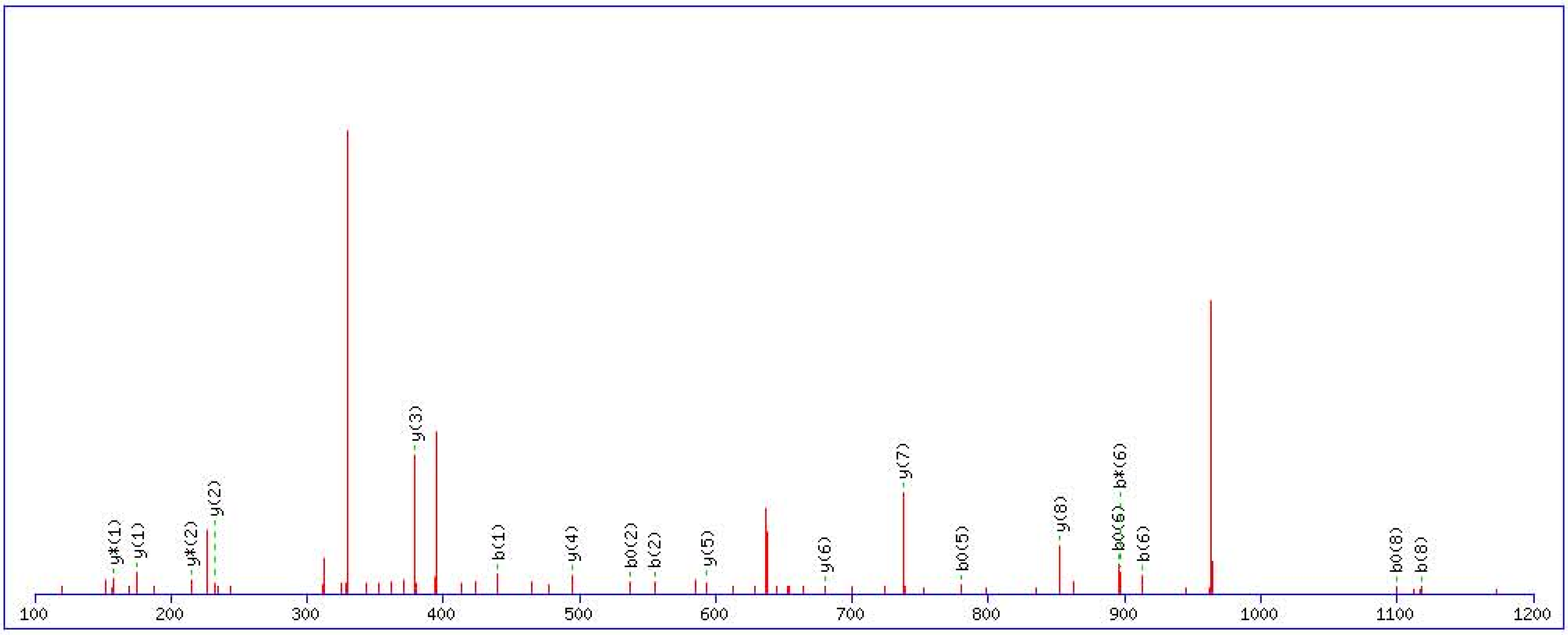
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QDGSVDFGR**
Found in **FIBB_HUMAN**, Fibrinogen beta chain OS=Homo sapiens GN=FGB PE=1 SV=2

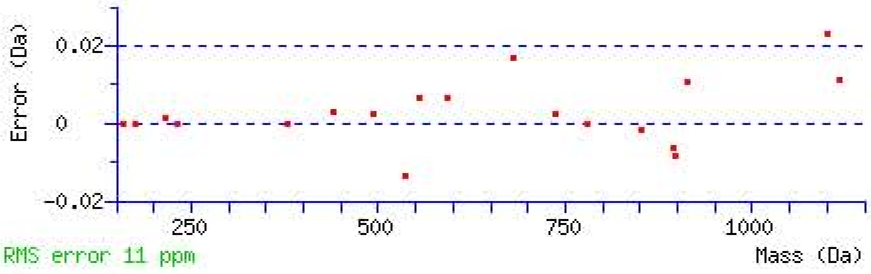
Match to Query 26036: 1290.608908 from(646.311730,2+) rtinseconds(1802) index(51546)
Title: Locus:1.1.1.1243.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

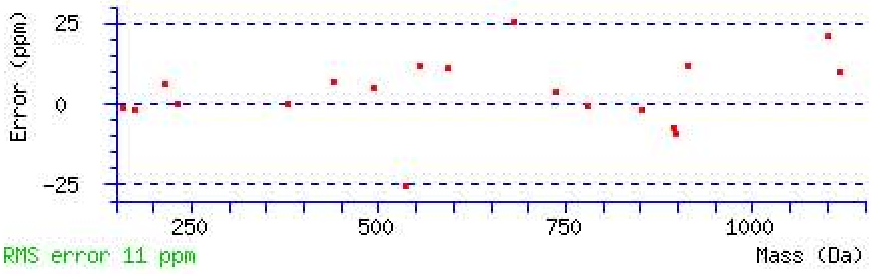
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1290.602692
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q1** : Biotin:Thermo-21345 (Q)
**Ions Score:** 46 **Expect:** 0.00036
**Matches :** 19/88 fragment ions using 41 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **440.232602** | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 9 |
| 2 | **555.259545** | 278.133411 | 538.232996 | 269.620136 | 537.248980 | 269.128128 | D | ***852.384622*** | 426.695949 | 835.358073 | 418.182674 | 834.374057 | 417.690666 | 8 |
| 3 | 612.281009 | 306.644143 | 595.254460 | 298.130868 | 594.270444 | 297.638860 | G | ***737.357679*** | 369.182477 | 720.331130 | 360.669203 | 719.347114 | 360.177195 | 7 |
| 4 | 699.313037 | 350.160157 | 682.286488 | 341.646882 | 681.302472 | 341.154874 | S | ***680.336215*** | 340.671745 | 663.309666 | 332.158471 | 662.325650 | 331.666463 | 6 |
| 5 | 798.381451 | 399.694364 | 781.354902 | 391.181089 | 780.370886 | 390.689081 | V | ***593.304187*** | 297.155731 | 576.277638 | 288.642457 | 575.293622 | 288.150449 | 5 |
| 6 | **913.408394** | 457.207835 | 896.381845 | 448.694560 | 895.397829 | 448.202552 | D | ***494.235773*** | 247.621524 | 477.209224 | 239.108250 | 476.225208 | 238.616242 | 4 |
| 7 | 1060.476808 | 530.742042 | 1043.450259 | 522.228768 | 1042.466243 | 521.736759 | F | ***379.208830*** | 190.108053 | 362.182281 | 181.594778 | | | 3 |
| 8 | **1117.498272** | 559.252774 | 1100.471723 | 550.739499 | 1099.487707 | 550.247491 | G | ***232.140416*** | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QDGSVDFGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.1 | 1290.602692 | 0.006216 | QDGSVDFGR |

**Mascot:** http://www.matrixscience.com/

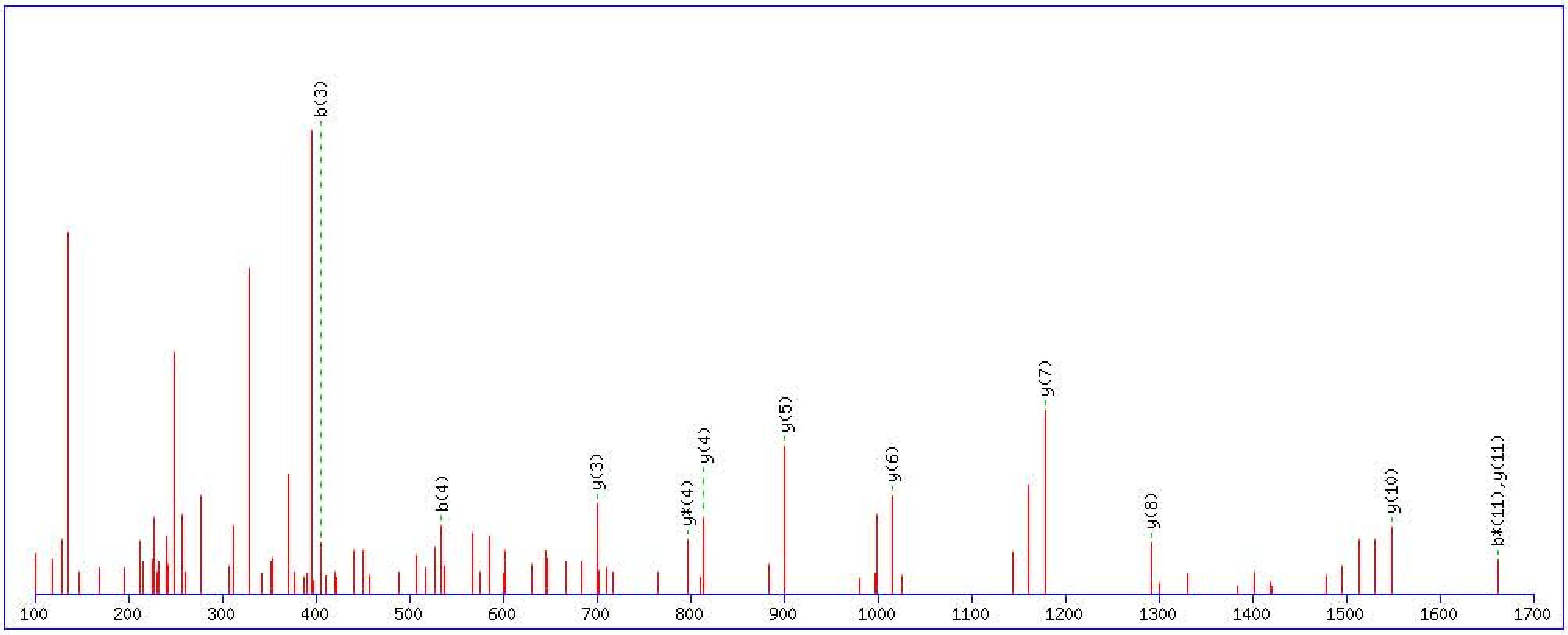
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **YLQEIYNSNNQK**
Found in **FIBG_HUMAN**, Fibrinogen gamma chain OS=Homo sapiens GN=FGG PE=1 SV=3

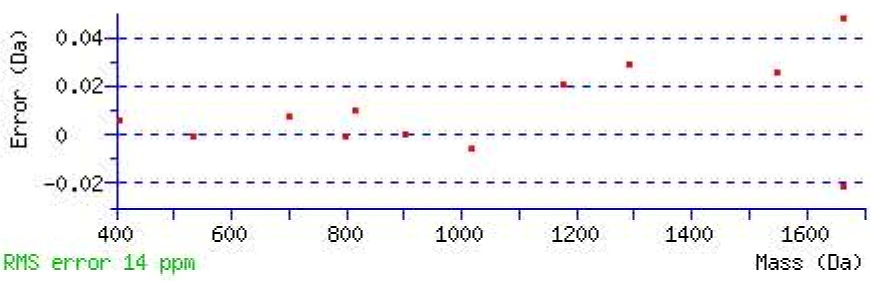
Match to Query 43235: 1823.893272 from(608.971700,3+) rtinseconds(1894) index(52045)
Title: Locus:1.1.1.1275.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

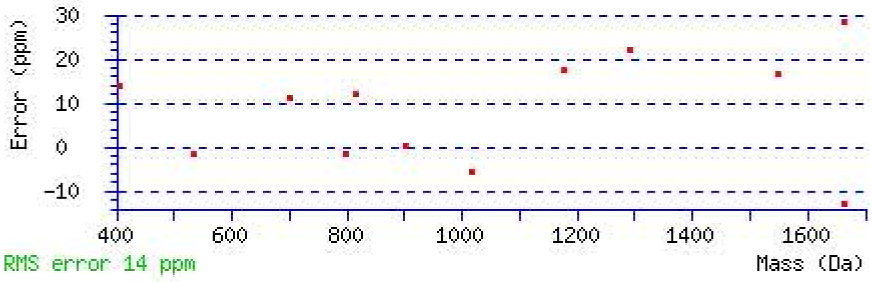
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1823.887573
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11    : Biotin:Thermo-21345 (Q)
Ions Score: 55  Expect: 7.1e-005
Matches : 12/114 fragment ions using 16 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 12 |
| 2 | 277.154669 | 139.080973 | | | | | L | ***1661.831567*** | 831.419422 | 1644.805018 | 822.906147 | 1643.821002 | 822.414139 | 11 |
| 3 | **405.213247** | 203.110262 | 388.186698 | 194.596987 | | | Q | ***1548.747503*** | 774.877390 | 1531.720954 | 766.364115 | 1530.736938 | 765.872107 | 10 |
| 4 | **534.255840** | 267.631558 | 517.229291 | 259.118284 | 516.245275 | 258.626276 | E | 1420.688925 | 710.848100 | 1403.662376 | 702.334826 | 1402.678360 | 701.842818 | 9 |
| 5 | 647.339904 | 324.173590 | 630.313355 | 315.660316 | 629.329339 | 315.168308 | I | ***1291.646332*** | 646.326804 | 1274.619783 | 637.813530 | 1273.635767 | 637.321522 | 8 |
| 6 | 810.403233 | 405.705255 | 793.376684 | 397.191980 | 792.392668 | 396.699972 | Y | ***1178.562268*** | 589.784772 | 1161.535719 | 581.271498 | 1160.551703 | 580.779489 | 7 |
| 7 | 924.446160 | 462.726718 | 907.419611 | 454.213443 | 906.435595 | 453.721435 | N | ***1015.498939*** | 508.253108 | 998.472390 | 499.739833 | 997.488374 | 499.247825 | 6 |
| 8 | 1011.478188 | 506.242732 | 994.451639 | 497.729457 | 993.467623 | 497.237449 | S | ***901.456012*** | 451.231644 | 884.429463 | 442.718370 | 883.445447 | 442.226362 | 5 |
| 9 | 1125.521115 | 563.264196 | 1108.494566 | 554.750921 | 1107.510550 | 554.258913 | N | ***814.423984*** | 407.715630 | 797.397435 | 399.202356 | | | 4 |
| 10 | 1239.564042 | 620.285659 | 1222.537493 | 611.772385 | 1221.553477 | 611.280376 | N | ***700.381057*** | 350.694167 | 683.354508 | 342.180892 | | | 3 |
| 11 | 1678.789368 | 839.898322 | 1661.762819 | 831.385048 | 1660.778803 | 830.893039 | Q | 586.338130 | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 12 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of YLQEIYNSNNQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.8 | 1823.887573 | 0.005699 | YLQEIYNSNNQK |

**Mascot:** http://www.matrixscience.com/

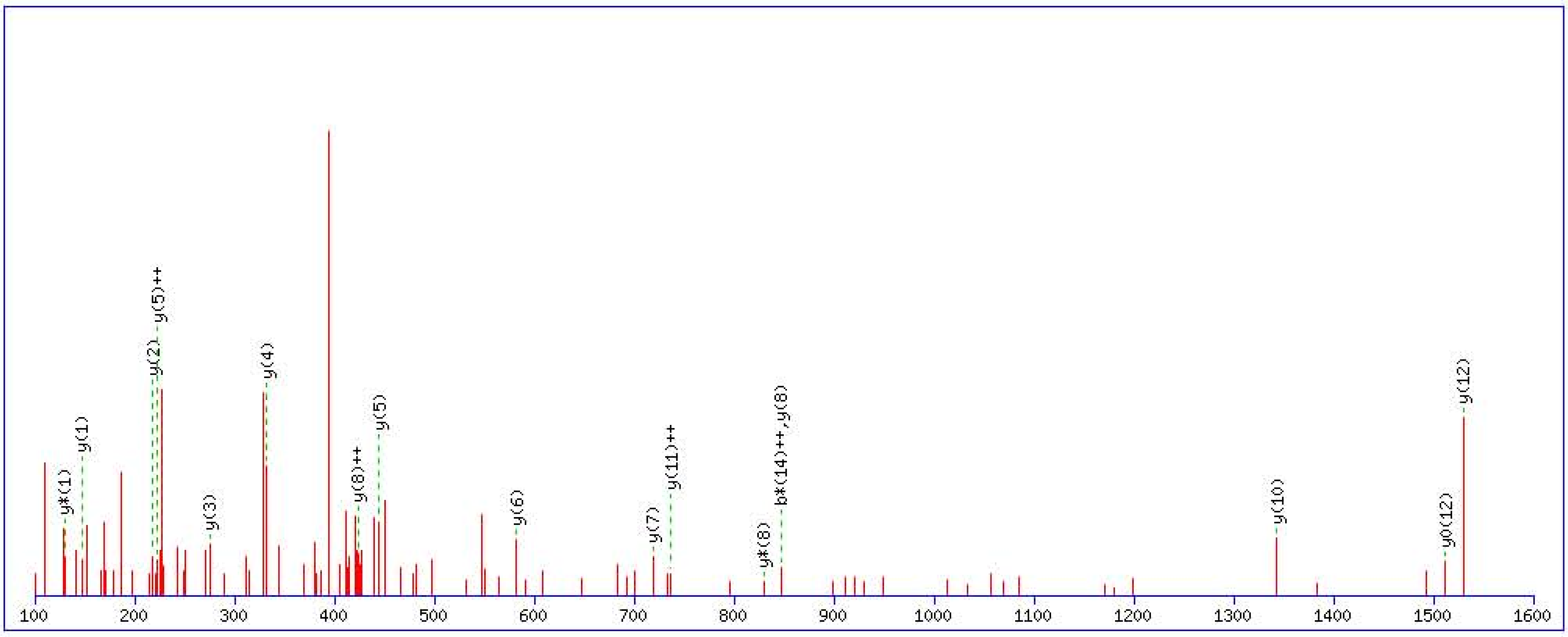
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LTIGEGQQHHLGGAK**
Found in **FIBG_HUMAN**, Fibrinogen gamma chain OS=Homo sapiens GN=FGG PE=1 SV=3

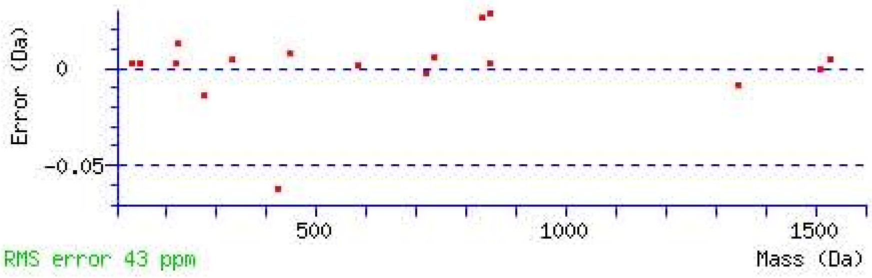
Match to Query 43917: 1855.966696 from(464.998950,4+) rtinseconds(1510) index(2980)
Title: Locus:1.1.1.1335.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

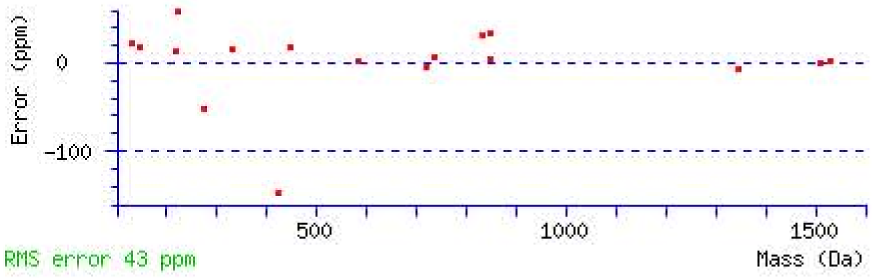
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1855.972687
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 26  Expect: 0.064
Matches : 17/134 fragment ions using 68 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 114.091340 | 57.549308 | | | | | **L** | | | | | | | **15** |
| **2** | 215.139019 | 108.073147 | | | 197.128454 | 99.067865 | **T** | 1743.895902 | 872.451589 | 1726.869353 | 863.938314 | 1725.885337 | 863.446306 | **14** |
| **3** | 328.223083 | 164.615179 | | | 310.212518 | 155.609897 | **I** | 1642.848223 | 821.927749 | 1625.821674 | 813.414475 | 1624.837658 | 812.922467 | **13** |
| **4** | 385.244547 | 193.125911 | | | 367.233982 | 184.120629 | **G** | ***1529.764159*** | 765.385717 | 1512.737610 | 756.872443 | 1511.753594 | 756.380435 | **12** |
| **5** | 514.287140 | 257.647208 | | | 496.276575 | 248.641926 | **E** | 1472.742695 | 736.874985 | 1455.716146 | 728.361711 | 1454.732130 | 727.869703 | **11** |
| **6** | 571.308604 | 286.157940 | | | 553.298039 | 277.152658 | **G** | ***1343.700102*** | 672.353689 | 1326.673553 | 663.840414 | | | **10** |
| **7** | 1010.533930 | 505.770603 | 993.507381 | 497.257329 | 992.523365 | 496.765321 | **Q** | 1286.678638 | 643.842957 | 1269.652089 | 635.329682 | | | **9** |
| **8** | 1138.592508 | 569.799892 | 1121.565959 | 561.286618 | 1120.581943 | 560.794609 | **Q** | ***847.453312*** | 424.230294 | 830.426763 | 415.717019 | | | **8** |
| **9** | 1275.651420 | 638.329348 | 1258.624871 | 629.816074 | 1257.640855 | 629.324065 | **H** | ***719.394734*** | 360.201005 | 702.368185 | 351.687730 | | | **7** |
| **10** | 1412.710332 | 706.858804 | 1395.683783 | 698.345530 | 1394.699767 | 697.853521 | **H** | ***582.335822*** | 291.671549 | 565.309273 | 283.158274 | | | **6** |
| **11** | 1525.794396 | 763.400836 | 1508.767847 | 754.887561 | 1507.783831 | 754.395553 | **L** | ***445.276910*** | 223.142093 | 428.250361 | 214.628818 | | | **5** |
| **12** | 1582.815860 | 791.911568 | 1565.789311 | 783.398293 | 1564.805295 | 782.906285 | **G** | ***332.192846*** | 166.600061 | 315.166297 | 158.086786 | | | **4** |
| **13** | 1639.837324 | 820.422300 | 1622.810775 | 811.909025 | 1621.826759 | 811.417017 | **G** | ***275.171382*** | 138.089329 | 258.144833 | 129.576054 | | | **3** |
| **14** | 1710.874438 | 855.940857 | 1693.847889 | 847.427582 | 1692.863873 | 846.935574 | **A** | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | **2** |
| **15** | | | | | | | **K** | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | **1** |





NCBI **BLAST** search of LTIGEGQQHHLGGAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.4 | 1855.972687 | -0.005991 | LTIGEGQQHHLGGAK |
| 16.4 | 1855.972687 | -0.005991 | LTIGEGQQHHLGGAK |

**Mascot:** http://www.matrixscience.com/

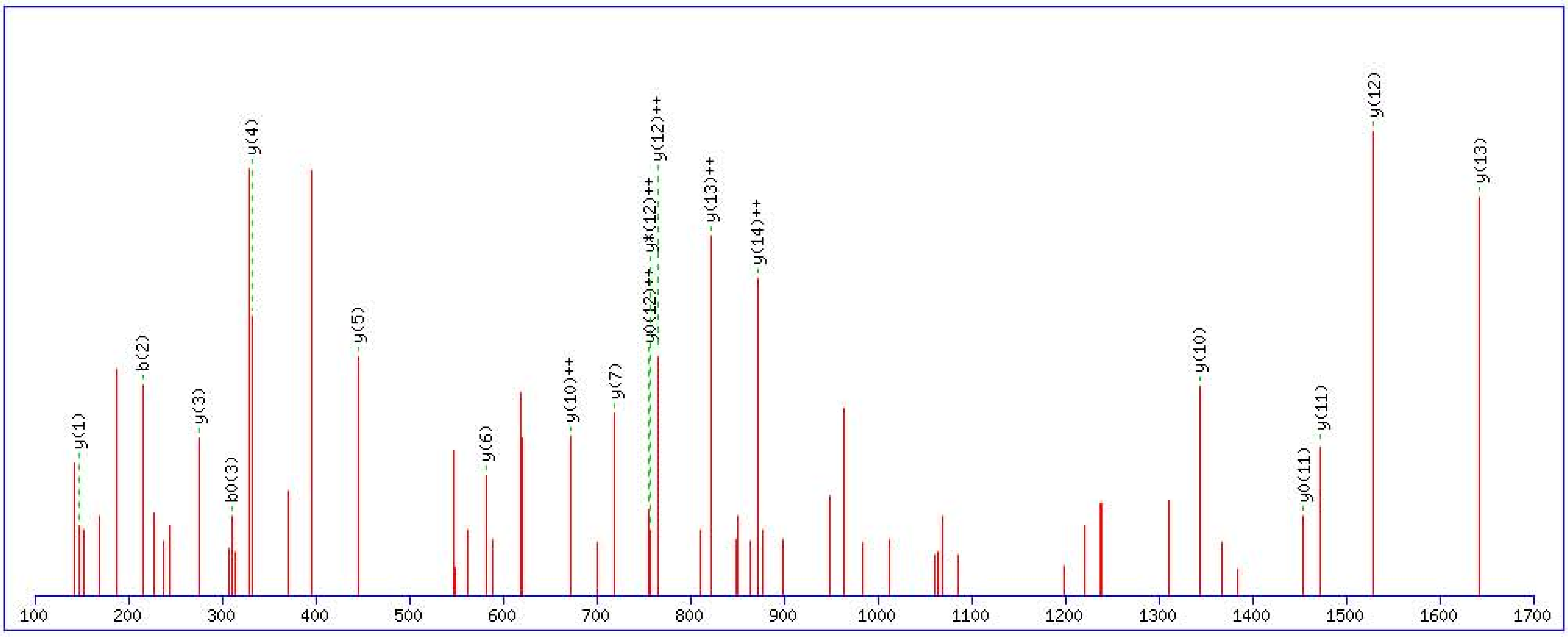
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LTIGEGQQHHLGGAK**
Found in **FIBG_HUMAN**, Fibrinogen gamma chain OS=Homo sapiens GN=FGG PE=1 SV=3

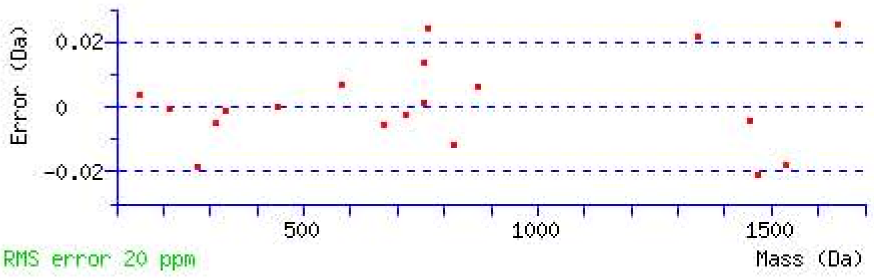
Match to Query 43927: 1855.968132 from(619.663320,3+) rtinseconds(1466) index(33059)
Title: Locus:1.1.1.2929.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

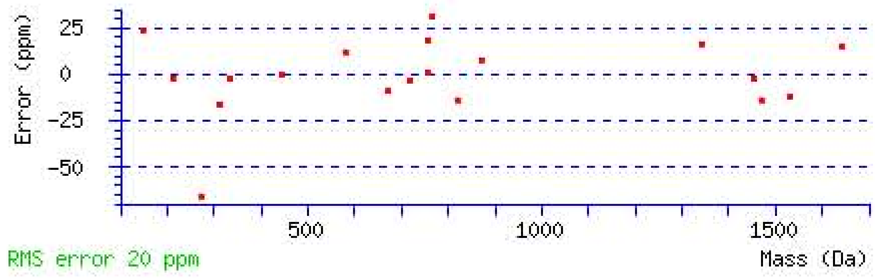
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1855.972687
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 36  Expect: 0.0012
Matches : 19/134 fragment ions using 57 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 15 |
| 2 | 215.139019 | 108.073147 | | | 197.128454 | 99.067865 | T | 1743.895902 | 872.451589 | 1726.869353 | 863.938314 | 1725.885337 | 863.446306 | 14 |
| 3 | 328.223083 | 164.615179 | | | 310.212518 | 155.609897 | I | ***1642.848223*** | 821.927749 | 1625.821674 | 813.414475 | 1624.837658 | 812.922467 | 13 |
| 4 | 385.244547 | 193.125911 | | | 367.233982 | 184.120629 | G | ***1529.764159*** | 765.385717 | 1512.737610 | 756.872443 | 1511.753594 | 756.380435 | 12 |
| 5 | 514.287140 | 257.647208 | | | 496.276575 | 248.641926 | E | ***1472.742695*** | 736.874985 | 1455.716146 | 728.361711 | 1454.732130 | 727.869703 | 11 |
| 6 | 571.308604 | 286.157940 | | | 553.298039 | 277.152658 | G | ***1343.700102*** | 672.353689 | 1326.673553 | 663.840414 | | | 10 |
| 7 | 699.367182 | 350.187229 | 682.340633 | 341.673955 | 681.356617 | 341.181947 | Q | 1286.678638 | 643.842957 | 1269.652089 | 635.329682 | | | 9 |
| 8 | 1138.592508 | 569.799892 | 1121.565959 | 561.286618 | 1120.581943 | 560.794609 | Q | 1158.620060 | 579.813668 | 1141.593511 | 571.300393 | | | 8 |
| 9 | 1275.651420 | 638.329348 | 1258.624871 | 629.816074 | 1257.640855 | 629.324065 | H | ***719.394734*** | 360.201005 | 702.368185 | 351.687730 | | | 7 |
| 10 | 1412.710332 | 706.858804 | 1395.683783 | 698.345530 | 1394.699767 | 697.853521 | H | ***582.335822*** | 291.671549 | 565.309273 | 283.158274 | | | 6 |
| 11 | 1525.794396 | 763.400836 | 1508.767847 | 754.887561 | 1507.783831 | 754.395553 | L | ***445.276910*** | 223.142093 | 428.250361 | 214.628818 | | | 5 |
| 12 | 1582.815860 | 791.911568 | 1565.789311 | 783.398293 | 1564.805295 | 782.906285 | G | ***332.192846*** | 166.600061 | 315.166297 | 158.086786 | | | 4 |
| 13 | 1639.837324 | 820.422300 | 1622.810775 | 811.909025 | 1621.826759 | 811.417017 | G | ***275.171382*** | 138.089329 | 258.144833 | 129.576054 | | | 3 |
| 14 | 1710.874438 | 855.940857 | 1693.847889 | 847.427582 | 1692.863873 | 846.935574 | A | 218.149918 | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 15 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LTIGEGQQHHLGGAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.2 | 1855.972687 | -0.004555 | LTIGEGQQHHLGGAK |
| 36.2 | 1855.972687 | -0.004555 | LTIGEGQQHHLGGAK |
| 5.2 | 1855.979202 | -0.011070 | ITIVENVGSVEGLAYHR |

**Mascot:** http://www.matrixscience.com/

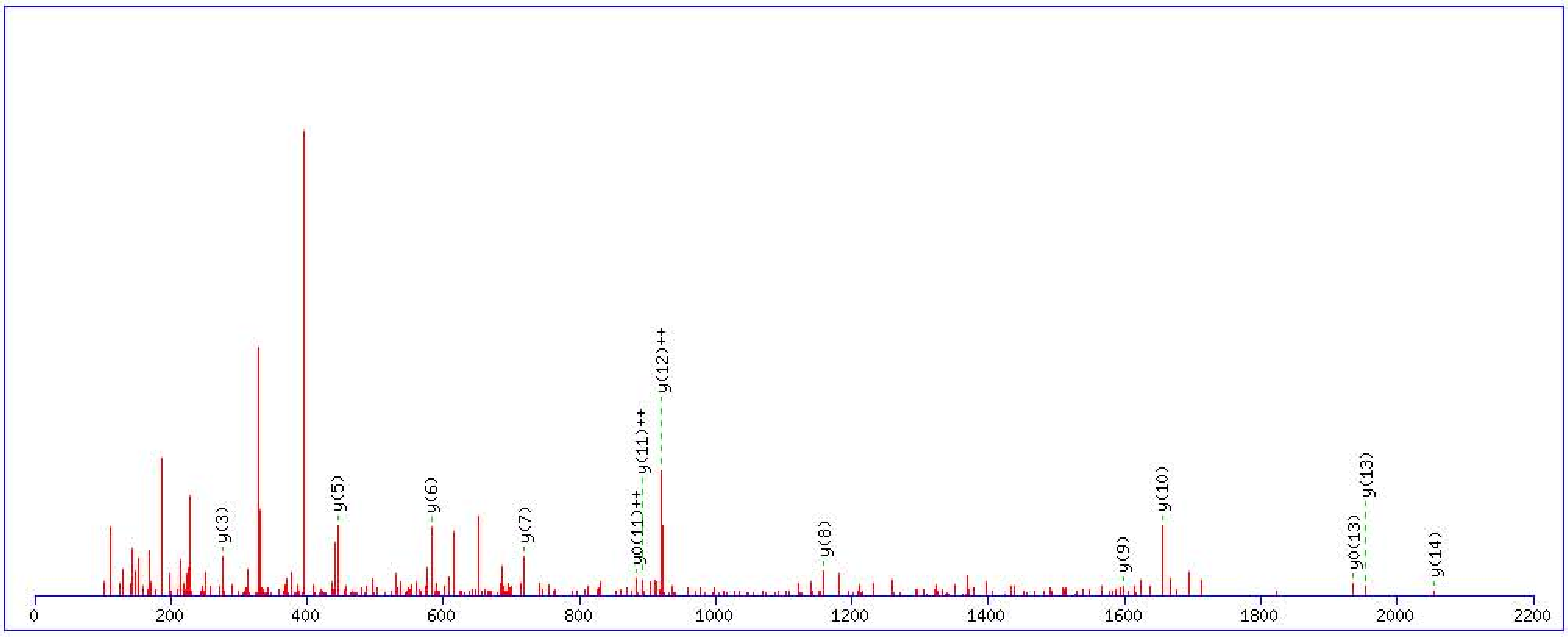
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LTIGEGQQHHLGGAK**
Found in **FIBG_HUMAN**, Fibrinogen gamma chain OS=Homo sapiens GN=FGG PE=1 SV=3

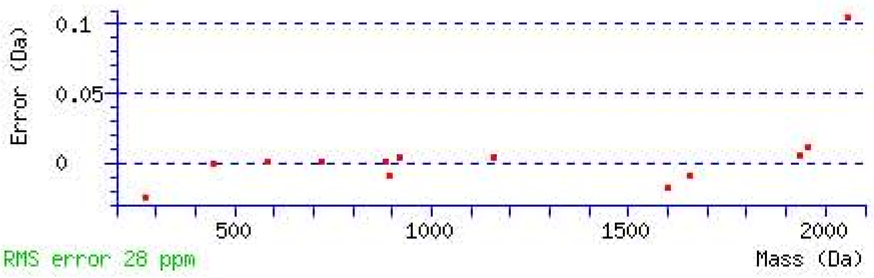
Match to Query 50353: 2167.131896 from(542.790250,4+) rtinseconds(1777) index(34926)
Title: Locus:1.1.1.3038.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

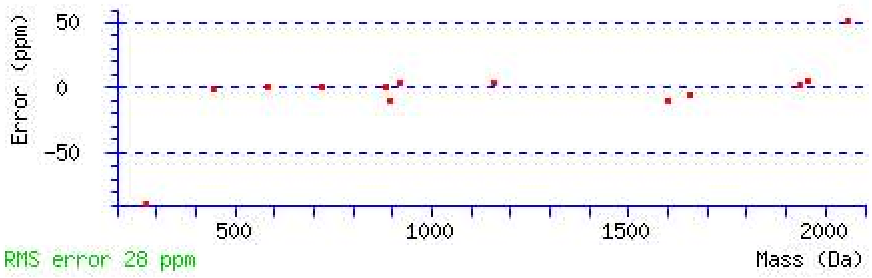
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2167.139435
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7     : Biotin:Thermo-21345 (Q)
Q8     : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.023
Matches : 13/134 fragment ions using 37 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 15 |
| 2 | 215.139019 | 108.073147 | | | 197.128454 | 99.067865 | T | ***2055.062650*** | 1028.034963 | 2038.036101 | 1019.521688 | 2037.052085 | 1019.029680 | 14 |
| 3 | 328.223083 | 164.615179 | | | 310.212518 | 155.609897 | I | ***1954.014971*** | 977.511123 | 1936.988422 | 968.997849 | 1936.004406 | 968.505841 | 13 |
| 4 | 385.244547 | 193.125911 | | | 367.233982 | 184.120629 | G | 1840.930907 | 920.969091 | 1823.904358 | 912.455817 | 1822.920342 | 911.963809 | 12 |
| 5 | 514.287140 | 257.647208 | | | 496.276575 | 248.641926 | E | 1783.909443 | 892.458359 | 1766.882894 | 883.945085 | 1765.898878 | 883.453077 | 11 |
| 6 | 571.308604 | 286.157940 | | | 553.298039 | 277.152658 | G | ***1654.866850*** | 827.937063 | 1637.840301 | 819.423788 | | | 10 |
| 7 | 1010.533930 | 505.770603 | 993.507381 | 497.257329 | 992.523365 | 496.765321 | Q | ***1597.845386*** | 799.426331 | 1580.818837 | 790.913056 | | | 9 |
| 8 | 1449.759256 | 725.383266 | 1432.732707 | 716.869992 | 1431.748691 | 716.377984 | Q | ***1158.620060*** | 579.813668 | 1141.593511 | 571.300393 | | | 8 |
| 9 | 1586.818168 | 793.912722 | 1569.791619 | 785.399448 | 1568.807603 | 784.907440 | H | ***719.394734*** | 360.201005 | 702.368185 | 351.687730 | | | 7 |
| 10 | 1723.877080 | 862.442178 | 1706.850531 | 853.928904 | 1705.866515 | 853.436895 | H | ***582.335822*** | 291.671549 | 565.309273 | 283.158274 | | | 6 |
| 11 | 1836.961144 | 918.984210 | 1819.934595 | 910.470936 | 1818.950579 | 909.978927 | L | ***445.276910*** | 223.142093 | 428.250361 | 214.628818 | | | 5 |
| 12 | 1893.982608 | 947.494942 | 1876.956059 | 938.981667 | 1875.972043 | 938.489659 | G | 332.192846 | 166.600061 | 315.166297 | 158.086786 | | | 4 |
| 13 | 1951.004072 | 976.005674 | 1933.977523 | 967.492399 | 1932.993507 | 967.000391 | G | ***275.171382*** | 138.089329 | 258.144833 | 129.576054 | | | 3 |
| 14 | 2022.041186 | 1011.524231 | 2005.014637 | 1003.010956 | 2004.030621 | 1002.518948 | A | 218.149918 | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 15 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LTIGEGQQHHLGGAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.5 | 2167.139435 | -0.007539 | LTIGEGQQHHLGGAK |

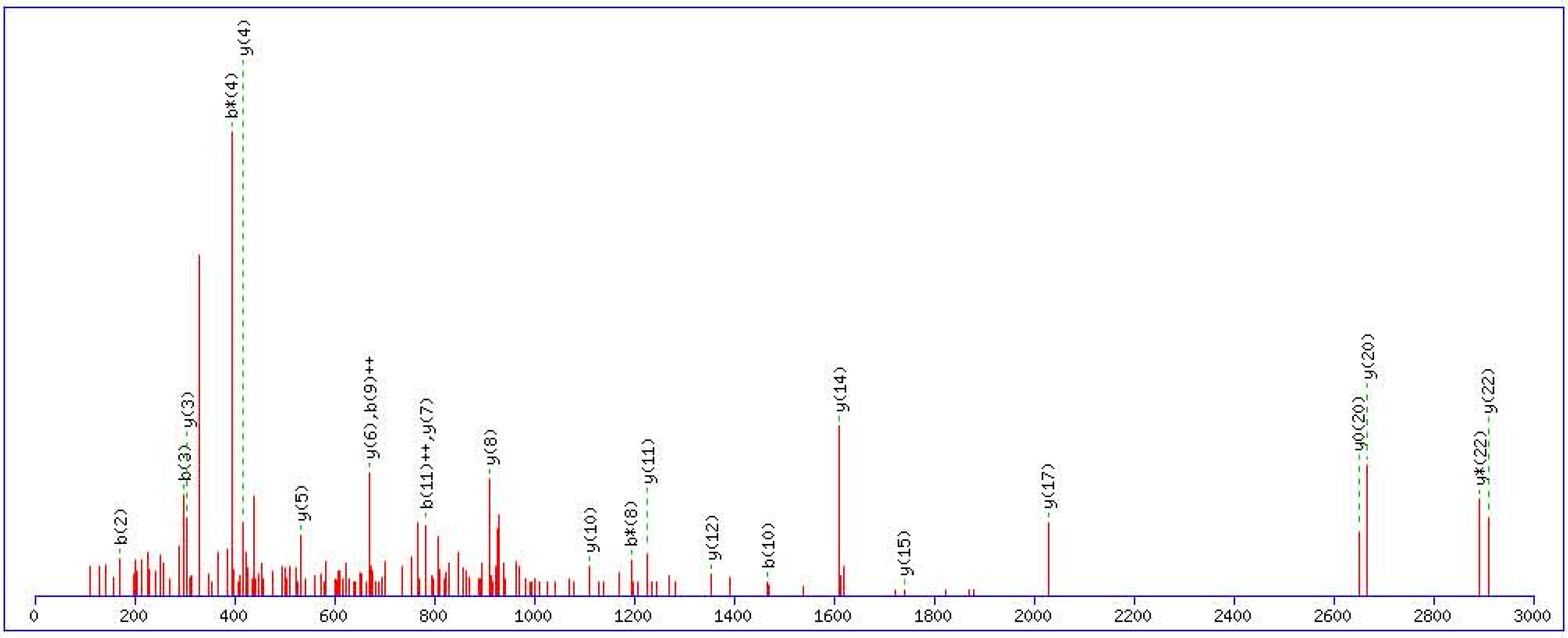
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VAQLEAQCQEPCKDTVQIHDITGK**
Found in **FIBG_HUMAN**, Fibrinogen gamma chain OS=Homo sapiens GN=FGG PE=1 SV=3

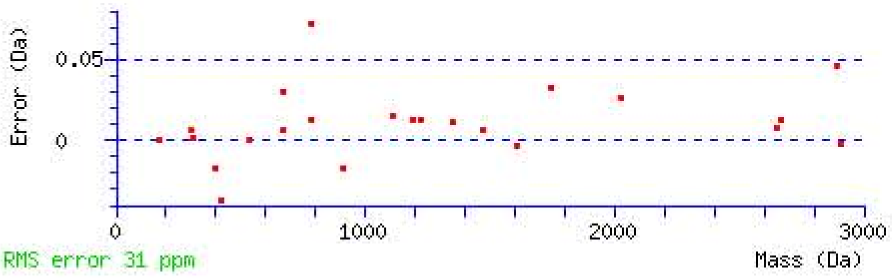
Match to Query 62242: 3078.512536 from(770.635410,4+) rtinseconds(1903) index(52091)
Title: Locus:1.1.1.1278.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●

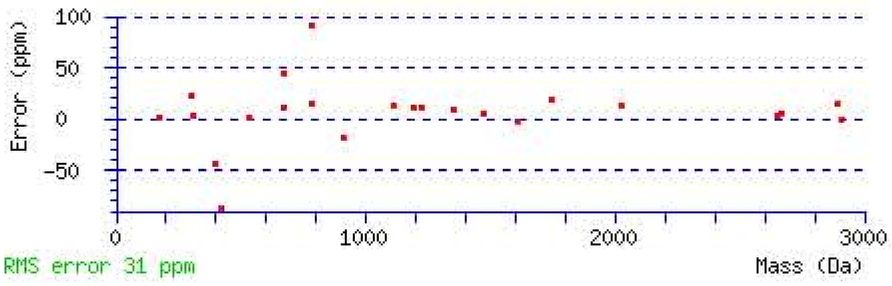


```
Monoisotopic mass of neutral peptide Mr(calc): 3078.493668
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 79  Expect: 3.8e-007
Matches : 23/260 fragment ions using 41 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 24 |
| 2 | **171.112804** | 86.060040 | | | | | A | 2980.432529 | 1490.719902 | 2963.405980 | 1482.206628 | 2962.421964 | 1481.714620 | 23 |
| 3 | **299.171382** | 150.089329 | 282.144833 | 141.576055 | | | Q | ***2909.395415*** | 1455.201345 | 2892.368866 | 1446.688071 | 2891.384850 | 1446.196063 | 22 |
| 4 | 412.255446 | 206.631361 | 395.228897 | 198.118087 | | | L | 2781.336837 | 1391.172056 | 2764.310288 | 1382.658782 | 2763.326272 | 1382.166774 | 21 |
| 5 | 541.298039 | 271.152658 | 524.271490 | 262.639383 | 523.287474 | 262.147375 | E | ***2668.252773*** | 1334.630024 | 2651.226224 | 1326.116750 | 2650.242208 | 1325.624742 | 20 |
| 6 | 612.335153 | 306.671215 | 595.308604 | 298.157940 | 594.324588 | 297.665932 | A | 2539.210180 | 1270.108728 | 2522.183631 | 1261.595453 | 2521.199615 | 1261.103445 | 19 |
| 7 | 1051.560479 | 526.283878 | 1034.533930 | 517.770603 | 1033.549914 | 517.278595 | Q | 2468.173066 | 1234.590171 | 2451.146517 | 1226.076896 | 2450.162501 | 1225.584888 | 18 |
| 8 | 1211.591128 | 606.299202 | 1194.564579 | 597.785928 | 1193.580563 | 597.293920 | C | ***2028.947740*** | 1014.977508 | 2011.921191 | 1006.464234 | 2010.937175 | 1005.972225 | 17 |
| 9 | 1339.649706 | **670.328491** | 1322.623157 | 661.815217 | 1321.639141 | 661.323208 | Q | 1868.917091 | 934.962183 | 1851.890542 | 926.448909 | 1850.906526 | 925.956901 | 16 |
| 10 | **1468.692299** | 734.849788 | 1451.665750 | 726.336513 | 1450.681734 | 725.844505 | E | ***1740.858513*** | 870.932894 | 1723.831964 | 862.419620 | 1722.847948 | 861.927612 | 15 |
| 11 | 1565.745063 | **783.376170** | 1548.718514 | 774.862895 | 1547.734498 | 774.370887 | P | ***1611.815920*** | 806.411598 | 1594.789371 | 797.898323 | 1593.805355 | 797.406315 | 14 |
| 12 | 1725.775712 | 863.391494 | 1708.749163 | 854.878220 | 1707.765147 | 854.386212 | C | 1514.763156 | 757.885216 | 1497.736607 | 749.371941 | 1496.752591 | 748.879933 | 13 |
| 13 | 1853.870675 | 927.438976 | 1836.844126 | 918.925701 | 1835.860110 | 918.433693 | K | ***1354.732507*** | 677.869891 | 1337.705958 | 669.356617 | 1336.721942 | 668.864609 | 12 |
| 14 | 1968.897618 | 984.952447 | 1951.871069 | 976.439173 | 1950.887053 | 975.947165 | D | ***1226.637544*** | 613.822410 | 1209.610995 | 605.309135 | 1208.626979 | 604.817127 | 11 |
| 15 | 2069.945297 | 1035.476286 | 2052.918748 | 1026.963012 | 2051.934732 | 1026.471004 | T | ***1111.610601*** | 556.308938 | 1094.584052 | 547.795664 | 1093.600036 | 547.303656 | 10 |
| 16 | 2169.013711 | 1085.010493 | 2151.987162 | 1076.497219 | 2151.003146 | 1076.005211 | V | 1010.562922 | 505.785099 | 993.536373 | 497.271824 | 992.552357 | 496.779816 | 9 |
| 17 | 2297.072289 | 1149.039782 | 2280.045740 | 1140.526508 | 2279.061724 | 1140.034500 | Q | ***911.494508*** | 456.250892 | 894.467959 | 447.737618 | 893.483943 | 447.245610 | 8 |
| 18 | 2410.156353 | 1205.581814 | 2393.129804 | 1197.068540 | 2392.145788 | 1196.576532 | I | ***783.435930*** | 392.221603 | 766.409381 | 383.708328 | 765.425365 | 383.216320 | 7 |
| 19 | 2547.215265 | 1274.111270 | 2530.188716 | 1265.597996 | 2529.204700 | 1265.105988 | H | ***670.351866*** | 335.679571 | 653.325317 | 327.166296 | 652.341301 | 326.674288 | 6 |
| 20 | 2662.242208 | 1331.624742 | 2645.215659 | 1323.111467 | 2644.231643 | 1322.619459 | D | ***533.292954*** | 267.150115 | 516.266405 | 258.636840 | 515.282389 | 258.144832 | 5 |
| 21 | 2775.326272 | 1388.166774 | 2758.299723 | 1379.653499 | 2757.315707 | 1379.161491 | I | ***418.266011*** | 209.636643 | 401.239462 | 201.123369 | 400.255446 | 200.631361 | 4 |
| 22 | 2876.373951 | 1438.690613 | 2859.347402 | 1430.177339 | 2858.363386 | 1429.685331 | T | ***305.181947*** | 153.094611 | 288.155398 | 144.581337 | 287.171382 | 144.089329 | 3 |
| 23 | 2933.395415 | 1467.201345 | 2916.368866 | 1458.688071 | 2915.384850 | 1458.196063 | G | 204.134268 | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 24 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 31 ppm



RMS error 31 ppm

NCBI **BLAST** search of VAQLEAQCQEPCKDTVQIHDITGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 78.9 | 3078.493668 | 0.018868 | VAQLEAQCQEPCKDTVQIHDITGK |
| 65.1 | 3078.493668 | 0.018868 | VAQLEAQCQEPCKDTVQIHDITGK |
| 61.0 | 3078.493668 | 0.018868 | VAQLEAQCQEPCKDTVQIHDITGK |
| 15.2 | 3078.493668 | 0.018868 | VAQLEAQCQEPCKDTVQIHDITGK |

**Mascot:** http://www.matrixscience.com/

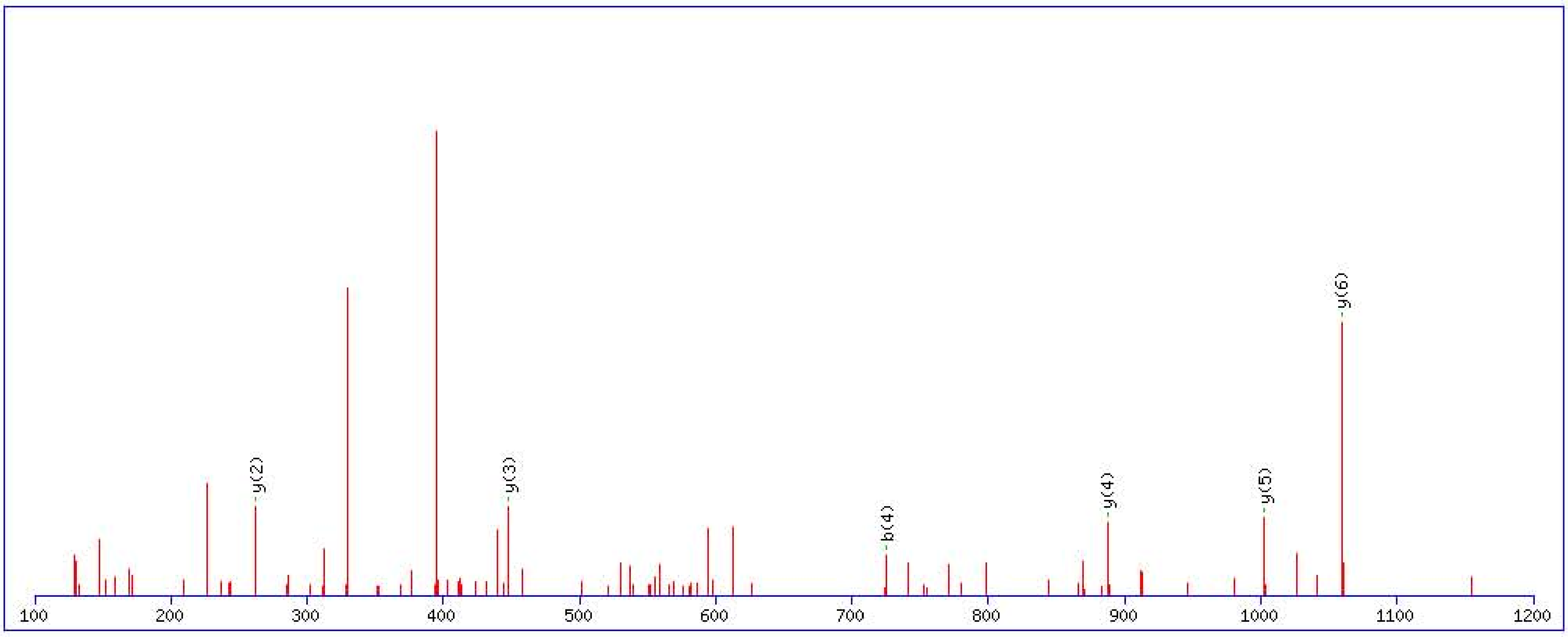
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IGDQWDK**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

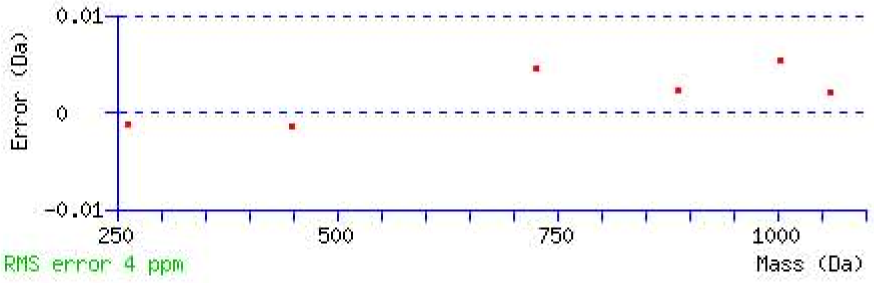
Match to Query 22388: 1171.566708 from(586.790630,2+) rtinseconds(1800) index(35054)
Title: Locus:1.1.1.3046.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

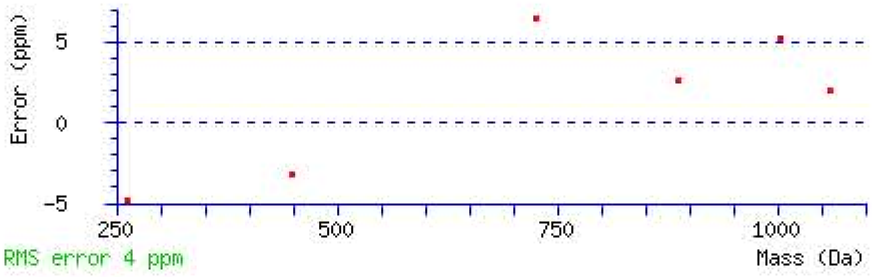
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1171.569580
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.006
Matches : 6/60 fragment ions using 11 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 7 |
| 2 | 171.112804 | 86.060040 | | | | | G | ***1059.492793*** | 530.250035 | 1042.466244 | 521.736760 | 1041.482228 | 521.244752 | 6 |
| 3 | 286.139747 | 143.573512 | | | 268.129182 | 134.568229 | D | ***1002.471329*** | 501.739303 | 985.444780 | 493.226028 | 984.460764 | 492.734020 | 5 |
| 4 | **725.365073** | 363.186175 | 708.338524 | 354.672900 | 707.354508 | 354.180892 | Q | ***887.444386*** | 444.225831 | 870.417837 | 435.712557 | 869.433821 | 435.220549 | 4 |
| 5 | 911.444386 | 456.225831 | 894.417837 | 447.712557 | 893.433821 | 447.220549 | W | ***448.219060*** | 224.613168 | 431.192511 | 216.099894 | 430.208495 | 215.607886 | 3 |
| 6 | 1026.471329 | 513.739303 | 1009.444780 | 505.226028 | 1008.460764 | 504.734020 | D | ***262.139747*** | 131.573512 | 245.113198 | 123.060237 | 244.129182 | 122.568229 | 2 |
| 7 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IGDQWDK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.4 | 1171.569580 | -0.002872 | IGDQWDK |
| 7.2 | 1171.583328 | -0.016620 | GEVGDPGQKGTK |
| 6.7 | 1171.572067 | -0.005359 | LGSGPDGAEEIK |
| 6.2 | 1171.576096 | -0.009388 | LYFSDATLDK |
| 5.2 | 1171.569565 | -0.002857 | LGPEWSQPMK |
| 4.1 | 1171.573410 | -0.006702 | RAPDPGFQER |
| 1.9 | 1171.559021 | 0.007687 | SQLHCRMPK |
| 1.2 | 1171.554337 | 0.012371 | ALCDTPGVDPK |
| 0.4 | 1171.577438 | -0.010730 | NDVLHNFWK |
| 0.2 | 1171.562134 | 0.004574 | RYYEEERK |

**Mascot:** http://www.matrixscience.com/

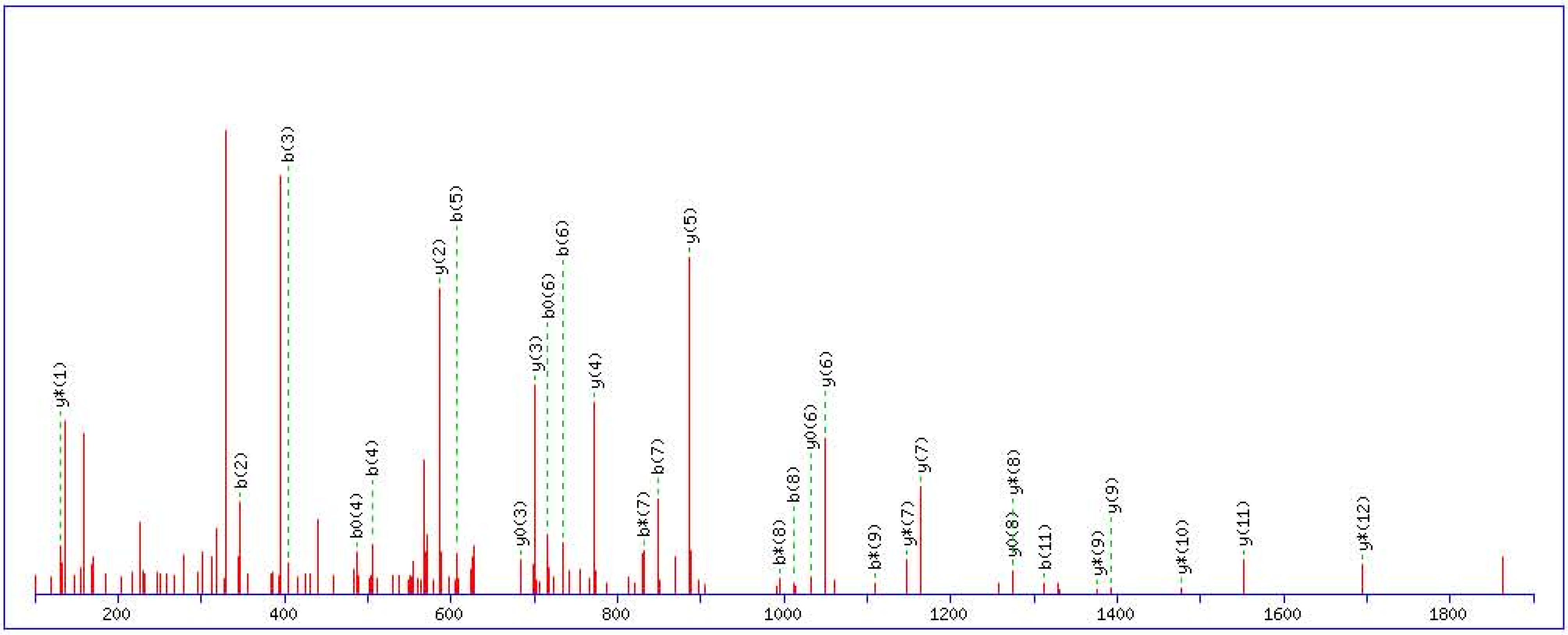
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **WCGTTQNYDADQK**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

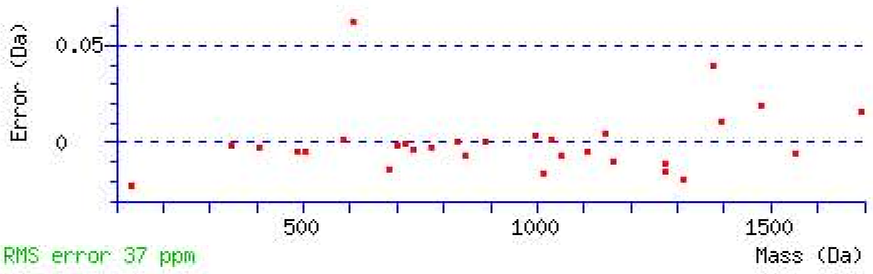
Match to Query 44456: 1896.807132 from(633.276320,3+) rtinseconds(1654) index(34120)
Title: Locus:1.1.1.2995.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

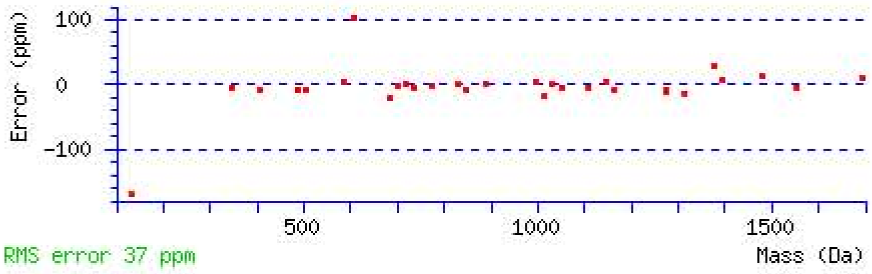
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1896.813477
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 0.00011
Matches : 30/124 fragment ions using 53 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 187.086589 | 94.046932 | | | | | W | | | | | | | 13 |
| 2 | ***347.117238*** | 174.062257 | | | | | C | 1711.741435 | 856.374356 | 1694.714886 | 847.861081 | 1693.730870 | 847.369073 | 12 |
| 3 | ***404.138702*** | 202.572989 | | | | | G | ***1551.710786*** | 776.359031 | 1534.684237 | 767.845757 | 1533.700221 | 767.353749 | 11 |
| 4 | ***505.186381*** | 253.096828 | | | 487.175816 | 244.091546 | T | 1494.689322 | 747.848299 | 1477.662773 | 739.335025 | 1476.678757 | 738.843017 | 10 |
| 5 | ***606.234060*** | 303.620668 | | | 588.223495 | 294.615386 | T | ***1393.641643*** | 697.324460 | 1376.615094 | 688.811185 | 1375.631078 | 688.319177 | 9 |
| 6 | ***734.292638*** | 367.649957 | 717.266089 | 359.136683 | 716.282073 | 358.644675 | Q | 1292.593964 | 646.800620 | 1275.567415 | 638.287346 | 1274.583399 | 637.795338 | 8 |
| 7 | ***848.335565*** | 424.671421 | 831.309016 | 416.158146 | 830.325000 | 415.666138 | N | ***1164.535386*** | 582.771331 | 1147.508837 | 574.258057 | 1146.524821 | 573.766049 | 7 |
| 8 | ***1011.398894*** | 506.203085 | 994.372345 | 497.689810 | 993.388329 | 497.197802 | Y | ***1050.492459*** | 525.749868 | 1033.465910 | 517.236593 | 1032.481894 | 516.744585 | 6 |
| 9 | 1126.425837 | 563.716557 | 1109.399288 | 555.203282 | 1108.415272 | 554.711274 | D | ***887.429130*** | 444.218203 | 870.402581 | 435.704929 | 869.418565 | 435.212921 | 5 |
| 10 | 1197.462951 | 599.235114 | 1180.436402 | 590.721839 | 1179.452386 | 590.229831 | A | ***772.402187*** | 386.704732 | 755.375638 | 378.191457 | 754.391622 | 377.699449 | 4 |
| 11 | ***1312.489894*** | 656.748585 | 1295.463345 | 648.235311 | 1294.479329 | 647.743303 | D | ***701.365073*** | 351.186175 | 684.338524 | 342.672900 | 683.354508 | 342.180892 | 3 |
| 12 | 1751.715220 | 876.361248 | 1734.688671 | 867.847974 | 1733.704655 | 867.355966 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of WCGTTQNYDADQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.7 | 1896.813477 | -0.006345 | WCGTTQNYDADQK |

**Mascot:** http://www.matrixscience.com/

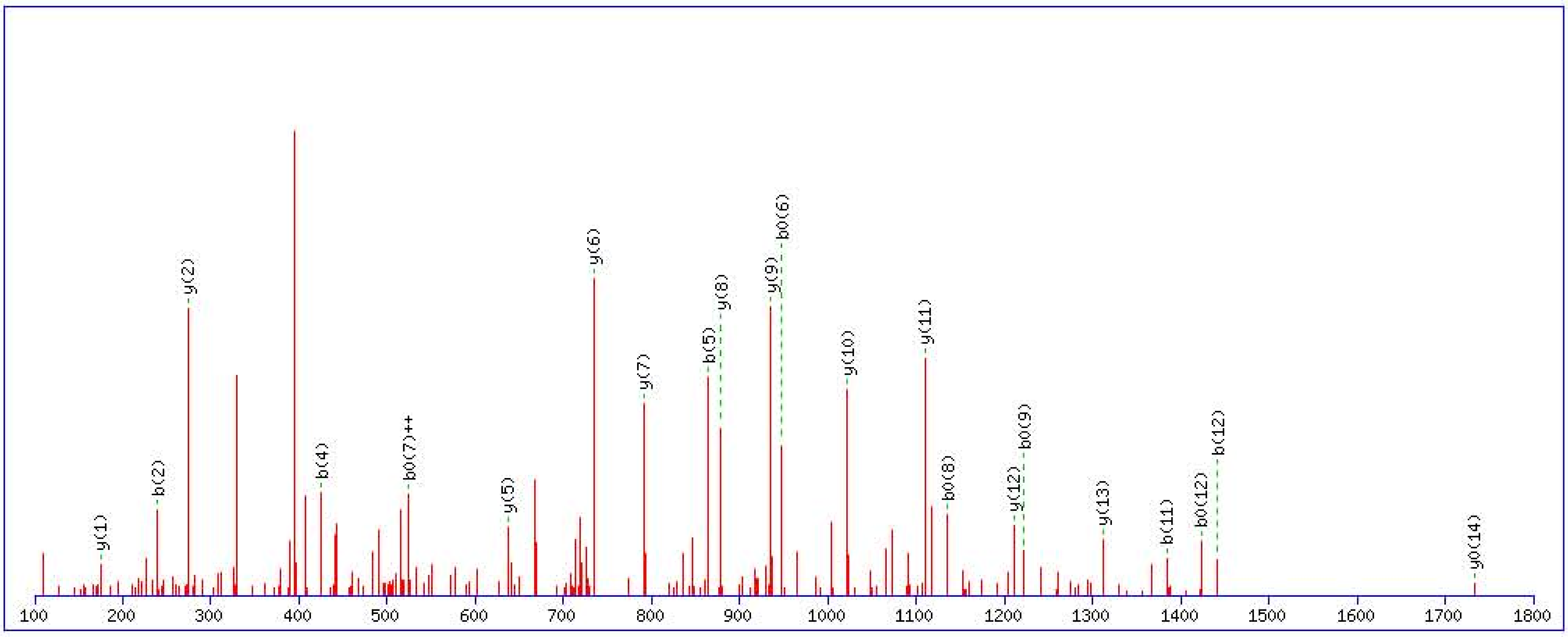
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HTSVQTTSSGSGPFTDVR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

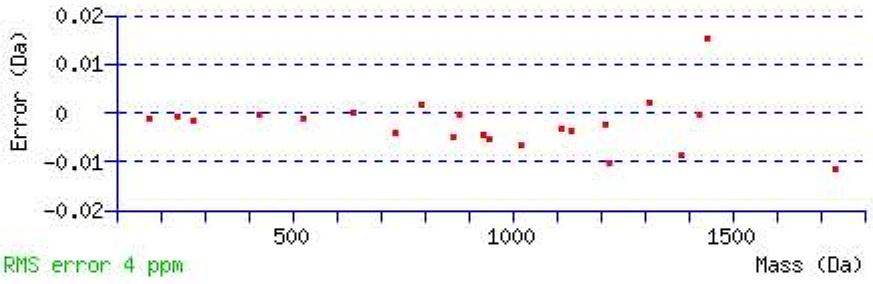
Match to Query 50535: 2174.039652 from(725.687160,3+) rtinseconds(1662) index(34170)
Title: Locus:1.1.1.2998.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

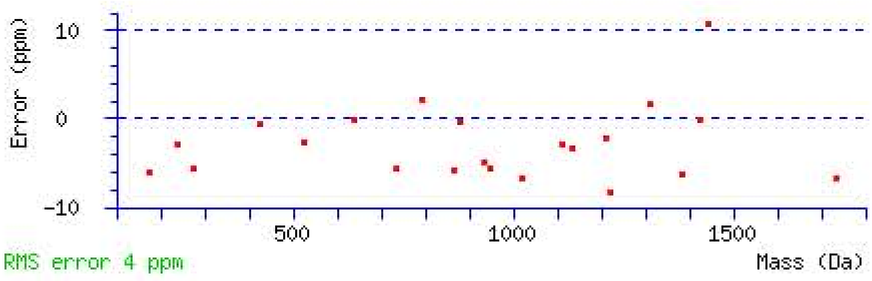
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2174.042664
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q5 : Biotin:Thermo-21345 (Q)
**Ions Score:** 86 **Expect:** 4.6e-008
**Matches :** 22/190 fragment ions using 29 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 18 |
| 2 | **239.113867** | 120.060571 | | | 221.103302 | 111.055289 | T | 2037.990983 | 1019.499130 | 2020.964434 | 1010.985855 | 2019.980418 | 1010.493847 | 17 |
| 3 | 326.145895 | 163.576585 | | | 308.135330 | 154.571303 | S | 1936.943304 | 968.975290 | 1919.916755 | 960.462016 | 1918.932739 | 959.970008 | 16 |
| 4 | **425.214309** | 213.110792 | | | 407.203744 | 204.105510 | V | 1849.911276 | 925.459276 | 1832.884727 | 916.946002 | 1831.900711 | 916.453994 | 15 |
| 5 | **864.439635** | 432.723456 | 847.413086 | 424.210181 | 846.429070 | 423.718173 | Q | 1750.842862 | 875.925069 | 1733.816313 | 867.411795 | 1732.832297 | 866.919787 | 14 |
| 6 | 965.487314 | 483.247295 | 948.460765 | 474.734021 | 947.476749 | 474.242013 | T | ***1311.617536*** | 656.312406 | 1294.590987 | 647.799132 | 1293.606971 | 647.307124 | 13 |
| 7 | 1066.534993 | 533.771135 | 1049.508444 | 525.257860 | 1048.524428 | 524.765852 | T | ***1210.569857*** | 605.788567 | 1193.543308 | 597.275292 | 1192.559292 | 596.783284 | 12 |
| 8 | 1153.567021 | 577.287149 | 1136.540472 | 568.773874 | 1135.556456 | 568.281866 | S | ***1109.522178*** | 555.264727 | 1092.495629 | 546.751453 | 1091.511613 | 546.259445 | 11 |
| 9 | 1240.599049 | 620.803163 | 1223.572500 | 612.289888 | 1222.588484 | 611.797880 | S | ***1022.490150*** | 511.748713 | 1005.463601 | 503.235439 | 1004.479585 | 502.743431 | 10 |
| 10 | 1297.620513 | 649.313895 | 1280.593964 | 640.800620 | 1279.609948 | 640.308612 | G | ***935.458122*** | 468.232699 | 918.431573 | 459.719425 | 917.447557 | 459.227417 | 9 |
| 11 | **1384.652541** | 692.829909 | 1367.625992 | 684.316634 | 1366.641976 | 683.824626 | S | ***878.436658*** | 439.721967 | 861.410109 | 431.208693 | 860.426093 | 430.716685 | 8 |
| 12 | **1441.674005** | 721.340641 | 1424.647456 | 712.827366 | 1423.663440 | 712.335358 | G | ***791.404630*** | 396.205953 | 774.378081 | 387.692679 | 773.394065 | 387.200671 | 7 |
| 13 | 1538.726769 | 769.867023 | 1521.700220 | 761.353748 | 1520.716204 | 760.861740 | P | ***734.383166*** | 367.695221 | 717.356617 | 359.181947 | 716.372601 | 358.689939 | 6 |
| 14 | 1685.795183 | 843.401230 | 1668.768634 | 834.887955 | 1667.784618 | 834.395947 | F | ***637.330402*** | 319.168839 | 620.303853 | 310.655565 | 619.319837 | 310.163557 | 5 |
| 15 | 1786.842862 | 893.925069 | 1769.816313 | 885.411795 | 1768.832297 | 884.919787 | T | 490.261988 | 245.634632 | 473.235439 | 237.121358 | 472.251423 | 236.629350 | 4 |
| 16 | 1901.869805 | 951.438541 | 1884.843256 | 942.925266 | 1883.859240 | 942.433258 | D | 389.214309 | 195.110793 | 372.187760 | 186.597518 | 371.203744 | 186.105510 | 3 |
| 17 | 2000.938219 | 1000.972748 | 1983.911670 | 992.459473 | 1982.927654 | 991.967465 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084047 | | | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of HTSVQTTSSGSGPFTDVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 86.3 | 2174.042664 | -0.003012 | HTSVQTTSSGSGPFTDVR |

**Mascot:** http://www.matrixscience.com/

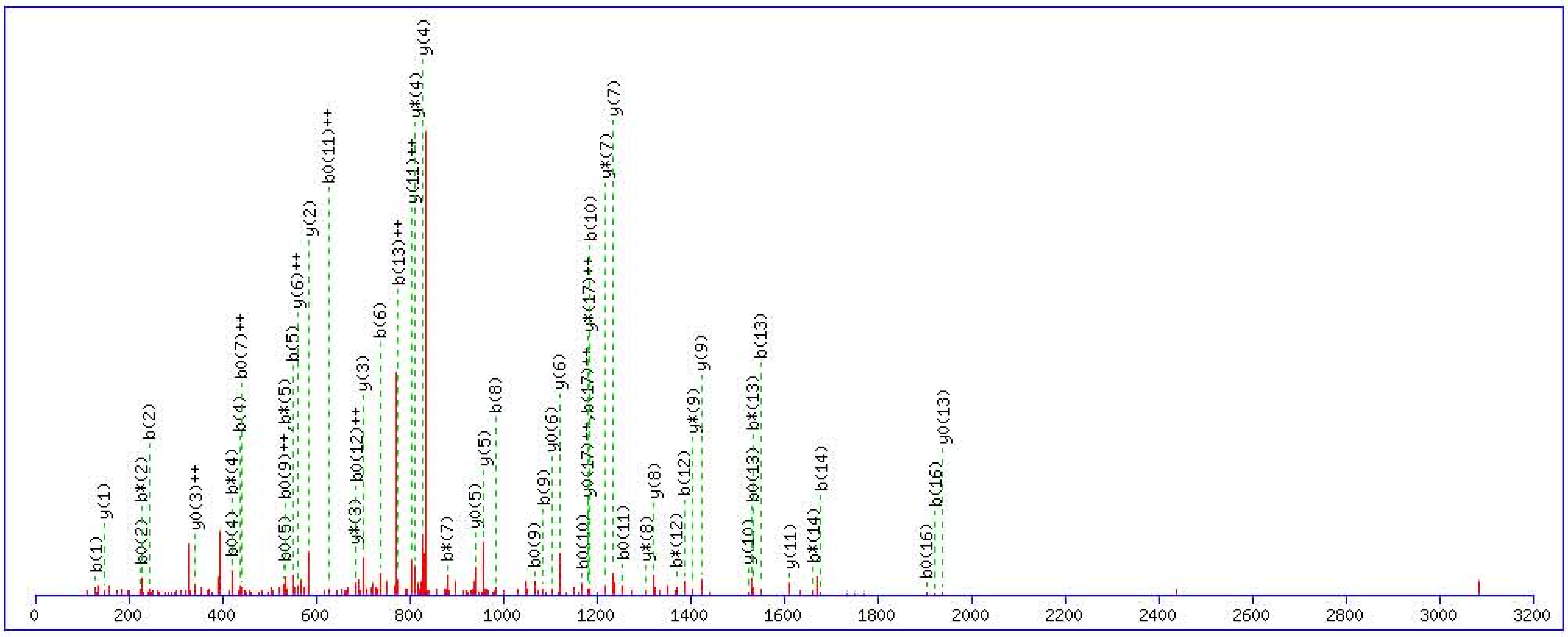
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QDGHLWCSTTSNYEQDQK**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

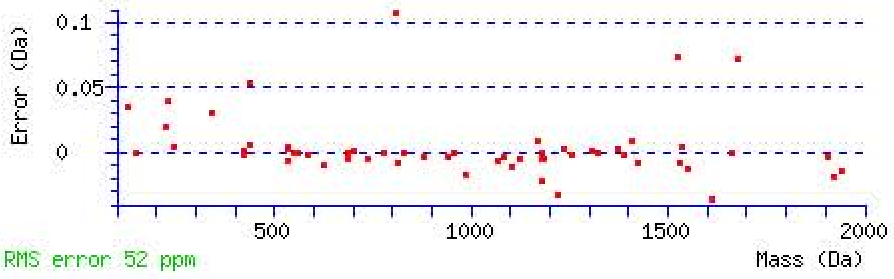
Match to Query 56805: 2507.089572 from(836.703800,3+) rtinseconds(1763) index(34845)
Title: Locus:1.1.1.3033.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

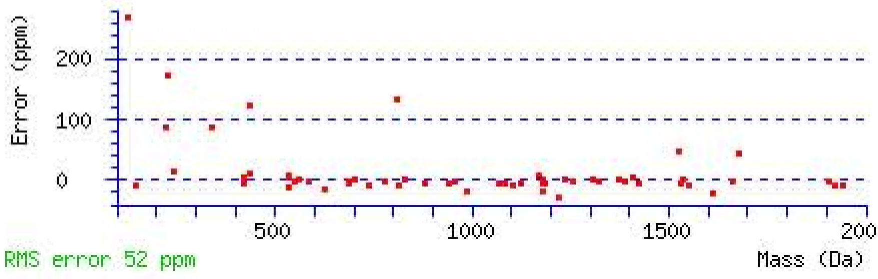
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2507.084564
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q17    : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 1.3e-006
Matches : 57/198 fragment ions using 97 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.065854*** | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 18 |
| 2 | ***244.092797*** | 122.550037 | 227.066248 | 114.036762 | 226.082232 | 113.544754 | D | 2380.033259 | 1190.520267 | 2363.006710 | 1182.006993 | 2362.022694 | 1181.514985 | 17 |
| 3 | 301.114261 | 151.060768 | 284.087712 | 142.547494 | 283.103696 | 142.055486 | G | 2265.006316 | 1133.006796 | 2247.979767 | 1124.493521 | 2246.995751 | 1124.001513 | 16 |
| 4 | ***438.173173*** | 219.590224 | 421.146624 | 211.076950 | 420.162608 | 210.584942 | H | 2207.984852 | 1104.496064 | 2190.958303 | 1095.982789 | 2189.974287 | 1095.490781 | 15 |
| 5 | ***551.257237*** | 276.132257 | 534.230688 | 267.618982 | 533.246672 | 267.126974 | L | 2070.925940 | 1035.966608 | 2053.899391 | 1027.453333 | 2052.915375 | 1026.961325 | 14 |
| 6 | ***737.336550*** | 369.171913 | 720.310001 | 360.658639 | 719.325985 | 360.166631 | W | 1957.841876 | 979.424576 | 1940.815327 | 970.911302 | 1939.831311 | 970.419294 | 13 |
| 7 | 897.367199 | 449.187238 | 880.340650 | 440.673963 | 879.356634 | 440.181955 | C | 1771.762563 | 886.384920 | 1754.736014 | 877.871645 | 1753.751998 | 877.379637 | 12 |
| 8 | ***984.399227*** | 492.703252 | 967.372678 | 484.189977 | 966.388662 | 483.697969 | S | ***1611.731914*** | 806.369595 | 1594.705365 | 797.856321 | 1593.721349 | 797.364313 | 11 |
| 9 | ***1085.446906*** | 543.227091 | 1068.420357 | 534.713817 | 1067.436341 | 534.221808 | T | ***1524.699886*** | 762.853581 | 1507.673337 | 754.340307 | 1506.689321 | 753.848299 | 10 |
| 10 | ***1186.494585*** | 593.750930 | 1169.468036 | 585.237656 | 1168.484020 | 584.745648 | T | ***1423.652207*** | 712.329742 | 1406.625658 | 703.816467 | 1405.641642 | 703.324459 | 9 |
| 11 | 1273.526613 | 637.266945 | 1256.500064 | 628.753670 | 1255.516048 | 628.261662 | S | ***1322.604528*** | 661.805902 | 1305.577979 | 653.292628 | 1304.593963 | 652.800620 | 8 |
| 12 | ***1387.569540*** | 694.288408 | 1370.542991 | 685.775134 | 1369.558975 | 685.283125 | N | ***1235.572500*** | 618.289888 | 1218.545951 | 609.776614 | 1217.561935 | 609.284606 | 7 |
| 13 | ***1550.632869*** | **775.820073** | 1533.606320 | 767.306798 | 1532.622304 | 766.814790 | Y | ***1121.529573*** | 561.268425 | 1104.503024 | 552.755150 | 1103.519008 | 552.263142 | 6 |
| 14 | ***1679.675462*** | 840.341369 | 1662.648913 | 831.828095 | 1661.664897 | 831.336086 | E | ***958.466244*** | 479.736760 | 941.439695 | 471.223486 | 940.455679 | 470.731478 | 5 |
| 15 | 1807.734040 | 904.370658 | 1790.707491 | 895.857384 | 1789.723475 | 895.365376 | Q | ***829.423651*** | 415.215464 | 812.397102 | 406.702189 | 811.413086 | 406.210181 | 4 |
| 16 | ***1922.760983*** | 961.884130 | 1905.734434 | 953.370855 | 1904.750418 | 952.878847 | D | ***701.365073*** | 351.186175 | 684.338524 | 342.672900 | 683.354508 | 342.180892 | 3 |
| 17 | 2361.986309 | **1181.496792** | 2344.959760 | 1172.983518 | 2343.975744 | 1172.491510 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 18 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QDGHLWCSTTSNYEQDQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.8 | 2507.084564 | 0.005008 | QDGHLWCSTTSNYEQDQK |
| 47.4 | 2507.084564 | 0.005008 | QDGHLWCSTTSNYEQDQK |
| 0.1 | 2507.119598 | -0.030026 | KYGAAMVVMAFDEEGQATETDTK |

**Mascot:** http://www.matrixscience.com/

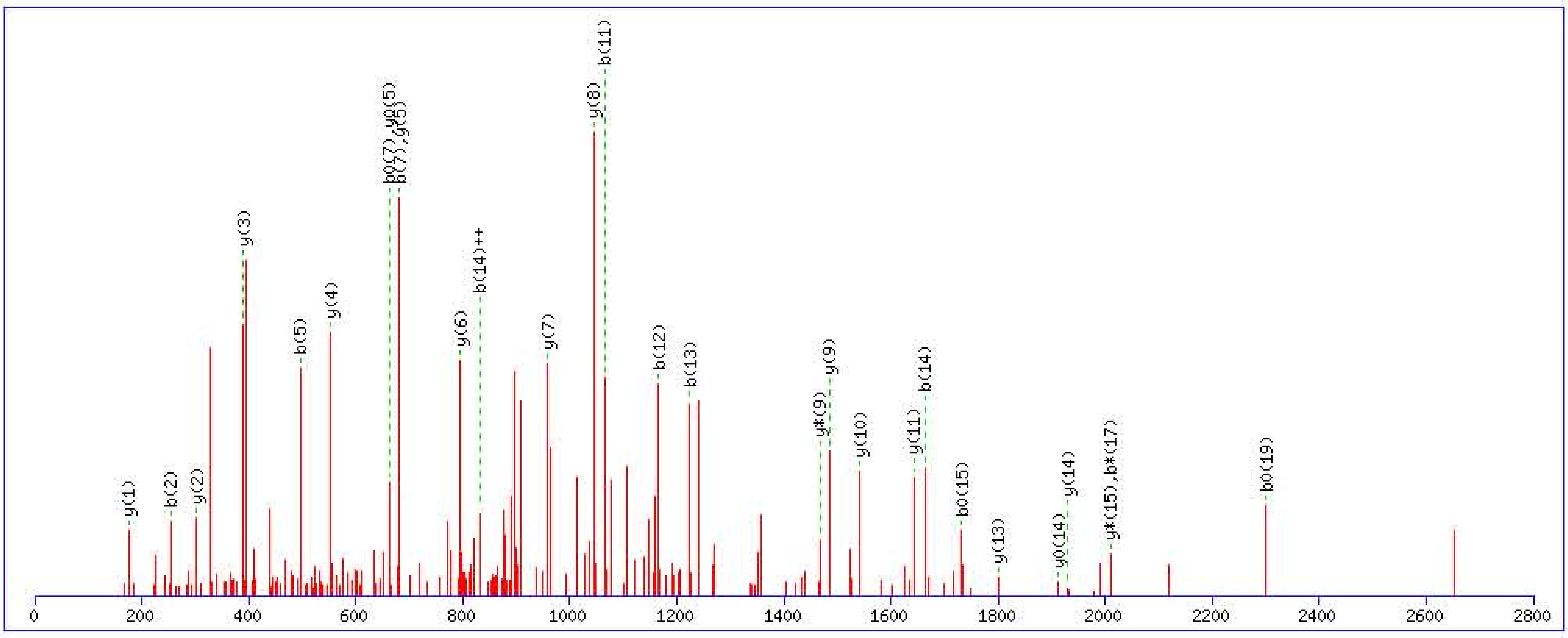
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RPGGEPSPEGTTGQSYNQYSQR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

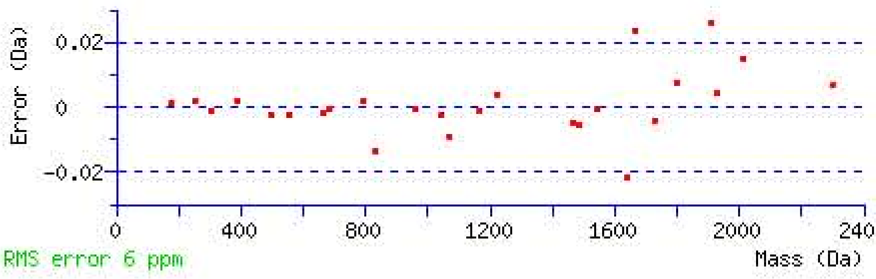
Match to Query 58350: 2706.246372 from(903.089400,3+) rtinseconds(1488) index(33199)
Title: Locus:1.1.1.2937.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

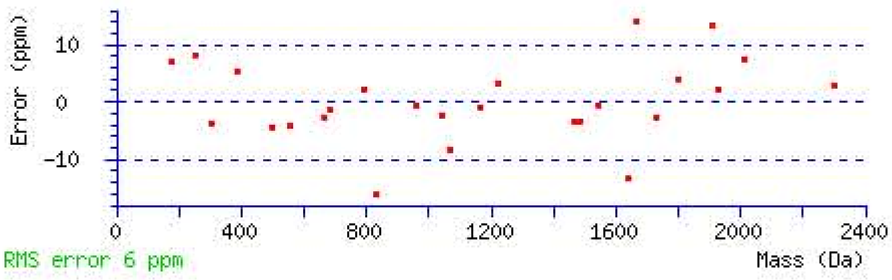
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2706.245621
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q14** : Biotin:Thermo-21345 (Q)
**Ions Score:** 83 **Expect:** 7.6e-008
**Matches** : 29/240 fragment ions using 41 most intense peaks (help)

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 22 |
| 2 | **254.161151** | 127.584213 | 237.134602 | 119.070939 | | | P | 2551.151795 | 1276.079535 | 2534.125246 | 1267.566261 | 2533.141230 | 1267.074253 | 21 |
| 3 | 311.182615 | 156.094945 | 294.156066 | 147.581671 | | | G | 2454.099031 | 1227.553153 | 2437.072482 | 1219.039879 | 2436.088466 | 1218.547871 | 20 |
| 4 | 368.204079 | 184.605677 | 351.177530 | 176.092403 | | | G | 2397.077567 | 1199.042421 | 2380.051018 | 1190.529147 | 2379.067002 | 1190.037139 | 19 |
| 5 | **497.246672** | 249.126974 | 480.220123 | 240.613700 | 479.236107 | 240.121692 | E | 2340.056103 | 1170.531689 | 2323.029554 | 1162.018415 | 2322.045538 | 1161.526407 | 18 |
| 6 | 594.299436 | 297.653356 | 577.272887 | 289.140082 | 576.288871 | 288.648074 | P | 2211.013510 | 1106.010393 | 2193.986961 | 1097.497118 | 2193.002945 | 1097.005110 | 17 |
| 7 | **681.331464** | 341.169370 | 664.304915 | 332.656095 | 663.320899 | 332.164087 | S | 2113.960746 | 1057.484011 | 2096.934197 | 1048.970736 | 2095.950181 | 1048.478728 | 16 |
| 8 | 778.384228 | 389.695752 | 761.357679 | 381.182478 | 760.373663 | 380.690470 | P | 2026.928718 | 1013.967997 | 2009.902169 | 1005.454723 | 2008.918153 | 1004.962715 | 15 |
| 9 | 907.426821 | 454.217049 | 890.400272 | 445.703774 | 889.416256 | 445.211766 | E | ***1929.875954*** | 965.441615 | 1912.849405 | 956.928341 | 1911.865389 | 956.436333 | 14 |
| 10 | 964.448285 | 482.727781 | 947.421736 | 474.214506 | 946.437720 | 473.722498 | G | ***1800.833361*** | 900.920319 | 1783.806812 | 892.407044 | 1782.822796 | 891.915036 | 13 |
| 11 | **1065.495964** | 533.251620 | 1048.469415 | 524.738346 | 1047.485399 | 524.246337 | T | 1743.811897 | 872.409587 | 1726.785348 | 863.896312 | 1725.801332 | 863.404304 | 12 |
| 12 | **1166.543643** | 583.775460 | 1149.517094 | 575.262185 | 1148.533078 | 574.770177 | T | ***1642.764218*** | 821.885747 | 1625.737669 | 813.372473 | 1624.753653 | 812.880465 | 11 |
| 13 | **1223.565107** | 612.286191 | 1206.538558 | 603.772917 | 1205.554542 | 603.280909 | G | ***1541.716539*** | 771.361908 | 1524.689990 | 762.848633 | 1523.705974 | 762.356625 | 10 |
| 14 | **1662.790433** | 831.898854 | 1645.763884 | 823.385580 | 1644.779868 | 822.893572 | Q | ***1484.695075*** | 742.851176 | 1467.668526 | 734.337901 | 1466.684510 | 733.845893 | 9 |
| 15 | 1749.822461 | 875.414869 | 1732.795912 | 866.901594 | 1731.811896 | 866.409586 | S | ***1045.469749*** | 523.238513 | 1028.443200 | 514.725238 | 1027.459184 | 514.233230 | 8 |
| 16 | 1912.885790 | 956.946533 | 1895.859241 | 948.433259 | 1894.875225 | 947.941251 | Y | ***958.437721*** | 479.722499 | 941.411172 | 471.209224 | 940.427156 | 470.717216 | 7 |
| 17 | 2026.928717 | 1013.967997 | 2009.902168 | 1005.454722 | 2008.918152 | 1004.962714 | N | ***795.374392*** | 398.190834 | 778.347843 | 389.677560 | 777.363827 | 389.185552 | 6 |
| 18 | 2154.987295 | 1077.997285 | 2137.960746 | 1069.484011 | 2136.976730 | 1068.992003 | Q | ***681.331465*** | 341.169371 | 664.304916 | 332.656096 | 663.320900 | 332.164088 | 5 |
| 19 | 2318.050624 | 1159.528950 | 2301.024075 | 1151.015675 | 2300.040059 | 1150.523667 | Y | ***553.272887*** | 277.140082 | 536.246338 | 268.626807 | 535.262322 | 268.134799 | 4 |
| 20 | 2405.082652 | 1203.044964 | 2388.056103 | 1194.531689 | 2387.072087 | 1194.039681 | S | ***390.209558*** | 195.608417 | 373.183009 | 187.095143 | 372.198993 | 186.603135 | 3 |
| 21 | 2533.141230 | 1267.074253 | 2516.114681 | 1258.560978 | 2515.130665 | 1258.068971 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 22 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RPGGEPSPEGTTGQSYNQYSQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 82.5 | 2706.245621 | 0.000751 | RPGGEPSPEGTTGQSYNQYSQR |
| 67.4 | 2706.245621 | 0.000751 | RPGGEPSPEGTTGQSYNQYSQR |
| 48.1 | 2706.245621 | 0.000751 | RPGGEPSPEGTTGQSYNQYSQR |

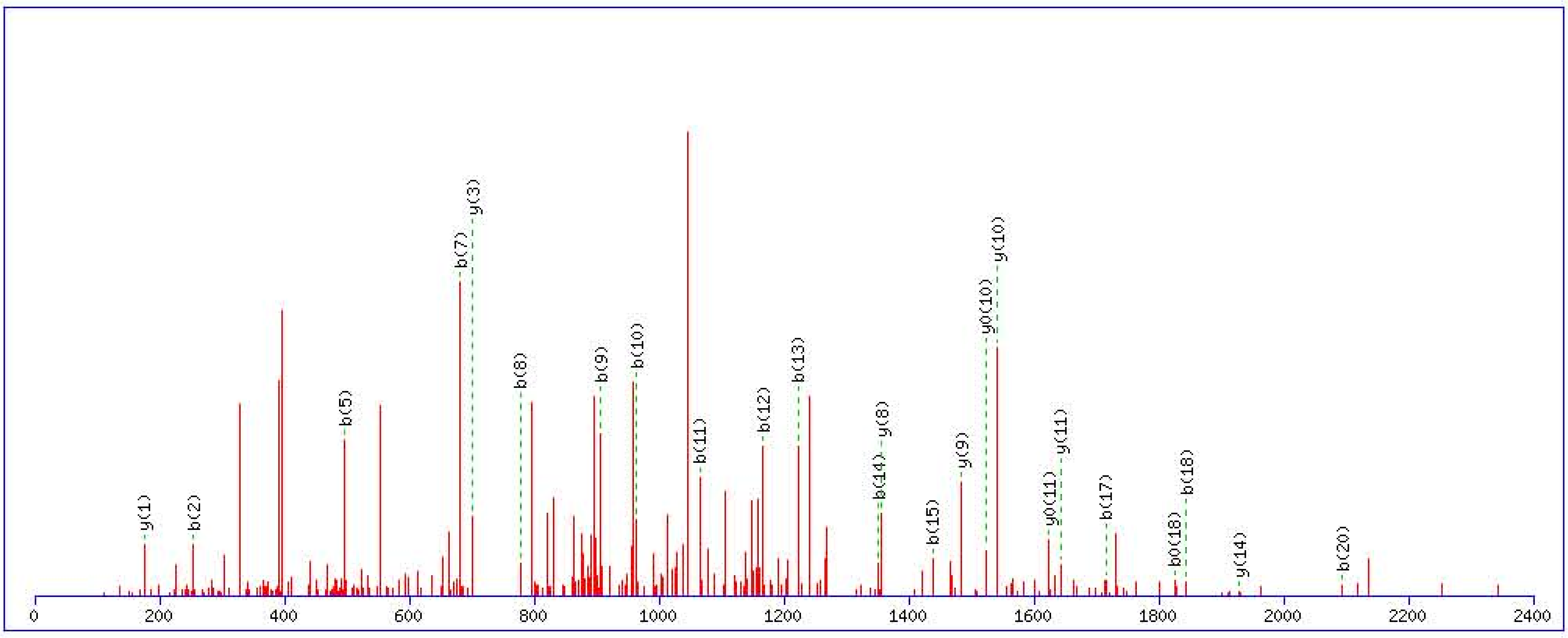
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **RPGGEPSPEGTTGQSYNQYSQR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

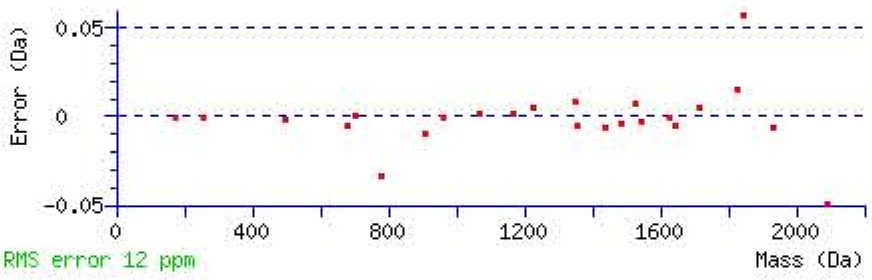
Match to Query 58351: 2706.246372 from(903.089400,3+) rtinseconds(1480) index(33151)
Title: Locus:1.1.1.2934.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

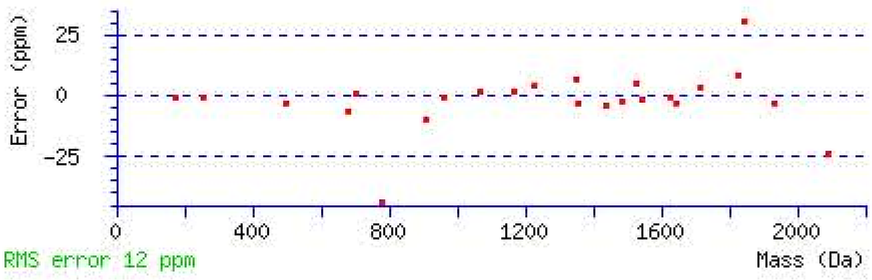
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2706.245621
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q21     : Biotin:Thermo-21345 (Q)
Ions Score: 85  Expect: 4.1e-008
Matches : 24/240 fragment ions using 43 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 22 |
| 2 | ***254.161151*** | 127.584213 | 237.134602 | 119.070939 | | | P | 2551.151795 | 1276.079535 | 2534.125246 | 1267.566261 | 2533.141230 | 1267.074253 | 21 |
| 3 | 311.182615 | 156.094945 | 294.156066 | 147.581671 | | | G | 2454.099031 | 1227.553153 | 2437.072482 | 1219.039879 | 2436.088466 | 1218.547871 | 20 |
| 4 | 368.204079 | 184.605677 | 351.177530 | 176.092403 | | | G | 2397.077567 | 1199.042421 | 2380.051018 | 1190.529147 | 2379.067002 | 1190.037139 | 19 |
| 5 | ***497.246672*** | 249.126974 | 480.220123 | 240.613700 | 479.236107 | 240.121692 | E | 2340.056103 | 1170.531689 | 2323.029554 | 1162.018415 | 2322.045538 | 1161.526407 | 18 |
| 6 | 594.299436 | 297.653356 | 577.272887 | 289.140082 | 576.288871 | 288.648074 | P | 2211.013510 | 1106.010393 | 2193.986961 | 1097.497118 | 2193.002945 | 1097.005110 | 17 |
| 7 | ***681.331464*** | 341.169370 | 664.304915 | 332.656095 | 663.320899 | 332.164087 | S | 2113.960746 | 1057.484011 | 2096.934197 | 1048.970736 | 2095.950181 | 1048.478728 | 16 |
| 8 | ***778.384228*** | 389.695752 | 761.357679 | 381.182478 | 760.373663 | 380.690470 | P | 2026.928718 | 1013.967997 | 2009.902169 | 1005.454723 | 2008.918153 | 1004.962715 | 15 |
| 9 | ***907.426821*** | 454.217049 | 890.400272 | 445.703774 | 889.416256 | 445.211766 | E | **1929.875954** | 965.441615 | 1912.849405 | 956.928341 | 1911.865389 | 956.436333 | 14 |
| 10 | ***964.448285*** | 482.727781 | 947.421736 | 474.214506 | 946.437720 | 473.722498 | G | 1800.833361 | 900.920319 | 1783.806812 | 892.407044 | 1782.822796 | 891.915036 | 13 |
| 11 | ***1065.495964*** | 533.251620 | 1048.469415 | 524.738346 | 1047.485399 | 524.246337 | T | 1743.811897 | 872.409587 | 1726.785348 | 863.896312 | 1725.801332 | 863.404304 | 12 |
| 12 | ***1166.543643*** | 583.775460 | 1149.517094 | 575.262185 | 1148.533078 | 574.770177 | T | **1642.764218** | 821.885747 | 1625.737669 | 813.372473 | 1624.753653 | 812.880465 | 11 |
| 13 | ***1223.565107*** | 612.286191 | 1206.538558 | 603.772917 | 1205.554542 | 603.280909 | G | **1541.716539** | 771.361908 | 1524.689990 | 762.848633 | 1523.705974 | 762.356625 | 10 |
| 14 | ***1351.623685*** | 676.315480 | 1334.597136 | 667.802206 | 1333.613120 | 667.310198 | Q | **1484.695075** | 742.851176 | 1467.668526 | 734.337901 | 1466.684510 | 733.845893 | 9 |
| 15 | ***1438.655713*** | 719.831494 | 1421.629164 | 711.318220 | 1420.645148 | 710.826212 | S | **1356.636497** | 678.821887 | 1339.609948 | 670.308612 | 1338.625932 | 669.816604 | 8 |
| 16 | 1601.719042 | 801.363159 | 1584.692493 | 792.849885 | 1583.708477 | 792.357876 | Y | 1269.604469 | 635.305873 | 1252.577920 | 626.792598 | 1251.593904 | 626.300590 | 7 |
| 17 | ***1715.761969*** | 858.384622 | 1698.735420 | 849.871348 | 1697.751404 | 849.379340 | N | 1106.541140 | 553.774208 | 1089.514591 | 545.260934 | 1088.530575 | 544.768926 | 6 |
| 18 | ***1843.820547*** | 922.413912 | 1826.793998 | 913.900637 | 1825.809982 | 913.408629 | Q | 992.498213 | 496.752745 | 975.471664 | 488.239470 | 974.487648 | 487.747462 | 5 |
| 19 | 2006.883876 | 1003.945576 | 1989.857327 | 995.432302 | 1988.873311 | 994.940294 | Y | 864.439635 | 432.723456 | 847.413086 | 424.210181 | 846.429070 | 423.718173 | 4 |
| 20 | ***2093.915904*** | 1047.461590 | 2076.889355 | 1038.948315 | 2075.905339 | 1038.456307 | S | **701.376306** | 351.191791 | 684.349757 | 342.678517 | 683.365741 | 342.186509 | 3 |
| 21 | 2533.141230 | 1267.074253 | 2516.114681 | 1258.560978 | 2515.130665 | 1258.068971 | Q | 614.344278 | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 22 | | | | | | | R | **175.118952** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RPGGEPSPEGTTGQSYNQYSQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 85.2 | 2706.245621 | 0.000751 | RPGGEPSPEGTTGQSYNQYSQR |
| 76.6 | 2706.245621 | 0.000751 | RPGGEPSPEGTTGQSYNQYSQR |
| 76.3 | 2706.245621 | 0.000751 | RPGGEPSPEGTTGQSYNQYSQR |

**Mascot:** http://www.matrixscience.com/

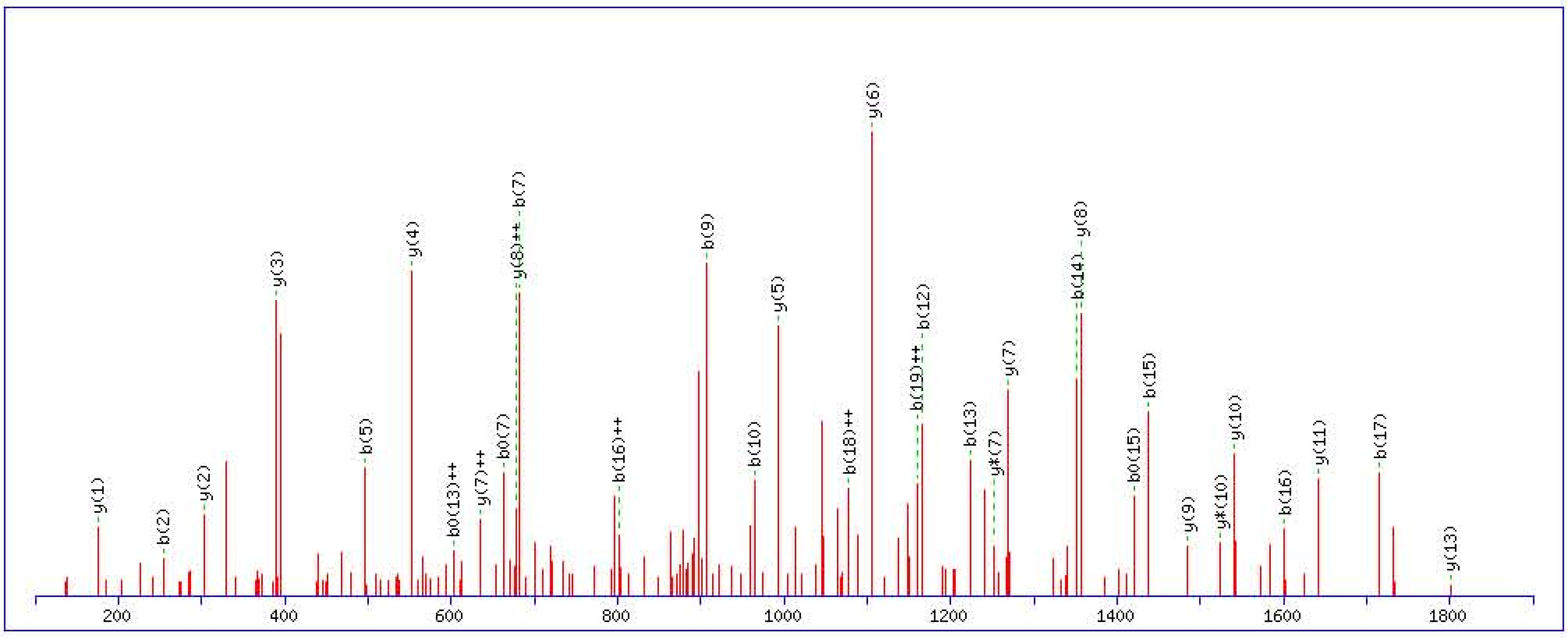
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **RPGGEPSPEGTTGQSYNQYSQR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

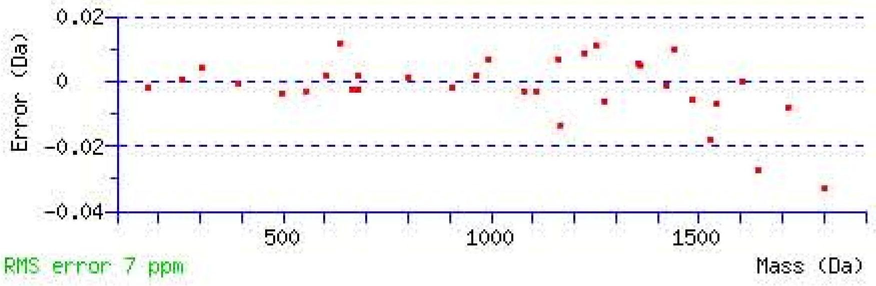
Match to Query 58352: 2706.246792 from(903.089540,3+) rtinseconds(1472) index(33109)
Title: Locus:1.1.1.2931.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

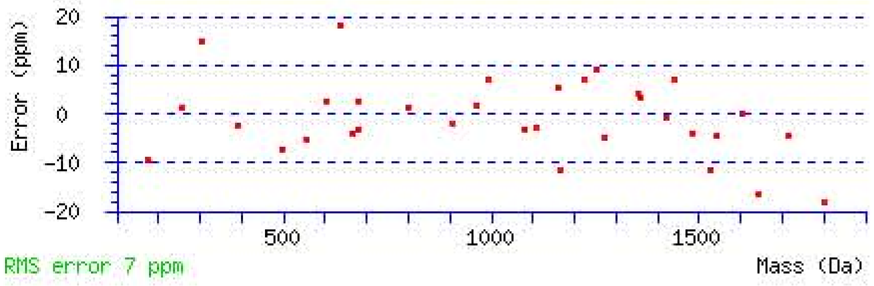
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2706.245621
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18     : Biotin:Thermo-21345 (Q)
Ions Score: 91  Expect: 1.1e-008
Matches : 33/240 fragment ions using 49 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 22 |
| 2 | ***254.161151*** | 127.584213 | 237.134602 | 119.070939 | | | P | 2551.151795 | 1276.079535 | 2534.125246 | 1267.566261 | 2533.141230 | 1267.074253 | 21 |
| 3 | 311.182615 | 156.094945 | 294.156066 | 147.581671 | | | G | 2454.099031 | 1227.553153 | 2437.072482 | 1219.039879 | 2436.088466 | 1218.547871 | 20 |
| 4 | 368.204079 | 184.605677 | 351.177530 | 176.092403 | | | G | 2397.077567 | 1199.042421 | 2380.051018 | 1190.529147 | 2379.067002 | 1190.037139 | 19 |
| 5 | ***497.246672*** | 249.126974 | 480.220123 | 240.613700 | 479.236107 | 240.121692 | E | 2340.056103 | 1170.531689 | 2323.029554 | 1162.018415 | 2322.045538 | 1161.526407 | 18 |
| 6 | 594.299436 | 297.653356 | 577.272887 | 289.140082 | 576.288871 | 288.648074 | P | 2211.013510 | 1106.010393 | 2193.986961 | 1097.497118 | 2193.002945 | 1097.005110 | 17 |
| 7 | ***681.331464*** | 341.169370 | 664.304915 | 332.656095 | 663.320899 | 332.164087 | S | 2113.960746 | 1057.484011 | 2096.934197 | 1048.970736 | 2095.950181 | 1048.478728 | 16 |
| 8 | 778.384228 | 389.695752 | 761.357679 | 381.182478 | 760.373663 | 380.690470 | P | 2026.928718 | 1013.967997 | 2009.902169 | 1005.454723 | 2008.918153 | 1004.962715 | 15 |
| 9 | ***907.426821*** | 454.217049 | 890.400272 | 445.703774 | 889.416256 | 445.211766 | E | 1929.875954 | 965.441615 | 1912.849405 | 956.928341 | 1911.865389 | 956.436333 | 14 |
| 10 | ***964.448285*** | 482.727781 | 947.421736 | 474.214506 | 946.437720 | 473.722498 | G | ***1800.833361*** | 900.920319 | 1783.806812 | 892.407044 | 1782.822796 | 891.915036 | 13 |
| 11 | 1065.495964 | 533.251620 | 1048.469415 | 524.738346 | 1047.485399 | 524.246337 | T | 1743.811897 | 872.409587 | 1726.785348 | 863.896312 | 1725.801332 | 863.404304 | 12 |
| 12 | ***1166.543643*** | 583.775460 | 1149.517094 | 575.262185 | 1148.533078 | 574.770177 | T | ***1642.764218*** | 821.885747 | 1625.737669 | 813.372473 | 1624.753653 | 812.880465 | 11 |
| 13 | ***1223.565107*** | 612.286191 | 1206.538558 | 603.772917 | 1205.554542 | 603.280909 | G | ***1541.716539*** | 771.361908 | 1524.689990 | 762.848633 | 1523.705974 | 762.356625 | 10 |
| 14 | ***1351.623685*** | 676.315480 | 1334.597136 | 667.802206 | 1333.613120 | 667.310198 | Q | ***1484.695075*** | 742.851176 | 1467.668526 | 734.337901 | 1466.684510 | 733.845893 | 9 |
| 15 | ***1438.655713*** | 719.831494 | 1421.629164 | 711.318220 | 1420.645148 | 710.826212 | S | ***1356.636497*** | 678.821887 | 1339.609948 | 670.308612 | 1338.625932 | 669.816604 | 8 |
| 16 | ***1601.719042*** | **801.363159** | 1584.692493 | 792.849885 | 1583.708477 | 792.357876 | Y | ***1269.604469*** | 635.305873 | 1252.577920 | 626.792598 | 1251.593904 | 626.300590 | 7 |
| 17 | ***1715.761969*** | 858.384622 | 1698.735420 | 849.871348 | 1697.751404 | 849.379340 | N | ***1106.541140*** | 553.774208 | 1089.514591 | 545.260934 | 1088.530575 | 544.768926 | 6 |
| 18 | 2154.987295 | **1077.997285** | 2137.960746 | 1069.484011 | 2136.976730 | 1068.992003 | Q | ***992.498213*** | 496.752745 | 975.471664 | 488.239470 | 974.487648 | 487.747462 | 5 |
| 19 | 2318.050624 | **1159.528950** | 2301.024075 | 1151.015675 | 2300.040059 | 1150.523667 | Y | ***553.272887*** | 277.140082 | 536.246338 | 268.626807 | 535.262322 | 268.134799 | 4 |
| 20 | 2405.082652 | 1203.044964 | 2388.056103 | 1194.531689 | 2387.072087 | 1194.039681 | S | ***390.209558*** | 195.608417 | 373.183009 | 187.095143 | 372.198993 | 186.603135 | 3 |
| 21 | 2533.141230 | 1267.074253 | 2516.114681 | 1258.560978 | 2515.130665 | 1258.068971 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 22 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RPGGEPSPEGTTGQSYNQYSQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 90.8 | 2706.245621 | 0.001171 | RPGGEPSPEGTTGQSYNQYSQR |
| 63.5 | 2706.245621 | 0.001171 | RPGGEPSPEGTTGQSYNQYSQR |
| 37.1 | 2706.245621 | 0.001171 | RPGGEPSPEGTTGQSYNQYSQR |

**Mascot:** http://www.matrixscience.com/

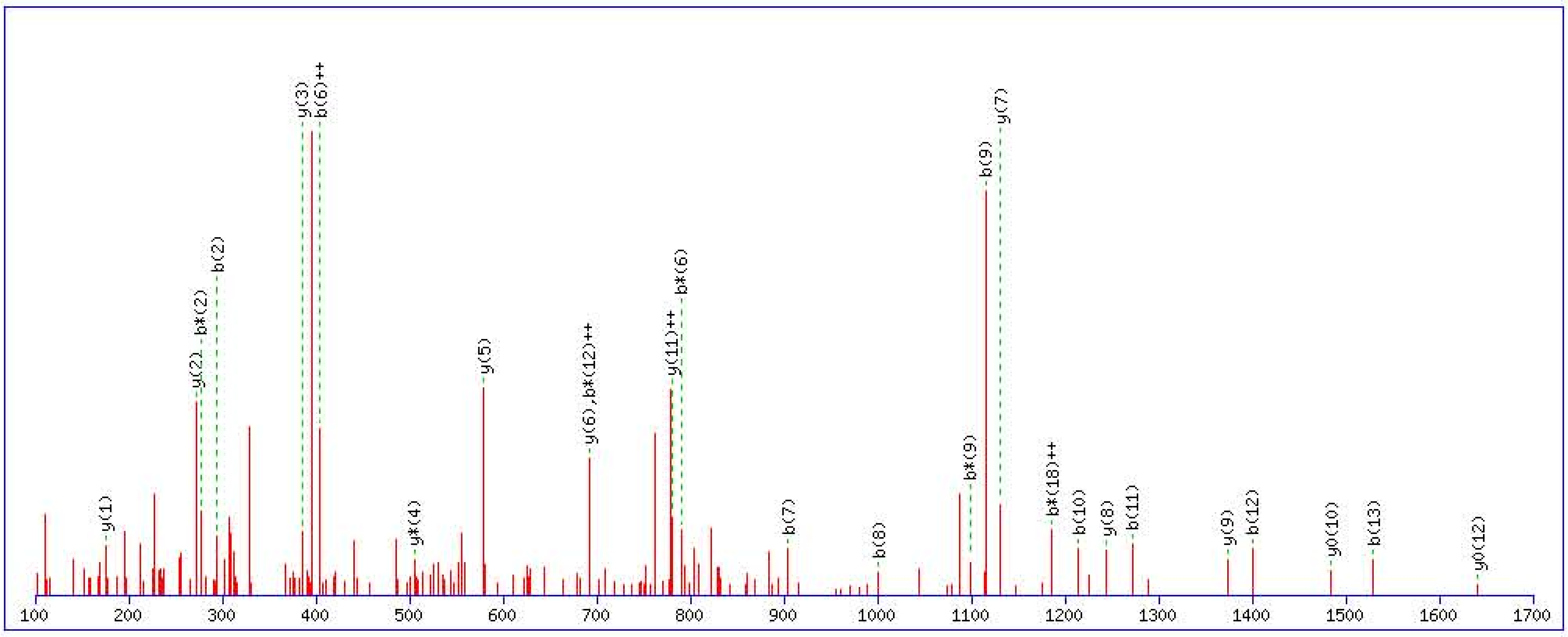
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HRPRPYPPNVGEEIQIGHIPR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

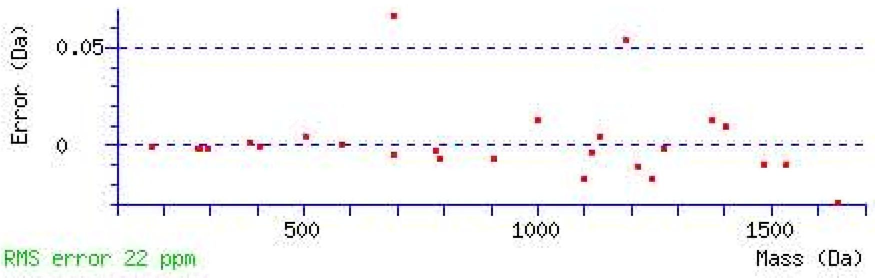
Match to Query 59121: 2772.465170 from(555.500310,5+) rtinseconds(1753) index(34787)
Title: Locus:1.1.1.3030.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

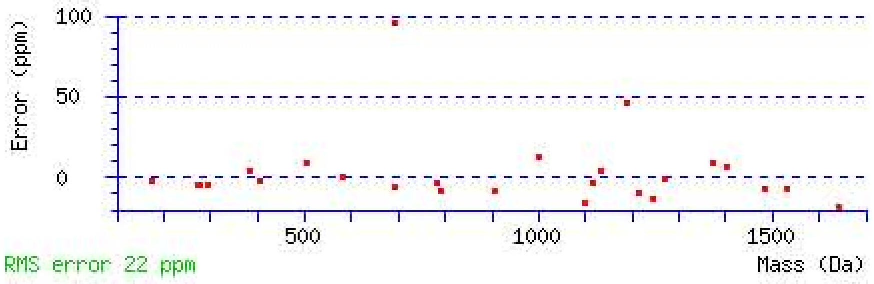
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2772.475815
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q15    : Biotin:Thermo-21345 (Q)
Ions Score: 42  Expect: 0.00014
Matches : 26/200 fragment ions using 53 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 21 |
| 2 | ***294.167299*** | 147.587288 | 277.140750 | 139.074013 | | | R | 2636.424208 | 1318.715742 | 2619.397659 | 1310.202467 | 2618.413643 | 1309.710459 | 20 |
| 3 | 391.220063 | 196.113670 | 374.193514 | 187.600395 | | | P | 2480.323097 | 1240.665186 | 2463.296548 | 1232.151912 | 2462.312532 | 1231.659904 | 19 |
| 4 | 547.321174 | 274.164225 | 530.294625 | 265.650951 | | | R | 2383.270333 | 1192.138804 | 2366.243784 | 1183.625530 | 2365.259768 | 1183.133522 | 18 |
| 5 | 644.373938 | 322.690607 | 627.347389 | 314.177333 | | | P | 2227.169222 | 1114.088249 | 2210.142673 | 1105.574974 | 2209.158657 | 1105.082966 | 17 |
| 6 | 807.437267 | 404.222272 | 790.410718 | 395.708997 | | | Y | 2130.116458 | 1065.561867 | 2113.089909 | 1057.048592 | 2112.105893 | 1056.556584 | 16 |
| 7 | ***904.490031*** | 452.748654 | 887.463482 | 444.235379 | | | P | 1967.053129 | 984.030203 | 1950.026580 | 975.516928 | 1949.042564 | 975.024920 | 15 |
| 8 | ***1001.542795*** | 501.275036 | 984.516246 | 492.761761 | | | P | 1870.000365 | 935.503821 | 1852.973816 | 926.990546 | 1851.989800 | 926.498538 | 14 |
| 9 | ***1115.585722*** | 558.296499 | 1098.559173 | 549.783225 | | | N | 1772.947601 | 886.977439 | 1755.921052 | 878.464164 | 1754.937036 | 877.972156 | 13 |
| 10 | ***1214.654136*** | 607.830706 | 1197.627587 | 599.317432 | | | V | 1658.904674 | 829.955975 | 1641.878125 | 821.442701 | 1640.894109 | 820.950693 | 12 |
| 11 | ***1271.675600*** | 636.341438 | 1254.649051 | 627.828164 | | | G | 1559.836260 | 780.421768 | 1542.809711 | 771.908494 | 1541.825695 | 771.416486 | 11 |
| 12 | ***1400.718193*** | 700.862735 | 1383.691644 | 692.349460 | 1382.707628 | 691.857452 | E | 1502.814796 | 751.911036 | 1485.788247 | 743.397762 | 1484.804231 | 742.905754 | 10 |
| 13 | ***1529.760786*** | 765.384031 | 1512.734237 | 756.870757 | 1511.750221 | 756.378749 | E | ***1373.772203*** | 687.389740 | 1356.745654 | 678.876465 | 1355.761638 | 678.384457 | 9 |
| 14 | 1642.844850 | 821.926063 | 1625.818301 | 813.412789 | 1624.834285 | 812.920781 | I | ***1244.729610*** | 622.868443 | 1227.703061 | 614.355169 | | | 8 |
| 15 | 2082.070176 | 1041.538726 | 2065.043627 | 1033.025451 | 2064.059611 | 1032.533444 | Q | ***1131.645546*** | 566.326411 | 1114.618997 | 557.813137 | | | 7 |
| 16 | 2195.154240 | 1098.080758 | 2178.127691 | 1089.567484 | 2177.143675 | 1089.075476 | I | ***692.420220*** | 346.713748 | 675.393671 | 338.200474 | | | 6 |
| 17 | 2252.175704 | 1126.591490 | 2235.149155 | 1118.078215 | 2234.165139 | 1117.586208 | G | ***579.336156*** | 290.171716 | 562.309607 | 281.658442 | | | 5 |
| 18 | 2389.234616 | 1195.120946 | 2372.208067 | 1186.607671 | 2371.224051 | 1186.115664 | H | 522.314692 | 261.660984 | 505.288143 | 253.147710 | | | 4 |
| 19 | 2502.318680 | 1251.662978 | 2485.292131 | 1243.149704 | 2484.308115 | 1242.657696 | I | ***385.255780*** | 193.131528 | 368.229231 | 184.618254 | | | 3 |
| 20 | 2599.371444 | 1300.189360 | 2582.344895 | 1291.676086 | 2581.360879 | 1291.184078 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 21 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of HRPRPYPPNVGEEIQIGHIPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.9 | 2772.475815 | -0.010645 | HRPRPYPPNVGEEIQIGHIPR |
| 0.7 | 2772.429306 | 0.035864 | EKHLAILKENNISEEVEAPEVEPR |

**Mascot:** http://www.matrixscience.com/

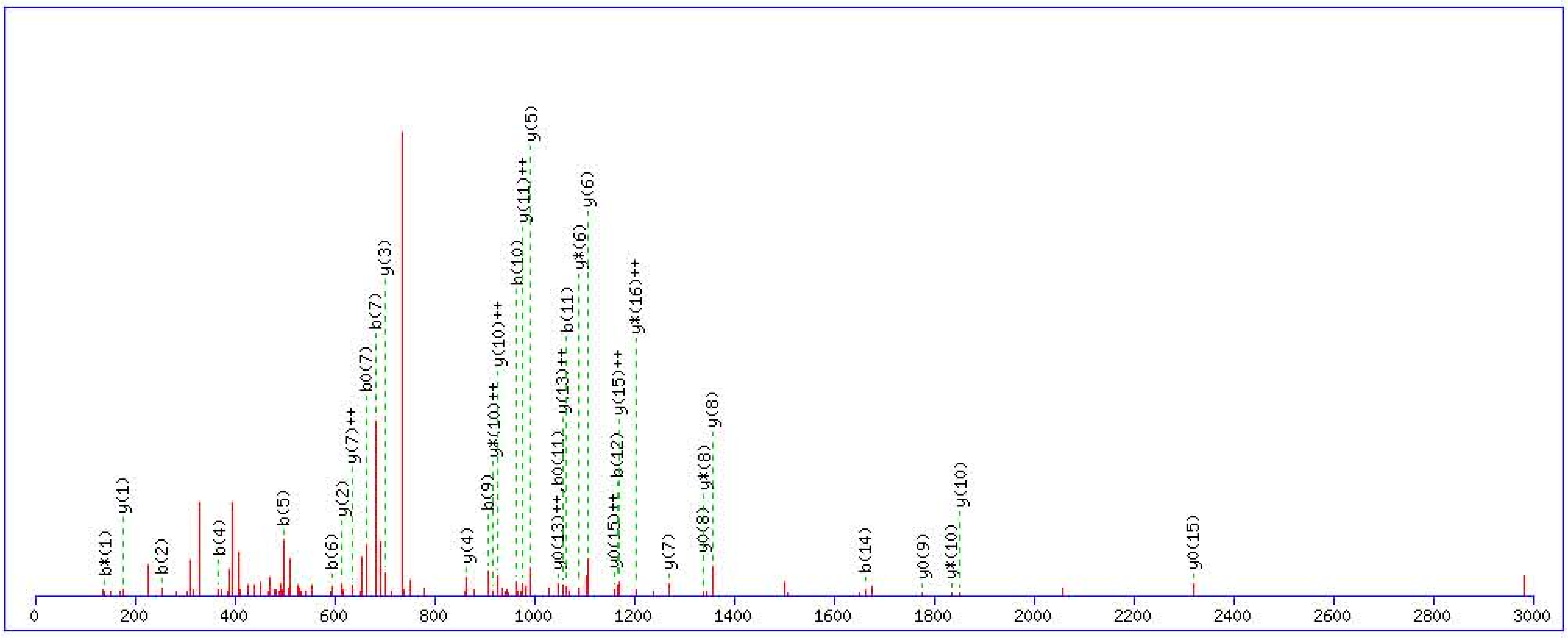
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **RPGGEPSPEGTTGQSYNQYSQR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

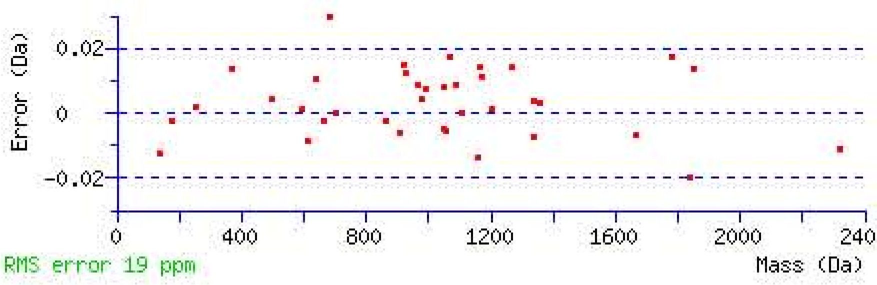
Match to Query 61828: 3017.416936 from(755.361510,4+) rtinseconds(1798) index(35044)
Title: Locus:1.1.1.3045.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

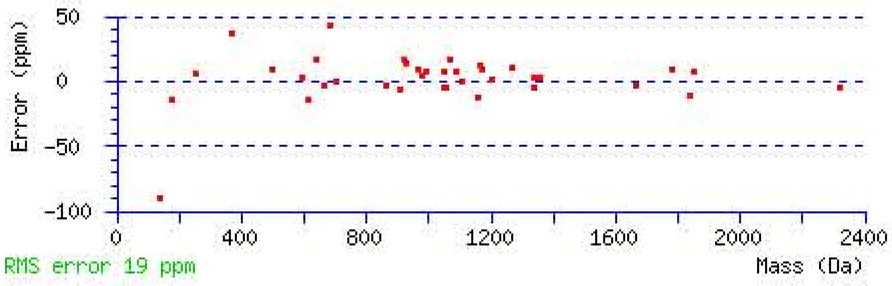
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3017.412369
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Q21     : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 0.00019
Matches : 37/240 fragment ions using 82 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | **R** | | | | | | | **22** |
| **2** | ***254.161151*** | 127.584213 | 237.134602 | 119.070939 | | | **P** | 2862.318543 | 1431.662909 | 2845.291994 | 1423.149635 | 2844.307978 | 1422.657627 | **21** |
| **3** | 311.182615 | 156.094945 | 294.156066 | 147.581671 | | | **G** | 2765.265779 | 1383.136527 | 2748.239230 | 1374.623253 | 2747.255214 | 1374.131245 | **20** |
| **4** | ***368.204079*** | 184.605677 | 351.177530 | 176.092403 | | | **G** | 2708.244315 | 1354.625795 | 2691.217766 | 1346.112521 | 2690.233750 | 1345.620513 | **19** |
| **5** | ***497.246672*** | 249.126974 | 480.220123 | 240.613700 | 479.236107 | 240.121692 | **E** | 2651.222851 | 1326.115063 | 2634.196302 | 1317.601789 | 2633.212286 | 1317.109781 | **18** |
| **6** | ***594.299436*** | 297.653356 | 577.272887 | 289.140082 | 576.288871 | 288.648074 | **P** | 2522.180258 | 1261.593767 | 2505.153709 | 1253.080492 | 2504.169693 | 1252.588484 | **17** |
| **7** | ***681.331464*** | 341.169370 | 664.304915 | 332.656095 | 663.320899 | 332.164087 | **S** | 2425.127494 | 1213.067385 | 2408.100945 | 1204.554110 | 2407.116929 | 1204.062102 | **16** |
| **8** | 778.384228 | 389.695752 | 761.357679 | 381.182478 | 760.373663 | 380.690470 | **P** | 2338.095466 | 1169.551371 | 2321.068917 | 1161.038096 | 2320.084901 | 1160.546088 | **15** |
| **9** | ***907.426821*** | 454.217049 | 890.400272 | 445.703774 | 889.416256 | 445.211766 | **E** | 2241.042702 | 1121.024989 | 2224.016153 | 1112.511714 | 2223.032137 | 1112.019706 | **14** |
| **10** | ***964.448285*** | 482.727781 | 947.421736 | 474.214506 | 946.437720 | 473.722498 | **G** | 2112.000109 | 1056.503692 | 2094.973560 | 1047.990418 | 2093.989544 | 1047.498410 | **13** |
| **11** | ***1065.495964*** | 533.251620 | 1048.469415 | 524.738346 | 1047.485399 | 524.246337 | **T** | 2054.978645 | 1027.992960 | 2037.952096 | 1019.479686 | 2036.968080 | 1018.987678 | **12** |
| **12** | ***1166.543643*** | 583.775460 | 1149.517094 | 575.262185 | 1148.533078 | 574.770177 | **T** | 1953.930966 | 977.469121 | 1936.904417 | 968.955847 | 1935.920401 | 968.463839 | **11** |
| **13** | 1223.565107 | 612.286191 | 1206.538558 | 603.772917 | 1205.554542 | 603.280909 | **G** | ***1852.883287*** | 926.945282 | 1835.856738 | 918.432007 | 1834.872722 | 917.939999 | **10** |
| **14** | ***1662.790433*** | 831.898854 | 1645.763884 | 823.385580 | 1644.779868 | 822.893572 | **Q** | 1795.861823 | 898.434550 | 1778.835274 | 889.921275 | 1777.851258 | 889.429267 | **9** |
| **15** | 1749.822461 | 875.414869 | 1732.795912 | 866.901594 | 1731.811896 | 866.409586 | **S** | ***1356.636497*** | 678.821887 | 1339.609948 | 670.308612 | 1338.625932 | 669.816604 | **8** |
| **16** | 1912.885790 | 956.946533 | 1895.859241 | 948.433259 | 1894.875225 | 947.941251 | **Y** | ***1269.604469*** | 635.305873 | 1252.577920 | 626.792598 | 1251.593904 | 626.300590 | **7** |
| **17** | 2026.928717 | 1013.967997 | 2009.902168 | 1005.454722 | 2008.918152 | 1004.962714 | **N** | ***1106.541140*** | 553.774208 | 1089.514591 | 545.260934 | 1088.530575 | 544.768926 | **6** |
| **18** | 2154.987295 | 1077.997285 | 2137.960746 | 1069.484011 | 2136.976730 | 1068.992003 | **Q** | ***992.498213*** | 496.752745 | 975.471664 | 488.239470 | 974.487648 | 487.747462 | **5** |
| **19** | 2318.050624 | 1159.528950 | 2301.024075 | 1151.015675 | 2300.040059 | 1150.523667 | **Y** | ***864.439635*** | 432.723456 | 847.413086 | 424.210181 | 846.429070 | 423.718173 | **4** |
| **20** | 2405.082652 | 1203.044964 | 2388.056103 | 1194.531689 | 2387.072087 | 1194.039681 | **S** | ***701.376306*** | 351.191791 | 684.349757 | 342.678517 | 683.365741 | 342.186509 | **3** |
| **21** | 2844.307978 | 1422.657627 | 2827.281429 | 1414.144353 | 2826.297413 | 1413.652345 | **Q** | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | **2** |
| **22** | | | | | | | **R** | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | **1** |





NCBI **BLAST** search of RPGGEPSPEGTTGQSYNQYSQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 49.6 | 3017.412369 | 0.004567 | RPGGEPSPEGTTGQSYNQYSQR |
| 49.5 | 3017.412369 | 0.004567 | RPGGEPSPEGTTGQSYNQYSQR |
| 22.1 | 3017.412369 | 0.004567 | RPGGEPSPEGTTGQSYNQYSQR |

**Mascot:** http://www.matrixscience.com/

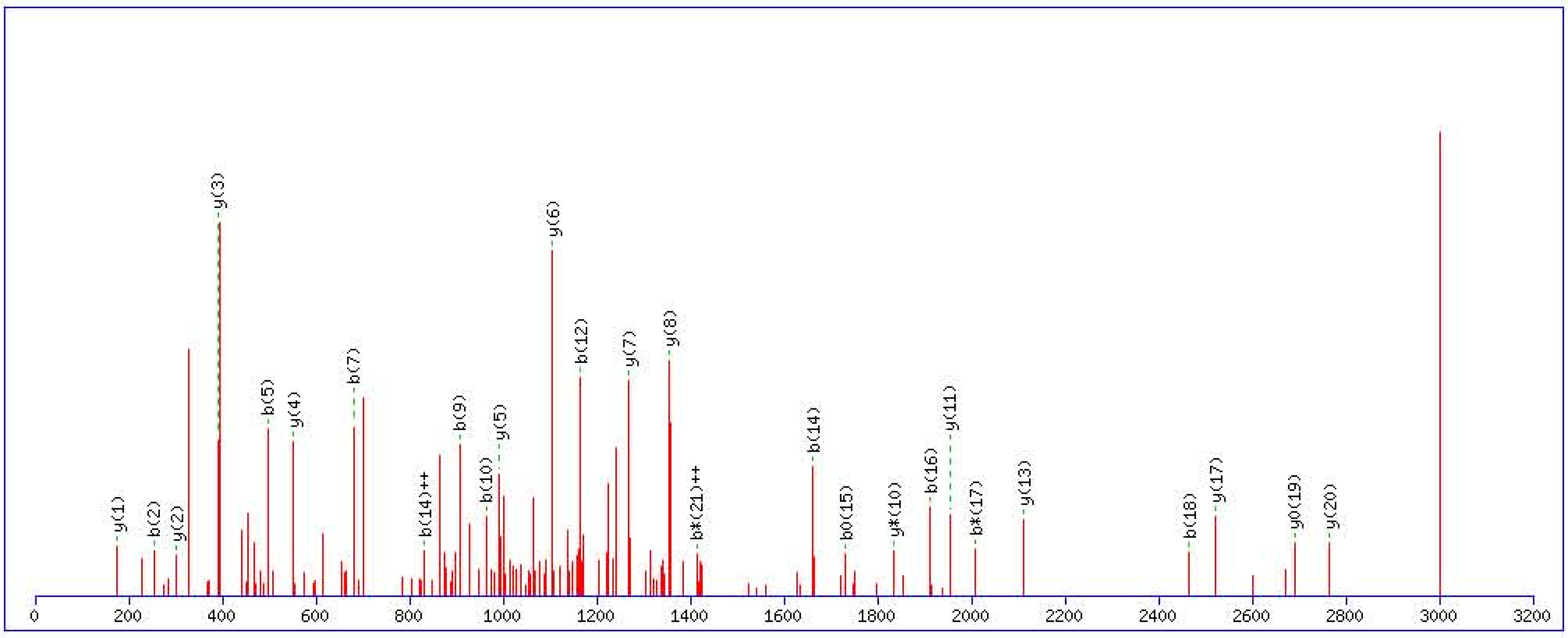
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RPGGEPSPEGTTGQSYNQYSQR**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

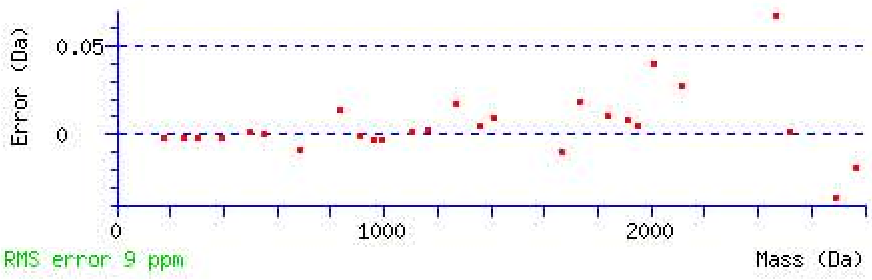
Match to Query 61832: 3017.428182 from(1006.816670,3+) rtinseconds(1784) index(34978)
Title: Locus:1.1.1.3040.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

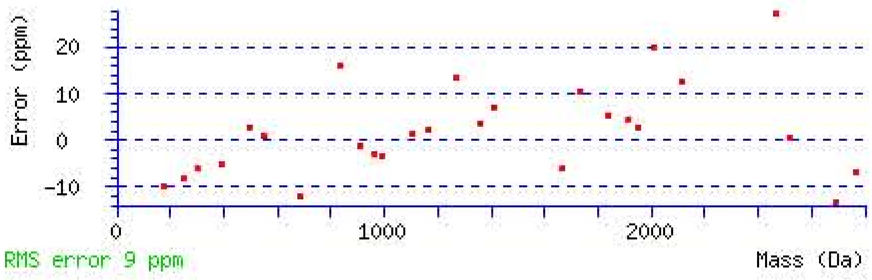
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3017.412369
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Q18     : Biotin:Thermo-21345 (Q)
Ions Score: 72  Expect: 1.3e-006
Matches : 27/240 fragment ions using 45 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 22 |
| 2 | ***254.161151*** | 127.584213 | 237.134602 | 119.070939 | | | P | 2862.318543 | 1431.662909 | 2845.291994 | 1423.149635 | 2844.307978 | 1422.657627 | 21 |
| 3 | 311.182615 | 156.094945 | 294.156066 | 147.581671 | | | G | ***2765.265779*** | 1383.136527 | 2748.239230 | 1374.623253 | 2747.255214 | 1374.131245 | 20 |
| 4 | 368.204079 | 184.605677 | 351.177530 | 176.092403 | | | G | 2708.244315 | 1354.625795 | 2691.217766 | 1346.112521 | 2690.233750 | 1345.620513 | 19 |
| 5 | ***497.246672*** | 249.126974 | 480.220123 | 240.613700 | 479.236107 | 240.121692 | E | 2651.222851 | 1326.115063 | 2634.196302 | 1317.601789 | 2633.212286 | 1317.109781 | 18 |
| 6 | 594.299436 | 297.653356 | 577.272887 | 289.140082 | 576.288871 | 288.648074 | P | ***2522.180258*** | 1261.593767 | 2505.153709 | 1253.080492 | 2504.169693 | 1252.588484 | 17 |
| 7 | ***681.331464*** | 341.169370 | 664.304915 | 332.656095 | 663.320899 | 332.164087 | S | 2425.127494 | 1213.067385 | 2408.100945 | 1204.554110 | 2407.116929 | 1204.062102 | 16 |
| 8 | 778.384228 | 389.695752 | 761.357679 | 381.182478 | 760.373663 | 380.690470 | P | 2338.095466 | 1169.551371 | 2321.068917 | 1161.038096 | 2320.084901 | 1160.546088 | 15 |
| 9 | ***907.426821*** | 454.217049 | 890.400272 | 445.703774 | 889.416256 | 445.211766 | E | 2241.042702 | 1121.024989 | 2224.016153 | 1112.511714 | 2223.032137 | 1112.019706 | 14 |
| 10 | ***964.448285*** | 482.727781 | 947.421736 | 474.214506 | 946.437720 | 473.722498 | G | ***2112.000109*** | 1056.503692 | 2094.973560 | 1047.990418 | 2093.989544 | 1047.498410 | 13 |
| 11 | 1065.495964 | 533.251620 | 1048.469415 | 524.738346 | 1047.485399 | 524.246337 | T | 2054.978645 | 1027.992960 | 2037.952096 | 1019.479686 | 2036.968080 | 1018.987678 | 12 |
| 12 | ***1166.543643*** | 583.775460 | 1149.517094 | 575.262185 | 1148.533078 | 574.770177 | T | ***1953.930966*** | 977.469121 | 1936.904417 | 968.955847 | 1935.920401 | 968.463839 | 11 |
| 13 | 1223.565107 | 612.286191 | 1206.538558 | 603.772917 | 1205.554542 | 603.280909 | G | 1852.883287 | 926.945282 | 1835.856738 | 918.432007 | 1834.872722 | 917.939999 | 10 |
| 14 | ***1662.790433*** | 831.898854 | 1645.763884 | 823.385580 | 1644.779868 | 822.893572 | Q | 1795.861823 | 898.434550 | 1778.835274 | 889.921275 | 1777.851258 | 889.429267 | 9 |
| 15 | 1749.822461 | 875.414869 | 1732.795912 | 866.901594 | 1731.811896 | 866.409586 | S | ***1356.636497*** | 678.821887 | 1339.609948 | 670.308612 | 1338.625932 | 669.816604 | 8 |
| 16 | ***1912.885790*** | 956.946533 | 1895.859241 | 948.433259 | 1894.875225 | 947.941251 | Y | ***1269.604469*** | 635.305873 | 1252.577920 | 626.792598 | 1251.593904 | 626.300590 | 7 |
| 17 | 2026.928717 | 1013.967997 | 2009.902168 | 1005.454722 | 2008.918152 | 1004.962714 | N | ***1106.541140*** | 553.774208 | 1089.514591 | 545.260934 | 1088.530575 | 544.768926 | 6 |
| 18 | ***2466.154043*** | 1233.580659 | 2449.127494 | 1225.067385 | 2448.143478 | 1224.575377 | Q | ***992.498213*** | 496.752745 | 975.471664 | 488.239470 | 974.487648 | 487.747462 | 5 |
| 19 | 2629.217372 | 1315.112324 | 2612.190823 | 1306.599049 | 2611.206807 | 1306.107041 | Y | ***553.272887*** | 277.140082 | 536.246338 | 268.626807 | 535.262322 | 268.134799 | 4 |
| 20 | 2716.249400 | 1358.628338 | 2699.222851 | 1350.115063 | 2698.238835 | 1349.623056 | S | ***390.209558*** | 195.608417 | 373.183009 | 187.095143 | 372.198993 | 186.603135 | 3 |
| 21 | 2844.307978 | 1422.657627 | 2827.281429 | 1414.144353 | 2826.297413 | 1413.652345 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 22 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RPGGEPSPEGTTGQSYNQYSQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 71.8 | 3017.412369 | 0.015813 | RPGGEPSPEGTTGQSYNQYSQR |
| 70.8 | 3017.412369 | 0.015813 | RPGGEPSPEGTTGQSYNQYSQR |
| 26.4 | 3017.412369 | 0.015813 | RPGGEPSPEGTTGQSYNQYSQR |

**Mascot:** http://www.matrixscience.com/

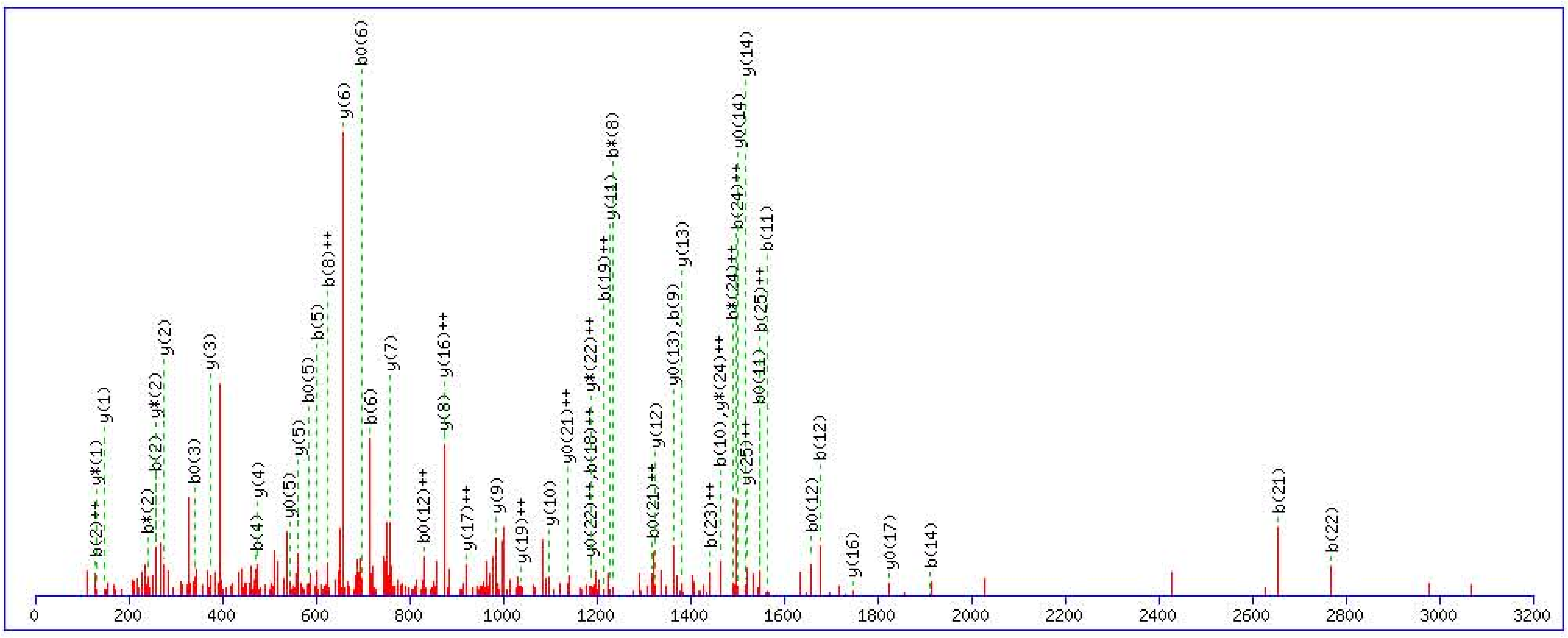
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KKTDELPQLVTLPHPNLHGPEILDVPSTVQK**
Found in **FINC_HUMAN**, Fibronectin OS=Homo sapiens GN=FN1 PE=1 SV=4

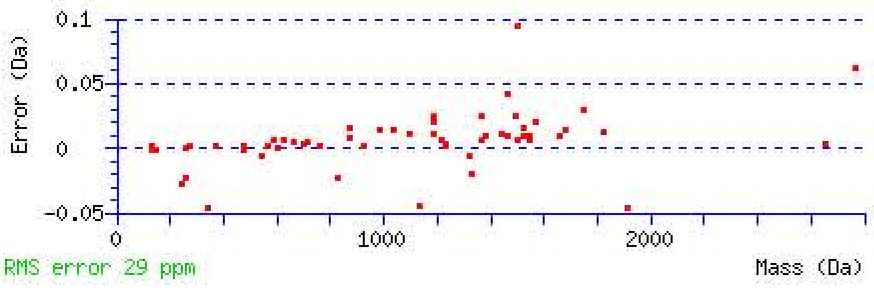
Match to Query 68631: 3754.077420 from(751.822760,5+) rtinseconds(2331) index(38400)
Title: Locus:1.1.1.3231.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

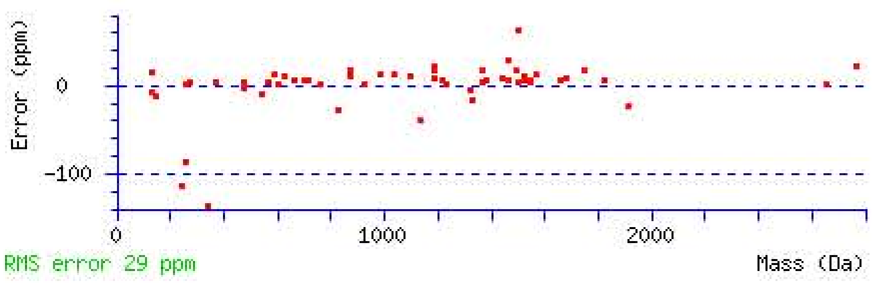
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3754.049149
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8     : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 1.9e-005
Matches : 58/350 fragment ions using 172 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 31 |
| 2 | ***257.197202*** | **129.102239** | 240.170653 | 120.588965 | | | K | 3626.961469 | 1813.984372 | 3609.934920 | 1805.471098 | 3608.950904 | 1804.979090 | 30 |
| 3 | 358.244881 | 179.626079 | 341.218332 | 171.112804 | 340.234316 | 170.620796 | T | 3498.866506 | 1749.936891 | 3481.839957 | 1741.423616 | 3480.855941 | 1740.931608 | 29 |
| 4 | ***473.271824*** | 237.139550 | 456.245275 | 228.626276 | 455.261259 | 228.134268 | D | 3397.818827 | 1699.413051 | 3380.792278 | 1690.899777 | 3379.808262 | 1690.407769 | 28 |
| 5 | ***602.314417*** | 301.660847 | 585.287868 | 293.147572 | 584.303852 | 292.655564 | E | 3282.791884 | 1641.899580 | 3265.765335 | 1633.386305 | 3264.781319 | 1632.894297 | 27 |
| 6 | ***715.398481*** | 358.202879 | 698.371932 | 349.689604 | 697.387916 | 349.197596 | L | 3153.749291 | 1577.378283 | 3136.722742 | 1568.865009 | 3135.738726 | 1568.373001 | 26 |
| 7 | 812.451245 | 406.729261 | 795.424696 | 398.215986 | 794.440680 | 397.723978 | P | 3040.665227 | 1520.836251 | 3023.638678 | 1512.322977 | 3022.654662 | 1511.830969 | 25 |
| 8 | 1251.676571 | **626.341924** | 1234.650022 | 617.828649 | 1233.666006 | 617.336641 | Q | 2943.612463 | 1472.309869 | 2926.585914 | 1463.796595 | 2925.601898 | 1463.304587 | 24 |
| 9 | ***1364.760635*** | 682.883956 | 1347.734086 | 674.370681 | 1346.750070 | 673.878673 | L | 2504.387137 | 1252.697206 | 2487.360588 | 1244.183932 | 2486.376572 | 1243.691924 | 23 |
| 10 | ***1463.829049*** | 732.418163 | 1446.802500 | 723.904888 | 1445.818484 | 723.412880 | V | 2391.303073 | 1196.155174 | 2374.276524 | 1187.641900 | 2373.292508 | 1187.149892 | 22 |
| 11 | ***1564.876728*** | 782.942002 | 1547.850179 | 774.428728 | 1546.866163 | 773.936720 | T | 2292.234659 | 1146.620967 | 2275.208110 | 1138.107693 | 2274.224094 | 1137.615685 | 21 |
| 12 | ***1677.960792*** | 839.484034 | 1660.934243 | 830.970760 | 1659.950227 | 830.478752 | L | 2191.186980 | 1096.097128 | 2174.160431 | 1087.583853 | 2173.176415 | 1087.091845 | 20 |
| 13 | 1775.013556 | 888.010416 | 1757.987007 | 879.497142 | 1757.002991 | 879.005134 | P | 2078.102916 | 1039.555096 | 2061.076367 | 1031.041821 | 2060.092351 | 1030.549813 | 19 |
| 14 | ***1912.072468*** | 956.539872 | 1895.045919 | 948.026598 | 1894.061903 | 947.534590 | H | 1981.050152 | 991.028714 | 1964.023603 | 982.515440 | 1963.039587 | 982.023432 | 18 |
| 15 | 2009.125232 | 1005.066254 | 1992.098683 | 996.552980 | 1991.114667 | 996.060972 | P | 1843.991240 | 922.499258 | 1826.964691 | 913.985984 | 1825.980675 | 913.493976 | 17 |
| 16 | 2123.168159 | 1062.087717 | 2106.141610 | 1053.574443 | 2105.157594 | 1053.082435 | N | ***1746.938476*** | 873.972876 | 1729.911927 | 865.459602 | 1728.927911 | 864.967594 | 16 |
| 17 | 2236.252223 | 1118.629749 | 2219.225674 | 1110.116475 | 2218.241658 | 1109.624467 | L | 1632.895549 | 816.951413 | 1615.869000 | 808.438138 | 1614.884984 | 807.946130 | 15 |
| 18 | 2373.311135 | **1187.159205** | 2356.284586 | 1178.645931 | 2355.300570 | 1178.153923 | H | ***1519.811485*** | 760.409381 | 1502.784936 | 751.896106 | 1501.800920 | 751.404098 | 14 |
| 19 | 2430.332599 | **1215.669937** | 2413.306050 | 1207.156663 | 2412.322034 | 1206.664655 | G | ***1382.752573*** | 691.879925 | 1365.726024 | 683.366650 | 1364.742008 | 682.874642 | 13 |
| 20 | 2527.385363 | 1264.196319 | 2510.358814 | 1255.683045 | 2509.374798 | 1255.191037 | P | ***1325.731109*** | 663.369193 | 1308.704560 | 654.855918 | 1307.720544 | 654.363910 | 12 |
| 21 | ***2656.427956*** | 1328.717616 | 2639.401407 | 1320.204341 | 2638.417391 | 1319.712333 | E | ***1228.678345*** | 614.842811 | 1211.651796 | 606.329536 | 1210.667780 | 605.837528 | 11 |
| 22 | ***2769.512020*** | 1385.259648 | 2752.485471 | 1376.746373 | 2751.501455 | 1376.254365 | I | ***1099.635752*** | 550.321514 | 1082.609203 | 541.808240 | 1081.625187 | 541.316231 | 10 |
| 23 | 2882.596084 | **1441.801680** | 2865.569535 | 1433.288406 | 2864.585519 | 1432.796398 | L | ***986.551688*** | 493.779482 | 969.525139 | 485.266207 | 968.541123 | 484.774199 | 9 |
| 24 | 2997.623027 | **1499.315152** | 2980.596478 | 1490.801877 | 2979.612462 | 1490.309869 | D | ***873.467624*** | 437.237450 | 856.441075 | 428.724175 | 855.457059 | 428.232167 | 8 |
| 25 | 3096.691441 | **1548.849358** | 3079.664892 | 1540.336084 | 3078.680876 | 1539.844076 | V | ***758.440681*** | 379.723978 | 741.414132 | 371.210704 | 740.430116 | 370.718696 | 7 |
| 26 | 3193.744205 | 1597.375740 | 3176.717656 | 1588.862466 | 3175.733640 | 1588.370458 | P | ***659.372267*** | 330.189772 | 642.345718 | 321.676497 | 641.361702 | 321.184489 | 6 |
| 27 | 3280.776233 | 1640.891754 | 3263.749684 | 1632.378480 | 3262.765668 | 1631.886472 | S | ***562.319503*** | 281.663389 | 545.292954 | 273.150115 | 544.308938 | 272.658107 | 5 |
| 28 | 3381.823912 | 1691.415594 | 3364.797363 | 1682.902319 | 3363.813347 | 1682.410311 | T | ***475.287475*** | 238.147375 | 458.260926 | 229.634101 | 457.276910 | 229.142093 | 4 |
| 29 | 3480.892326 | 1740.949801 | 3463.865777 | 1732.436526 | 3462.881761 | 1731.944518 | V | ***374.239796*** | 187.623536 | 357.213247 | 179.110261 | | | 3 |
| 30 | 3608.950904 | 1804.979090 | 3591.924355 | 1796.465815 | 3590.940339 | 1795.973807 | Q | ***275.171382*** | 138.089329 | 258.144833 | 129.576055 | | | 2 |
| 31 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of KKTDELPQLVTLPHPNLHGPEILDVPSTVQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.4 | 3754.049149 | 0.028271 | KKTDELPQLVTLPHPNLHGPEILDVPSTVQK |

**Mascot:** http://www.matrixscience.com/

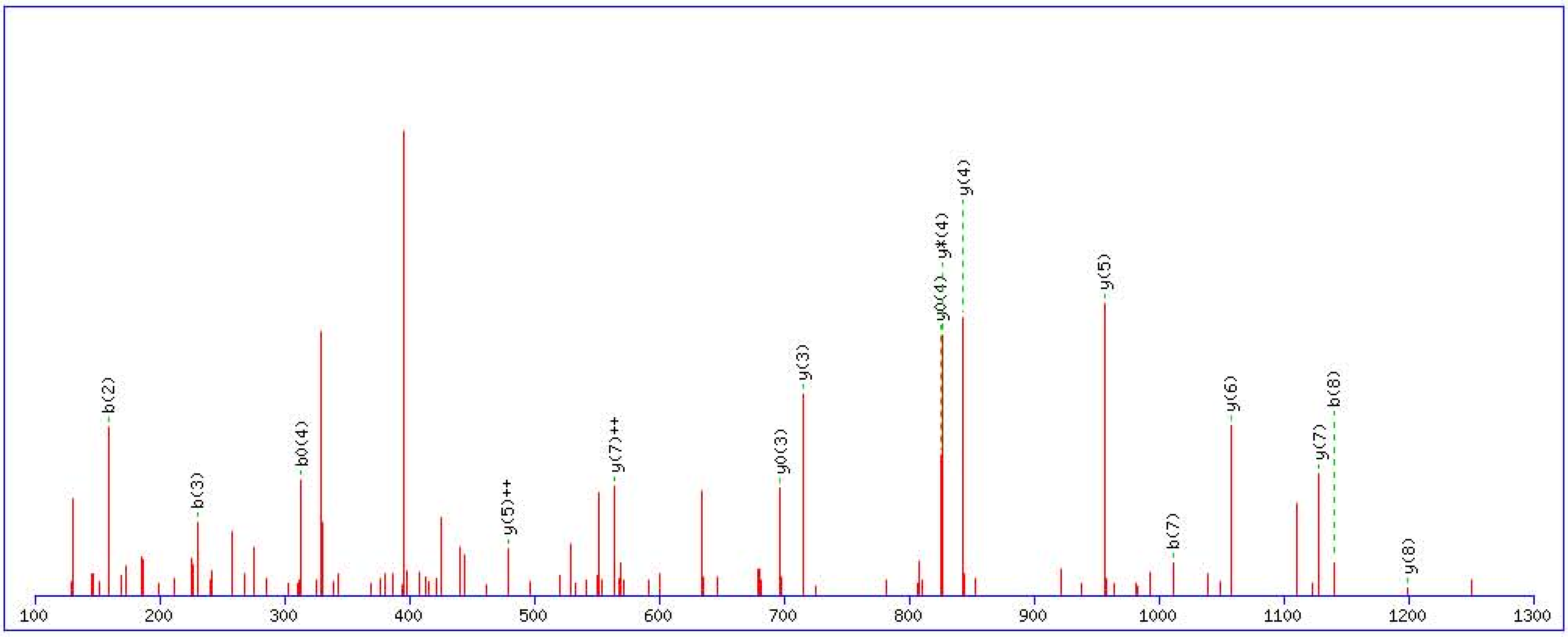
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SAATLQQEK**
Found in **FBLN1_HUMAN**, Fibulin-1 OS=Homo sapiens GN=FBLN1 PE=1 SV=4

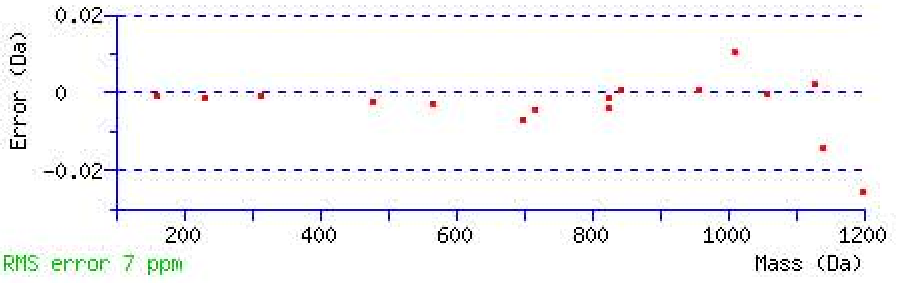
Match to Query 25910: 1285.668608 from(643.841580,2+) rtinseconds(1468) index(33079)
Title: Locus:1.1.1.2930.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

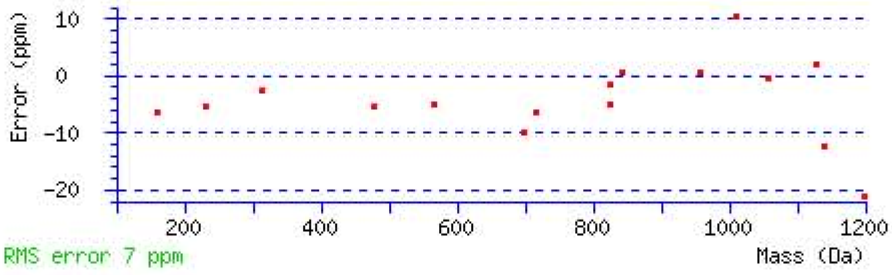
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1285.669998
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 0.00044
Matches : 16/84 fragment ions using 23 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 9 |
| 2 | ***159.076418*** | 80.041847 | | | 141.065853 | 71.036564 | A | ***1199.645272*** | 600.326274 | 1182.618723 | 591.813000 | 1181.634707 | 591.320991 | 8 |
| 3 | ***230.113532*** | 115.560404 | | | 212.102967 | 106.555121 | A | ***1128.608158*** | 564.807717 | 1111.581609 | 556.294443 | 1110.597593 | 555.802435 | 7 |
| 4 | 331.161211 | 166.084243 | | | 313.150646 | 157.078961 | T | ***1057.571044*** | 529.289160 | 1040.544495 | 520.775886 | 1039.560479 | 520.283878 | 6 |
| 5 | 444.245275 | 222.626275 | | | 426.234710 | 213.620993 | L | ***956.523365*** | 478.765321 | 939.496816 | 470.252046 | 938.512800 | 469.760038 | 5 |
| 6 | 572.303853 | 286.655565 | 555.277304 | 278.142290 | 554.293288 | 277.650282 | Q | ***843.439301*** | 422.223289 | 826.412752 | 413.710014 | 825.428736 | 413.218006 | 4 |
| 7 | ***1011.529179*** | 506.268228 | 994.502630 | 497.754953 | 993.518614 | 497.262945 | Q | ***715.380723*** | 358.194000 | 698.354174 | 349.680725 | 697.370158 | 349.188717 | 3 |
| 8 | ***1140.571772*** | 570.789524 | 1123.545223 | 562.276250 | 1122.561207 | 561.784242 | E | 276.155397 | 138.581336 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 9 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SAATLQQEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.8 | 1285.669998 | -0.001390 | SAATLQQEK |
| 34.7 | 1285.669998 | -0.001390 | SAATLQQEK |
| 9.4 | 1285.652237 | 0.016371 | AMQIQEQK |
| 6.8 | 1285.669998 | -0.001390 | ASLDQGKEK |
| 6.2 | 1285.651367 | 0.017241 | LLQAVENGDAEK |
| 4.9 | 1285.658752 | 0.009856 | IESLEQEK |
| 4.9 | 1285.658768 | 0.009840 | VTELEQEK |
| 4.2 | 1285.649582 | 0.019026 | SVPCPRCVRR |
| 3.4 | 1285.673859 | -0.005251 | NDVGGQRSLVNK |
| 1.5 | 1285.687759 | -0.019151 | LKTGPEGALGSEK |

**Mascot:** http://www.matrixscience.com/

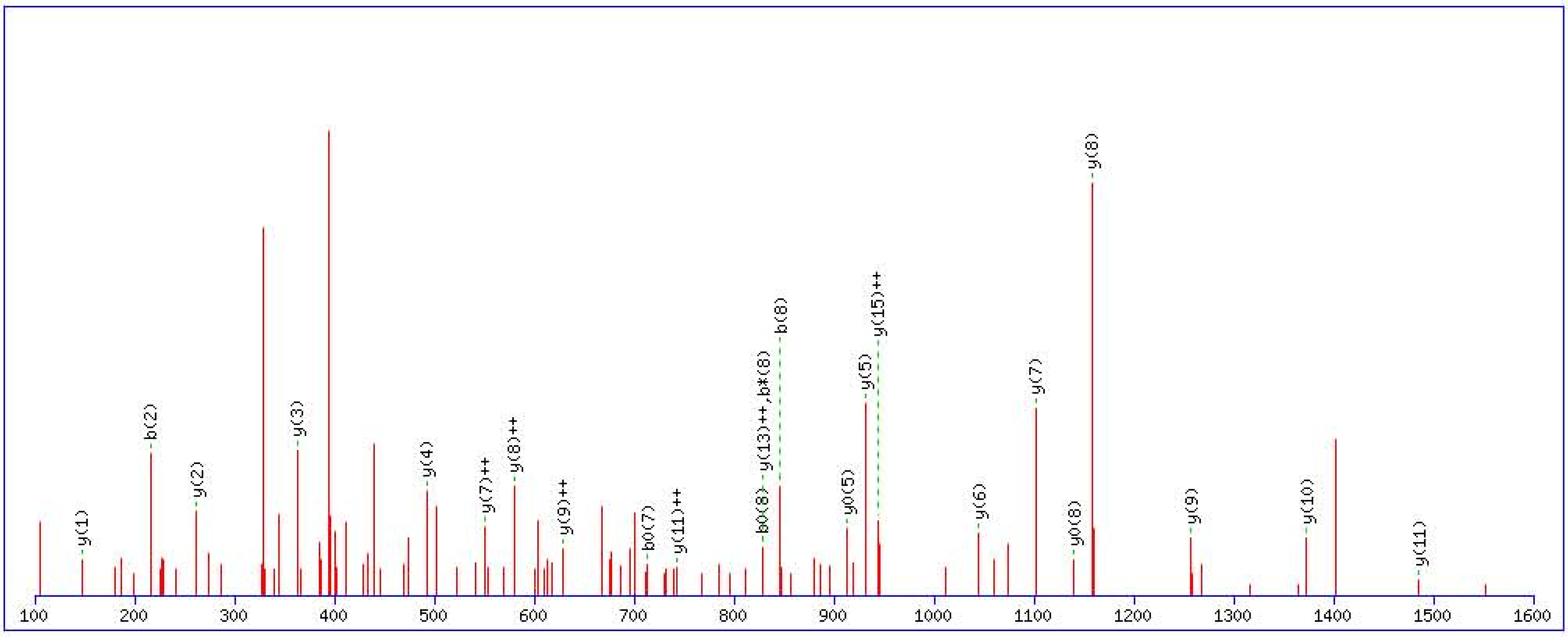
# MATRIX SCIENCE Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SQETGDLDVGGLQETDK**
Found in **FBLN1_HUMAN**, Fibulin-1 OS=Homo sapiens GN=FBLN1 PE=1 SV=4

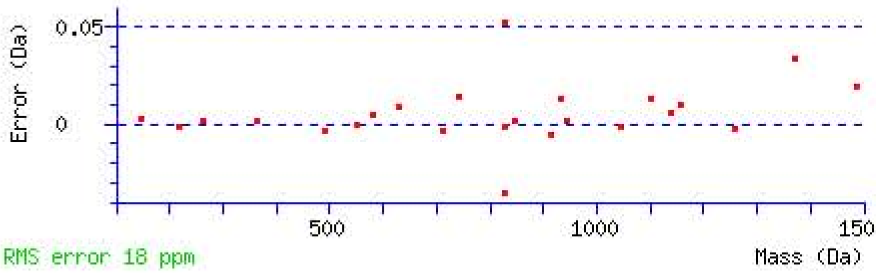
Match to Query 49236: 2101.994322 from(701.672050,3+) rtinseconds(2020) index(36509)
Title: Locus:1.1.1.3123.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

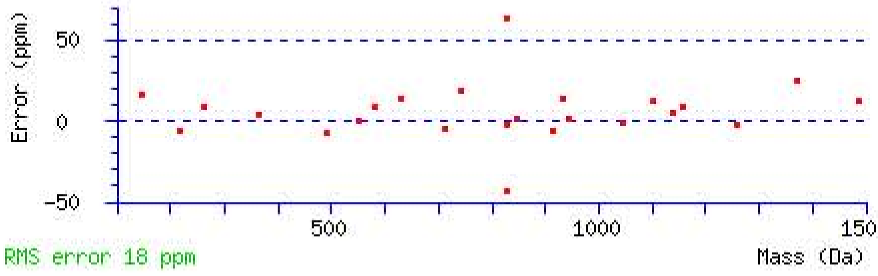
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2101.983780
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 4e-006
Matches : 24/188 fragment ions using 41 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 17 |
| 2 | **216.097882** | 108.552579 | 199.071333 | 100.039305 | 198.087317 | 99.547296 | Q | 2015.959015 | 1008.483146 | 1998.932466 | 999.969871 | 1997.948450 | 999.477863 | 16 |
| 3 | 345.140475 | 173.073875 | 328.113926 | 164.560601 | 327.129910 | 164.068593 | E | 1887.900437 | 944.453857 | 1870.873888 | 935.940582 | 1869.889872 | 935.448574 | 15 |
| 4 | 446.188154 | 223.597715 | 429.161605 | 215.084441 | 428.177589 | 214.592433 | T | 1758.857844 | 879.932560 | 1741.831295 | 871.419286 | 1740.847279 | 870.927278 | 14 |
| 5 | 503.209618 | 252.108447 | 486.183069 | 243.595172 | 485.199053 | 243.103164 | G | 1657.810165 | 829.408721 | 1640.783616 | 820.895446 | 1639.799600 | 820.403438 | 13 |
| 6 | 618.236561 | 309.621919 | 601.210012 | 301.108644 | 600.225996 | 300.616636 | D | 1600.788701 | 800.897989 | 1583.762152 | 792.384714 | 1582.778136 | 791.892706 | 12 |
| 7 | 731.320625 | 366.163951 | 714.294076 | 357.650676 | 713.310060 | 357.158668 | L | ***1485.761758*** | 743.384517 | 1468.735209 | 734.871243 | 1467.751193 | 734.379235 | 11 |
| 8 | **846.347568** | 423.677422 | 829.321019 | 415.164148 | 828.337003 | 414.672140 | D | ***1372.677694*** | 686.842485 | 1355.651145 | 678.329211 | 1354.667129 | 677.837203 | 10 |
| 9 | 945.415982 | 473.211629 | 928.389433 | 464.698354 | 927.405417 | 464.206347 | V | ***1257.650751*** | 629.329014 | 1240.624202 | 620.815739 | 1239.640186 | 620.323731 | 9 |
| 10 | 1002.437446 | 501.722361 | 985.410897 | 493.209087 | 984.426881 | 492.717079 | G | ***1158.582337*** | 579.794807 | 1141.555788 | 571.281532 | 1140.571772 | 570.789524 | 8 |
| 11 | 1059.458910 | 530.233093 | 1042.432361 | 521.719819 | 1041.448345 | 521.227811 | G | ***1101.560873*** | 551.284075 | 1084.534324 | 542.770800 | 1083.550308 | 542.278792 | 7 |
| 12 | 1172.542974 | 586.775125 | 1155.516425 | 578.261851 | 1154.532409 | 577.769842 | L | ***1044.539409*** | 522.773343 | 1027.512860 | 514.260068 | 1026.528844 | 513.768060 | 6 |
| 13 | 1611.768300 | 806.387788 | 1594.741751 | 797.874514 | 1593.757735 | 797.382505 | Q | ***931.455345*** | 466.231311 | 914.428796 | 457.718036 | 913.444780 | 457.226028 | 5 |
| 14 | 1740.810893 | 870.909085 | 1723.784344 | 862.395810 | 1722.800328 | 861.903802 | E | ***492.230019*** | 246.618648 | 475.203470 | 238.105373 | 474.219454 | 237.613365 | 4 |
| 15 | 1841.858572 | 921.432924 | 1824.832023 | 912.919650 | 1823.848007 | 912.427642 | T | ***363.187426*** | 182.097351 | 346.160877 | 173.584077 | 345.176861 | 173.092069 | 3 |
| 16 | 1956.885515 | 978.946396 | 1939.858966 | 970.433121 | 1938.874950 | 969.941113 | D | ***262.139747*** | 131.573512 | 245.113198 | 123.060237 | 244.129182 | 122.568229 | 2 |
| 17 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SQETGDLDVGGLQETDK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.5 | 2101.983780 | 0.010542 | SQETGDLDVGGLQETDK |

**Mascot:** http://www.matrixscience.com/

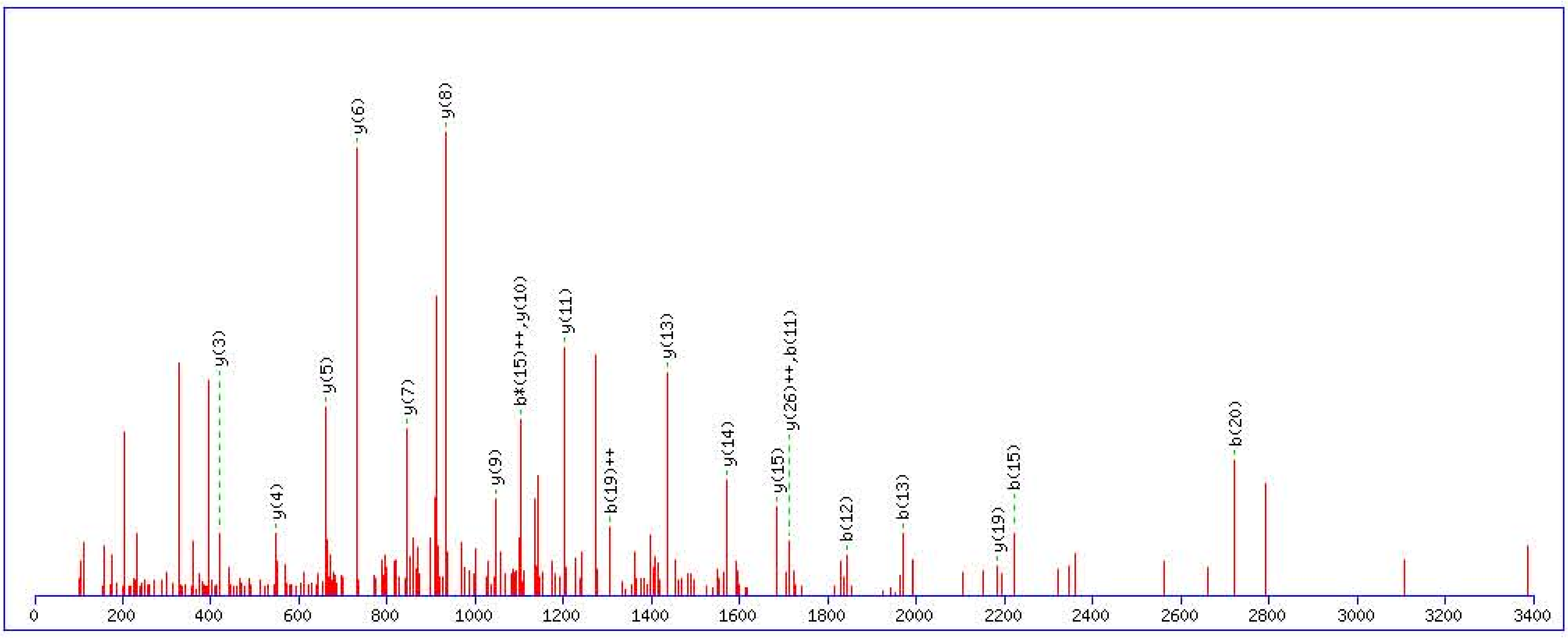
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **MVQEQCCHSQLEELHCATGISLANEQDR**
Found in **FBLN1_HUMAN**, Fibulin-1 OS=Homo sapiens GN=FBLN1 PE=1 SV=4

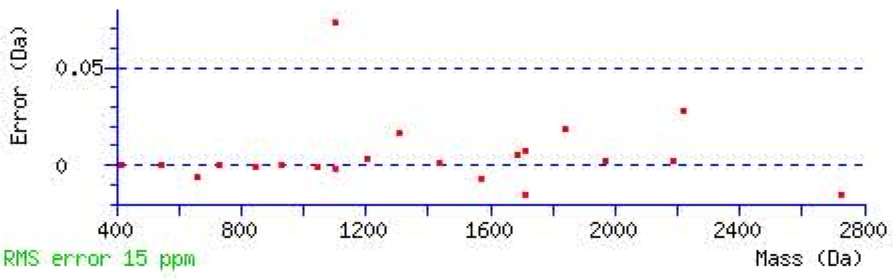
Match to Query 68188: 3653.633456 from(914.415640,4+) rtinseconds(1976) index(36275)
Title: Locus:1.1.1.3107.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

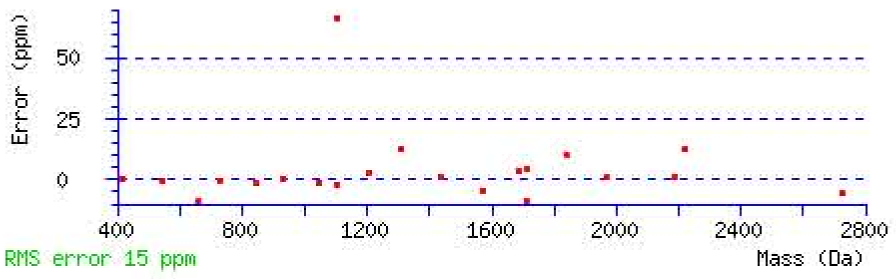
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3653.615311
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 85  Expect: 2.9e-008
Matches : 21/312 fragment ions using 27 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 28 |
| 2 | 231.116175 | 116.061725 | | | | | V | 3523.582122 | 1762.294699 | 3506.555573 | 1753.781424 | 3505.571557 | 1753.289416 | 27 |
| 3 | 359.174753 | 180.091015 | 342.148204 | 171.577740 | | | Q | 3424.513708 | 1712.760492 | 3407.487159 | 1704.247217 | 3406.503143 | 1703.755209 | 26 |
| 4 | 488.217346 | 244.612311 | 471.190797 | 236.099037 | 470.206781 | 235.607029 | E | 3296.455130 | 1648.731203 | 3279.428581 | 1640.217928 | 3278.444565 | 1639.725920 | 25 |
| 5 | 927.442672 | 464.224974 | 910.416123 | 455.711700 | 909.432107 | 455.219692 | Q | 3167.412537 | 1584.209906 | 3150.385988 | 1575.696632 | 3149.401972 | 1575.204624 | 24 |
| 6 | 1087.473321 | 544.240298 | 1070.446772 | 535.727024 | 1069.462756 | 535.235016 | C | 2728.187211 | 1364.597243 | 2711.160662 | 1356.083969 | 2710.176646 | 1355.591961 | 23 |
| 7 | 1247.503970 | 624.255623 | 1230.477421 | 615.742349 | 1229.493405 | 615.250340 | C | 2568.156562 | 1284.581919 | 2551.130013 | 1276.068644 | 2550.145997 | 1275.576636 | 22 |
| 8 | 1384.562882 | 692.785079 | 1367.536333 | 684.271805 | 1366.552317 | 683.779796 | H | 2408.125913 | 1204.566594 | 2391.099364 | 1196.053320 | 2390.115348 | 1195.561312 | 21 |
| 9 | 1471.594910 | 736.301093 | 1454.568361 | 727.787819 | 1453.584345 | 727.295811 | S | 2271.067001 | 1136.037138 | 2254.040452 | 1127.523864 | 2253.056436 | 1127.031856 | 20 |
| 10 | 1599.653488 | 800.330382 | 1582.626939 | 791.817108 | 1581.642923 | 791.325100 | Q | ***2184.034973*** | 1092.521124 | 2167.008424 | 1084.007850 | 2166.024408 | 1083.515842 | 19 |
| 11 | **1712.737552** | 856.872414 | 1695.711003 | 848.359140 | 1694.726987 | 847.867132 | L | 2055.976395 | 1028.491835 | 2038.949846 | 1019.978561 | 2037.965830 | 1019.486553 | 18 |
| 12 | **1841.780145** | 921.393711 | 1824.753596 | 912.880436 | 1823.769580 | 912.388428 | E | 1942.892331 | 971.949804 | 1925.865782 | 963.436529 | 1924.881766 | 962.944521 | 17 |
| 13 | **1970.822738** | 985.915007 | 1953.796189 | 977.401733 | 1952.812173 | 976.909725 | E | 1813.849738 | 907.428507 | 1796.823189 | 898.915233 | 1795.839173 | 898.423225 | 16 |
| 14 | 2083.906802 | 1042.457039 | 2066.880253 | 1033.943764 | 2065.896237 | 1033.451756 | L | ***1684.807145*** | 842.907211 | 1667.780596 | 834.393936 | 1666.796580 | 833.901928 | 15 |
| 15 | **2220.965714** | 1110.986495 | 2203.939165 | 1102.473220 | 2202.955149 | 1101.981212 | H | ***1571.723081*** | 786.365179 | 1554.696532 | 777.851904 | 1553.712516 | 777.359896 | 14 |
| 16 | 2380.996363 | 1191.001819 | 2363.969814 | 1182.488545 | 2362.985798 | 1181.996537 | C | ***1434.664169*** | 717.835723 | 1417.637620 | 709.322448 | 1416.653604 | 708.830440 | 13 |
| 17 | 2452.033477 | 1226.520376 | 2435.006928 | 1218.007102 | 2434.022912 | 1217.515094 | A | 1274.633520 | 637.820398 | 1257.606971 | 629.307124 | 1256.622955 | 628.815116 | 12 |
| 18 | 2553.081156 | 1277.044216 | 2536.054607 | 1268.530941 | 2535.070591 | 1268.038933 | T | ***1203.596406*** | 602.301841 | 1186.569857 | 593.788567 | 1185.585841 | 593.296559 | 11 |
| 19 | 2610.102620 | 1305.554948 | 2593.076071 | 1297.041673 | 2592.092055 | 1296.549665 | G | ***1102.548727*** | 551.778002 | 1085.522178 | 543.264727 | 1084.538162 | 542.772719 | 10 |
| 20 | **2723.186684** | 1362.096980 | 2706.160135 | 1353.583705 | 2705.176119 | 1353.091697 | I | ***1045.527263*** | 523.267270 | 1028.500714 | 514.753995 | 1027.516698 | 514.261987 | 9 |
| 21 | 2810.218712 | 1405.612994 | 2793.192163 | 1397.099719 | 2792.208147 | 1396.607711 | S | ***932.443199*** | 466.725238 | 915.416650 | 458.211963 | 914.432634 | 457.719955 | 8 |
| 22 | 2923.302776 | 1462.155026 | 2906.276227 | 1453.641751 | 2905.292211 | 1453.149743 | L | ***845.411171*** | 423.209224 | 828.384622 | 414.695949 | 827.400606 | 414.203941 | 7 |
| 23 | 2994.339890 | 1497.673583 | 2977.313341 | 1489.160308 | 2976.329325 | 1488.668301 | A | ***732.327107*** | 366.667192 | 715.300558 | 358.153917 | 714.316542 | 357.661909 | 6 |
| 24 | 3108.382817 | 1554.695047 | 3091.356268 | 1546.181772 | 3090.372252 | 1545.689764 | N | ***661.289993*** | 331.148635 | 644.263444 | 322.635360 | 643.279428 | 322.143352 | 5 |
| 25 | 3237.425410 | 1619.216343 | 3220.398861 | 1610.703069 | 3219.414845 | 1610.211061 | E | ***547.247066*** | 274.127171 | 530.220517 | 265.613897 | 529.236501 | 265.121889 | 4 |
| 26 | 3365.483988 | 1683.245632 | 3348.457439 | 1674.732358 | 3347.473423 | 1674.240350 | Q | ***418.204473*** | 209.605874 | 401.177924 | 201.092600 | 400.193908 | 200.600592 | 3 |
| 27 | 3480.510931 | 1740.759104 | 3463.484382 | 1732.245829 | 3462.500366 | 1731.753821 | D | 290.145895 | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 28 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MVQEQCCHSQLEELHCATGISLANEQDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 84.9 | 3653.615311 | 0.018145 | MVQEQCCHSQLEELHCATGISLANEQDR |
| 84.9 | 3653.615311 | 0.018145 | MVQEQCCHSQLEELHCATGISLANEQDR |
| 72.2 | 3653.615311 | 0.018145 | MVQEQCCHSQLEELHCATGISLANEQDR |

**Mascot:** http://www.matrixscience.com/

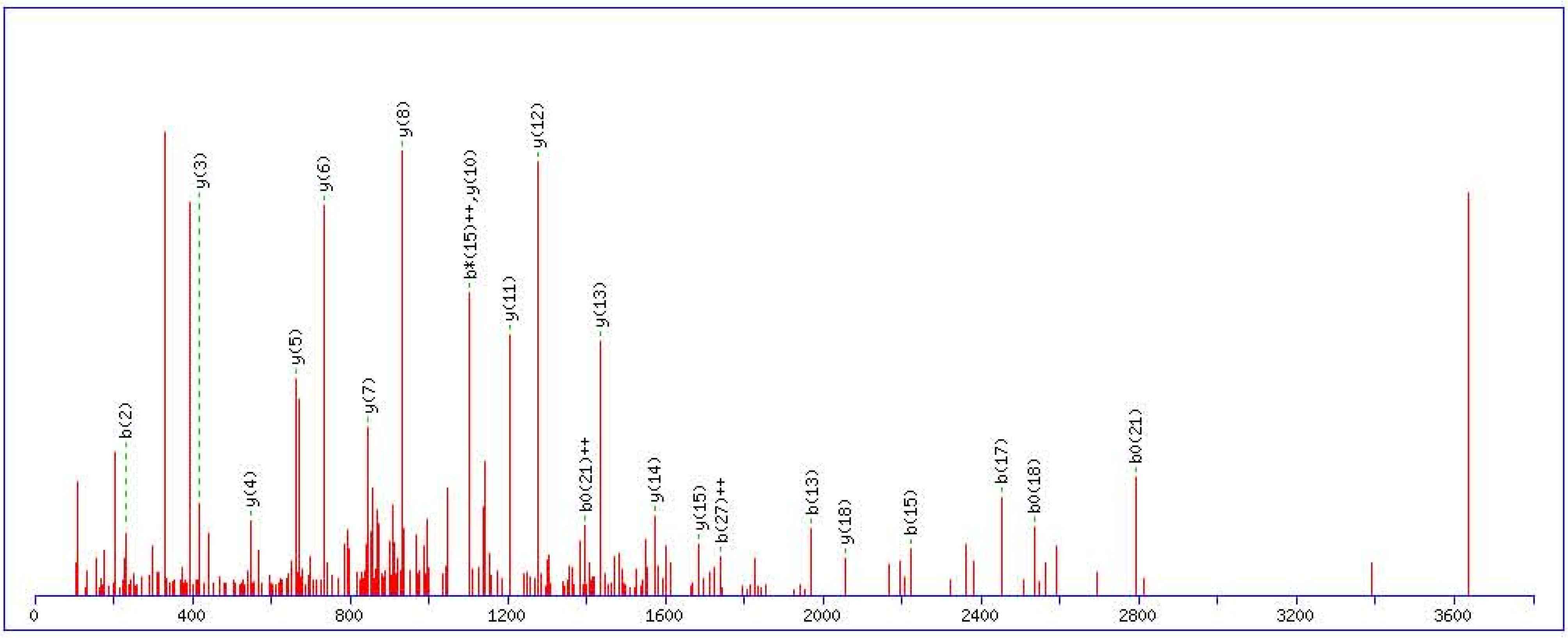
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **MVQEQCCHSQLEELHCATGISLANEQDR**
Found in **FBLN1_HUMAN**, Fibulin-1 OS=Homo sapiens GN=FBLN1 PE=1 SV=4

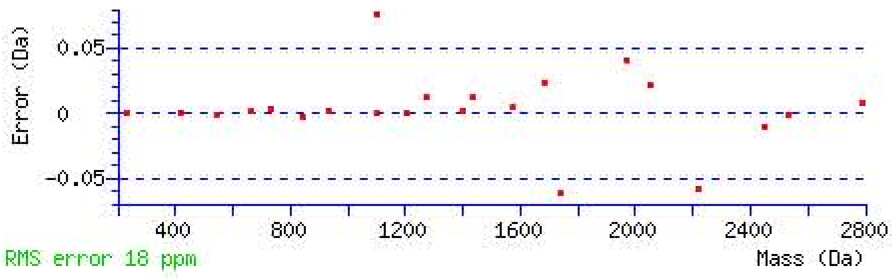
Match to Query 68189: 3653.633456 from(914.415640,4+) rtinseconds(1985) index(36317)
Title: Locus:1.1.1.3110.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

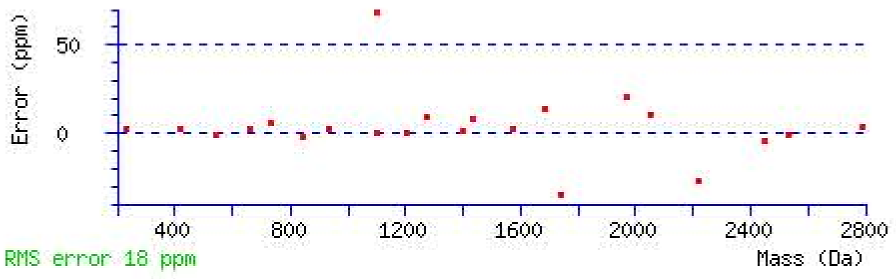
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3653.615311
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 87  Expect: 2e-008
Matches : 22/312 fragment ions using 30 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 28 |
| 2 | **231.116175** | 116.061725 | | | | | V | 3523.582122 | 1762.294699 | 3506.555573 | 1753.781424 | 3505.571557 | 1753.289416 | 27 |
| 3 | 359.174753 | 180.091015 | 342.148204 | 171.577740 | | | Q | 3424.513708 | 1712.760492 | 3407.487159 | 1704.247217 | 3406.503143 | 1703.755209 | 26 |
| 4 | 488.217346 | 244.612311 | 471.190797 | 236.099037 | 470.206781 | 235.607029 | E | 3296.455130 | 1648.731203 | 3279.428581 | 1640.217928 | 3278.444565 | 1639.725920 | 25 |
| 5 | 616.275924 | 308.641600 | 599.249375 | 300.128326 | 598.265359 | 299.636318 | Q | 3167.412537 | 1584.209906 | 3150.385988 | 1575.696632 | 3149.401972 | 1575.204624 | 24 |
| 6 | 776.306573 | 388.656925 | 759.280024 | 380.143650 | 758.296008 | 379.651642 | C | 3039.353959 | 1520.180617 | 3022.327410 | 1511.667343 | 3021.343394 | 1511.175335 | 23 |
| 7 | 936.337222 | 468.672249 | 919.310673 | 460.158975 | 918.326657 | 459.666967 | C | 2879.323310 | 1440.165293 | 2862.296761 | 1431.652018 | 2861.312745 | 1431.160010 | 22 |
| 8 | 1073.396134 | 537.201705 | 1056.369585 | 528.688431 | 1055.385569 | 528.196423 | H | 2719.292661 | 1360.149968 | 2702.266112 | 1351.636694 | 2701.282096 | 1351.144686 | 21 |
| 9 | 1160.428162 | 580.717719 | 1143.401613 | 572.204445 | 1142.417597 | 571.712437 | S | 2582.233749 | 1291.620512 | 2565.207200 | 1283.107238 | 2564.223184 | 1282.615230 | 20 |
| 10 | 1599.653488 | 800.330382 | 1582.626939 | 791.817108 | 1581.642923 | 791.325100 | Q | 2495.201721 | 1248.104498 | 2478.175172 | 1239.591224 | 2477.191156 | 1239.099216 | 19 |
| 11 | 1712.737552 | 856.872414 | 1695.711003 | 848.359140 | 1694.726987 | 847.867132 | L | ***2055.976395*** | 1028.491835 | 2038.949846 | 1019.978561 | 2037.965830 | 1019.486553 | 18 |
| 12 | 1841.780145 | 921.393711 | 1824.753596 | 912.880436 | 1823.769580 | 912.388428 | E | 1942.892331 | 971.949804 | 1925.865782 | 963.436529 | 1924.881766 | 962.944521 | 17 |
| 13 | **1970.822738** | 985.915007 | 1953.796189 | 977.401733 | 1952.812173 | 976.909725 | E | 1813.849738 | 907.428507 | 1796.823189 | 898.915233 | 1795.839173 | 898.423225 | 16 |
| 14 | 2083.906802 | 1042.457039 | 2066.880253 | 1033.943764 | 2065.896237 | 1033.451756 | L | ***1684.807145*** | 842.907211 | 1667.780596 | 834.393936 | 1666.796580 | 833.901928 | 15 |
| 15 | **2220.965714** | 1110.986495 | 2203.939165 | 1102.473220 | 2202.955149 | 1101.981212 | H | ***1571.723081*** | 786.365179 | 1554.696532 | 777.851904 | 1553.712516 | 777.359896 | 14 |
| 16 | 2380.996363 | 1191.001819 | 2363.969814 | 1182.488545 | 2362.985798 | 1181.996537 | C | ***1434.664169*** | 717.835723 | 1417.637620 | 709.322448 | 1416.653604 | 708.830440 | 13 |
| 17 | **2452.033477** | 1226.520376 | 2435.006928 | 1218.007102 | 2434.022912 | 1217.515094 | A | ***1274.633520*** | 637.820398 | 1257.606971 | 629.307124 | 1256.622955 | 628.815116 | 12 |
| 18 | 2553.081156 | 1277.044216 | 2536.054607 | 1268.530941 | 2535.070591 | 1268.038933 | T | ***1203.596406*** | 602.301841 | 1186.569857 | 593.788567 | 1185.585841 | 593.296559 | 11 |
| 19 | 2610.102620 | 1305.554948 | 2593.076071 | 1297.041673 | 2592.092055 | 1296.549665 | G | ***1102.548727*** | 551.778002 | 1085.522178 | 543.264727 | 1084.538162 | 542.772719 | 10 |
| 20 | 2723.186684 | 1362.096980 | 2706.160135 | 1353.583705 | 2705.176119 | 1353.091697 | I | 1045.527263 | 523.267270 | 1028.500714 | 514.753995 | 1027.516698 | 514.261987 | 9 |
| 21 | 2810.218712 | 1405.612994 | 2793.192163 | 1397.099719 | 2792.208147 | 1396.607711 | S | ***932.443199*** | 466.725238 | 915.416650 | 458.211963 | 914.432634 | 457.719955 | 8 |
| 22 | 2923.302776 | 1462.155026 | 2906.276227 | 1453.641751 | 2905.292211 | 1453.149743 | L | ***845.411171*** | 423.209224 | 828.384622 | 414.695949 | 827.400606 | 414.203941 | 7 |
| 23 | 2994.339890 | 1497.673583 | 2977.313341 | 1489.160308 | 2976.329325 | 1488.668301 | A | ***732.327107*** | 366.667192 | 715.300558 | 358.153917 | 714.316542 | 357.661909 | 6 |
| 24 | 3108.382817 | 1554.695047 | 3091.356268 | 1546.181772 | 3090.372252 | 1545.689764 | N | ***661.289993*** | 331.148635 | 644.263444 | 322.635360 | 643.279428 | 322.143352 | 5 |
| 25 | 3237.425410 | 1619.216343 | 3220.398861 | 1610.703069 | 3219.414845 | 1610.211061 | E | ***547.247066*** | 274.127171 | 530.220517 | 265.613897 | 529.236501 | 265.121889 | 4 |
| 26 | 3365.483988 | 1683.245632 | 3348.457439 | 1674.732358 | 3347.473423 | 1674.240350 | Q | ***418.204473*** | 209.605874 | 401.177924 | 201.092600 | 400.193908 | 200.600592 | 3 |
| 27 | 3480.510931 | 1740.759104 | 3463.484382 | 1732.245829 | 3462.500366 | 1731.753821 | D | 290.145895 | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 28 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MVQEQCCHSQLEELHCATGISLANEQDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 86.5 | 3653.615311 | 0.018145 | MVQEQCCHSQLEELHCATGISLANEQDR |
| 86.5 | 3653.615311 | 0.018145 | MVQEQCCHSQLEELHCATGISLANEQDR |
| 86.5 | 3653.615311 | 0.018145 | MVQEQCCHSQLEELHCATGISLANEQDR |

**Mascot:** http://www.matrixscience.com/

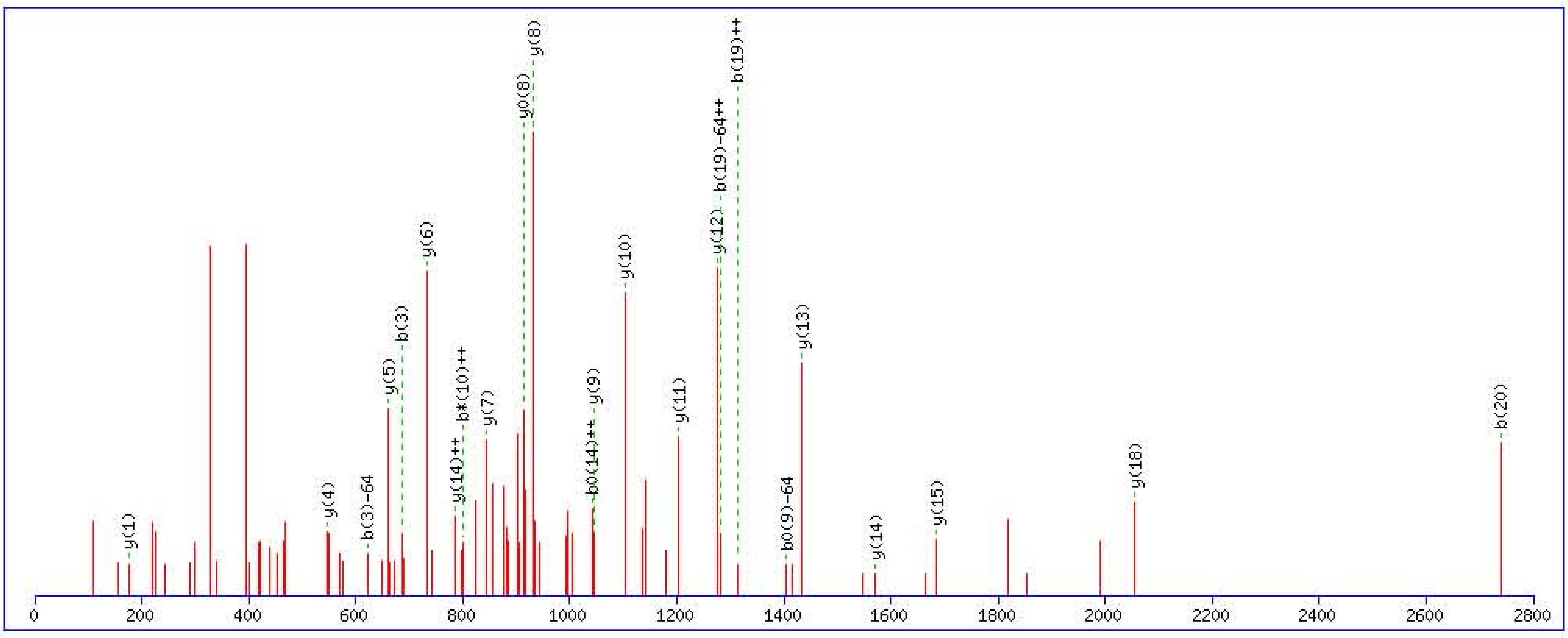
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **MVQEQCCHSQLEELHCATGISLANEQDR**
Found in **FBLN1_HUMAN**, Fibulin-1 OS=Homo sapiens GN=FBLN1 PE=1 SV=4

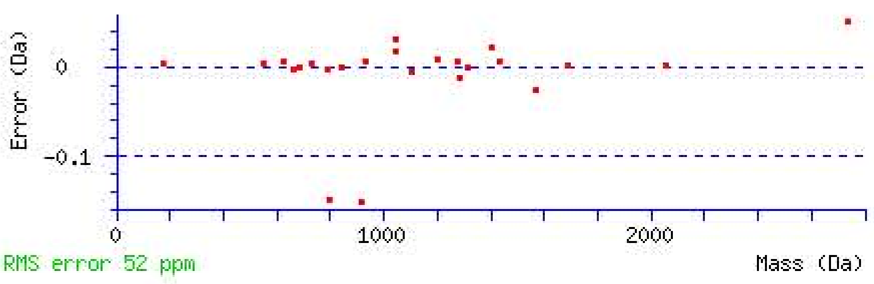
Match to Query 68294: 3669.620416 from(918.412380,4+) rtinseconds(1915) index(35793)
Title: Locus:1.1.1.3086.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

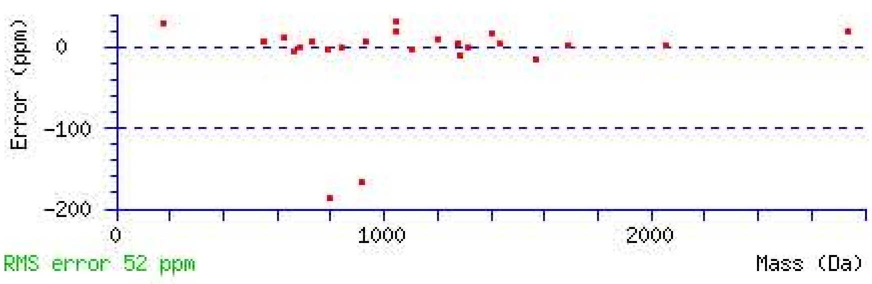
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3669.610229
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
M1      : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 63  Expect: 2.6e-006
Matches : 24/464 fragment ions using 48 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.042676 | 74.524976 | | | | | M | | | | | | | 28 |
| 2 | 247.111090 | 124.059183 | | | | | V | 3523.582122 | 1762.294699 | 3506.555573 | 1753.781425 | 3505.571557 | 1753.289417 | 27 |
| 3 | **686.336416** | 343.671846 | 669.309867 | 335.158572 | | | Q | 3424.513708 | 1712.760492 | 3407.487159 | 1704.247217 | 3406.503143 | 1703.755209 | 26 |
| 4 | 815.379009 | 408.193143 | 798.352460 | 399.679868 | 797.368444 | 399.187860 | E | 2985.288382 | 1493.147829 | 2968.261833 | 1484.634554 | 2967.277817 | 1484.142547 | 25 |
| 5 | 943.437587 | 472.222432 | 926.411038 | 463.709157 | 925.427022 | 463.217149 | Q | 2856.245789 | 1428.626532 | 2839.219240 | 1420.113258 | 2838.235224 | 1419.621250 | 24 |
| 6 | 1103.468236 | 552.237756 | 1086.441687 | 543.724482 | 1085.457671 | 543.232474 | C | 2728.187211 | 1364.597243 | 2711.160662 | 1356.083969 | 2710.176646 | 1355.591961 | 23 |
| 7 | 1263.498885 | 632.253081 | 1246.472336 | 623.739806 | 1245.488320 | 623.247798 | C | 2568.156562 | 1284.581919 | 2551.130013 | 1276.068644 | 2550.145997 | 1275.576636 | 22 |
| 8 | 1400.557797 | 700.782537 | 1383.531248 | 692.269262 | 1382.547232 | 691.777254 | H | 2408.125913 | 1204.566594 | 2391.099364 | 1196.053320 | 2390.115348 | 1195.561312 | 21 |
| 9 | 1487.589825 | 744.298551 | 1470.563276 | 735.785276 | 1469.579260 | 735.293268 | S | 2271.067001 | 1136.037138 | 2254.040452 | 1127.523864 | 2253.056436 | 1127.031856 | 20 |
| 10 | 1615.648403 | 808.327840 | 1598.621854 | 799.814565 | 1597.637838 | 799.322557 | Q | 2184.034973 | 1092.521124 | 2167.008424 | 1084.007850 | 2166.024408 | 1083.515842 | 19 |
| 11 | 1728.732467 | 864.869872 | 1711.705918 | 856.356597 | 1710.721902 | 855.864589 | L | ***2055.976395*** | 1028.491835 | 2038.949846 | 1019.978561 | 2037.965830 | 1019.486553 | 18 |
| 12 | 1857.775060 | 929.391168 | 1840.748511 | 920.877894 | 1839.764495 | 920.385886 | E | 1942.892331 | 971.949804 | 1925.865782 | 963.436529 | 1924.881766 | 962.944521 | 17 |
| 13 | 1986.817653 | 993.912465 | 1969.791104 | 985.399190 | 1968.807088 | 984.907182 | E | 1813.849738 | 907.428507 | 1796.823189 | 898.915233 | 1795.839173 | 898.423225 | 16 |
| 14 | 2099.901717 | 1050.454497 | 2082.875168 | 1041.941222 | 2081.891152 | 1041.449214 | L | ***1684.807145*** | 842.907211 | 1667.780596 | 834.393936 | 1666.796580 | 833.901928 | 15 |
| 15 | 2236.960629 | 1118.983953 | 2219.934080 | 1110.470678 | 2218.950064 | 1109.978670 | H | ***1571.723081*** | 786.365179 | 1554.696532 | 777.851904 | 1553.712516 | 777.359896 | 14 |
| 16 | 2396.991278 | 1198.999277 | 2379.964729 | 1190.486002 | 2378.980713 | 1189.993994 | C | ***1434.664169*** | 717.835723 | 1417.637620 | 709.322448 | 1416.653604 | 708.830440 | 13 |
| 17 | 2468.028392 | 1234.517834 | 2451.001843 | 1226.004559 | 2450.017827 | 1225.512552 | A | ***1274.633520*** | 637.820398 | 1257.606971 | 629.307124 | 1256.622955 | 628.815116 | 12 |
| 18 | 2569.076071 | 1285.041673 | 2552.049522 | 1276.528399 | 2551.065506 | 1276.036391 | T | ***1203.596406*** | 602.301841 | 1186.569857 | 593.788567 | 1185.585841 | 593.296559 | 11 |
| 19 | 2626.097535 | 1313.552405 | 2609.070986 | 1305.039131 | 2608.086970 | 1304.547123 | G | ***1102.548727*** | 551.778002 | 1085.522178 | 543.264727 | 1084.538162 | 542.772719 | 10 |
| 20 | **2739.181599** | 1370.094437 | 2722.155050 | 1361.581163 | 2721.171034 | 1361.089155 | I | ***1045.527263*** | 523.267270 | 1028.500714 | 514.753995 | 1027.516698 | 514.261987 | 9 |
| 21 | 2826.213627 | 1413.610452 | 2809.187078 | 1405.097177 | 2808.203062 | 1404.605169 | S | ***932.443199*** | 466.725238 | 915.416650 | 458.211963 | 914.432634 | 457.719955 | 8 |
| 22 | 2939.297691 | 1470.152484 | 2922.271142 | 1461.639209 | 2921.287126 | 1461.147201 | L | ***845.411171*** | 423.209224 | 828.384622 | 414.695949 | 827.400606 | 414.203941 | 7 |
| 23 | 3010.334805 | 1505.671041 | 2993.308256 | 1497.157766 | 2992.324240 | 1496.665758 | A | ***732.327107*** | 366.667192 | 715.300558 | 358.153917 | 714.316542 | 357.661909 | 6 |
| 24 | 3124.377732 | 1562.692504 | 3107.351183 | 1554.179230 | 3106.367167 | 1553.687222 | N | ***661.289993*** | 331.148635 | 644.263444 | 322.635360 | 643.279428 | 322.143352 | 5 |
| 25 | 3253.420325 | 1627.213801 | 3236.393776 | 1618.700526 | 3235.409760 | 1618.208518 | E | ***547.247066*** | 274.127171 | 530.220517 | 265.613897 | 529.236501 | 265.121889 | 4 |
| 26 | 3381.478903 | 1691.243090 | 3364.452354 | 1682.729815 | 3363.468338 | 1682.237807 | Q | 418.204473 | 209.605874 | 401.177924 | 201.092600 | 400.193908 | 200.600592 | 3 |
| 27 | 3496.505846 | 1748.756561 | 3479.479297 | 1740.243287 | 3478.495281 | 1739.751279 | D | 290.145895 | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 28 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of MVQEQCCHSQLEELHCATGISLANEQDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.2 | 3669.610229 | 0.010187 | MVQEQCCHSQLEELHCATGISLANEQDR |
| 61.3 | 3669.610229 | 0.010187 | MVQEQCCHSQLEELHCATGISLANEQDR |
| 61.3 | 3669.610229 | 0.010187 | MVQEQCCHSQLEELHCATGISLANEQDR |

**Mascot:** http://www.matrixscience.com/

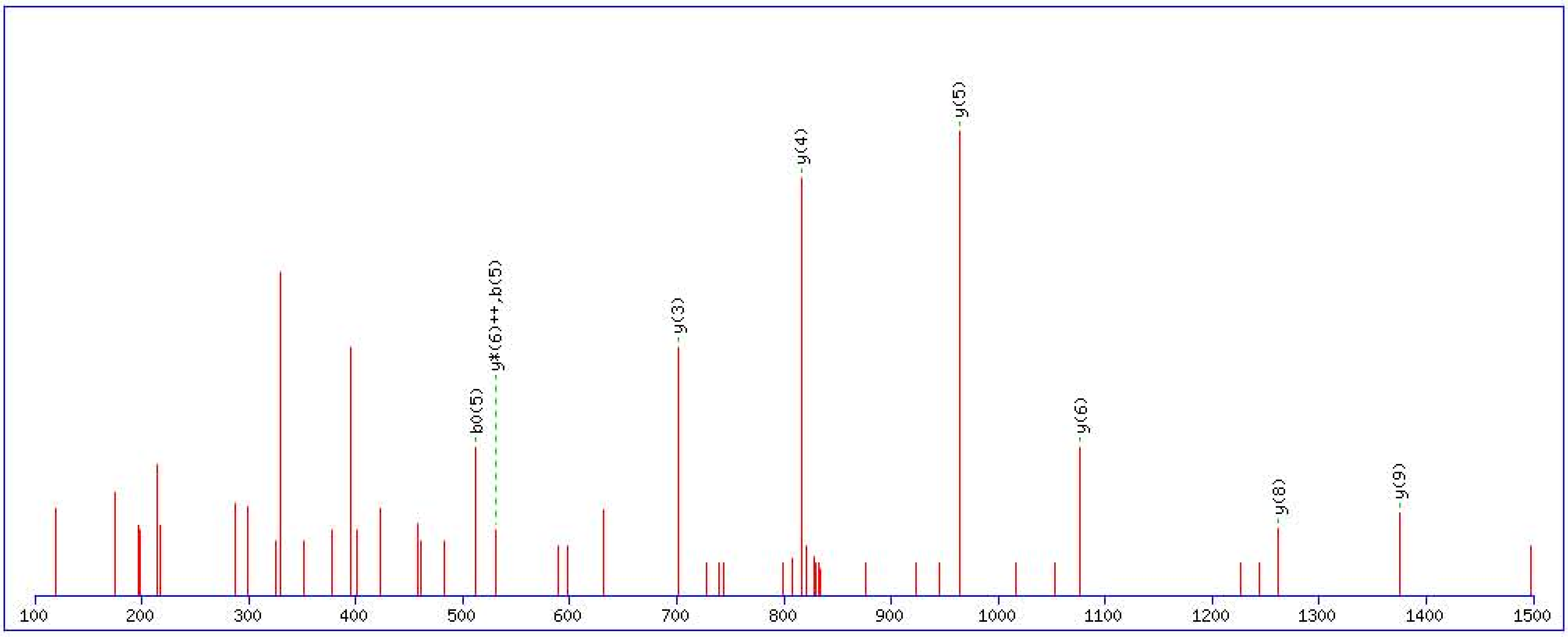
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ELSEALGQIFDSQR**
Found in **LG3BP_HUMAN**, Galectin-3-binding protein OS=Homo sapiens GN=LGALS3BP PE=1 SV=1

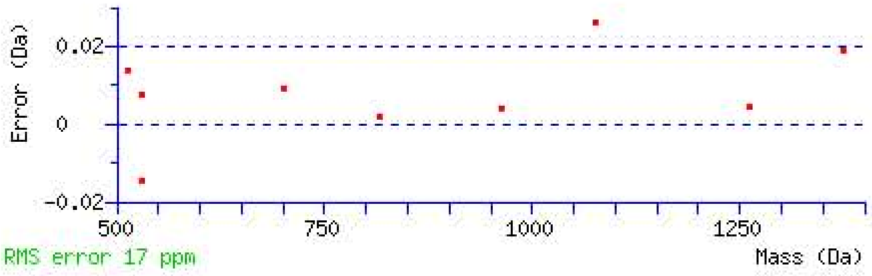
Match to Query 25306: 1902.969342 from(635.330390,3+) rtinseconds(2718) index(57151)
Title: Locus:1.1.1.1561.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

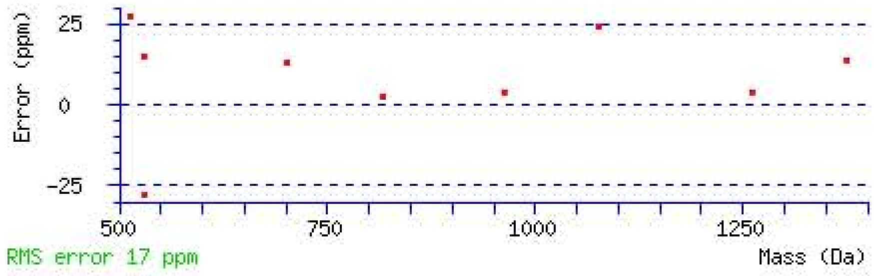
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1902.950928
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13    : Biotin:Thermo-21345 (Q)
Ions Score: 36  Expect: 0.017
Matches : 9/138 fragment ions using 13 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 |  |  | 112.039304 | 56.523290 | E |  |  |  |  |  |  | 14 |
| 2 | 243.133933 | 122.070605 |  |  | 225.123368 | 113.065322 | L | 1774.915632 | 887.961454 | 1757.889083 | 879.448180 | 1756.905067 | 878.956172 | 13 |
| 3 | 330.165961 | 165.586618 |  |  | 312.155396 | 156.581336 | S | 1661.831568 | 831.419422 | 1644.805019 | 822.906148 | 1643.821003 | 822.414140 | 12 |
| 4 | 459.208554 | 230.107915 |  |  | 441.197989 | 221.102633 | E | 1574.799540 | 787.903408 | 1557.772991 | 779.390134 | 1556.788975 | 778.898126 | 11 |
| 5 | **530.245668** | 265.626472 |  |  | 512.235103 | 256.621190 | A | 1445.756947 | 723.382112 | 1428.730398 | 714.868837 | 1427.746382 | 714.376829 | 10 |
| 6 | 643.329732 | 322.168504 |  |  | 625.319167 | 313.163222 | L | ***1374.719833*** | 687.863555 | 1357.693284 | 679.350280 | 1356.709268 | 678.858272 | 9 |
| 7 | 700.351196 | 350.679236 |  |  | 682.340631 | 341.673954 | G | ***1261.635769*** | 631.321523 | 1244.609220 | 622.808248 | 1243.625204 | 622.316240 | 8 |
| 8 | 828.409774 | 414.708525 | 811.383225 | 406.195251 | 810.399209 | 405.703243 | Q | 1204.614305 | 602.810791 | 1187.587756 | 594.297516 | 1186.603740 | 593.805508 | 7 |
| 9 | 941.493838 | 471.250557 | 924.467289 | 462.737283 | 923.483273 | 462.245275 | I | ***1076.555727*** | 538.781502 | 1059.529178 | 530.268227 | 1058.545162 | 529.776219 | 6 |
| 10 | 1088.562252 | 544.784764 | 1071.535703 | 536.271490 | 1070.551687 | 535.779482 | F | ***963.471663*** | 482.239470 | 946.445114 | 473.726195 | 945.461098 | 473.234187 | 5 |
| 11 | 1203.589195 | 602.298236 | 1186.562646 | 593.784961 | 1185.578630 | 593.292953 | D | ***816.403249*** | 408.705263 | 799.376700 | 400.191988 | 798.392684 | 399.699980 | 4 |
| 12 | 1290.621223 | 645.814250 | 1273.594674 | 637.300975 | 1272.610658 | 636.808967 | S | ***701.376306*** | 351.191791 | 684.349757 | 342.678517 | 683.365741 | 342.186509 | 3 |
| 13 | 1729.846549 | 865.426913 | 1712.820000 | 856.913638 | 1711.835984 | 856.421630 | Q | 614.344278 | 307.675777 | 597.317729 | 299.162503 |  |  | 2 |
| 14 |  |  |  |  |  |  | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 |  |  | 1 |





NCBI **BLAST** search of ELSEALGQIFDSQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 35.6 | 1902.950928 | 0.018414 | ELSEALGQIFDSQR |
| 16.8 | 1902.947739 | 0.021603 | MKEQLREMENLR |

**Mascot:** http://www.matrixscience.com/

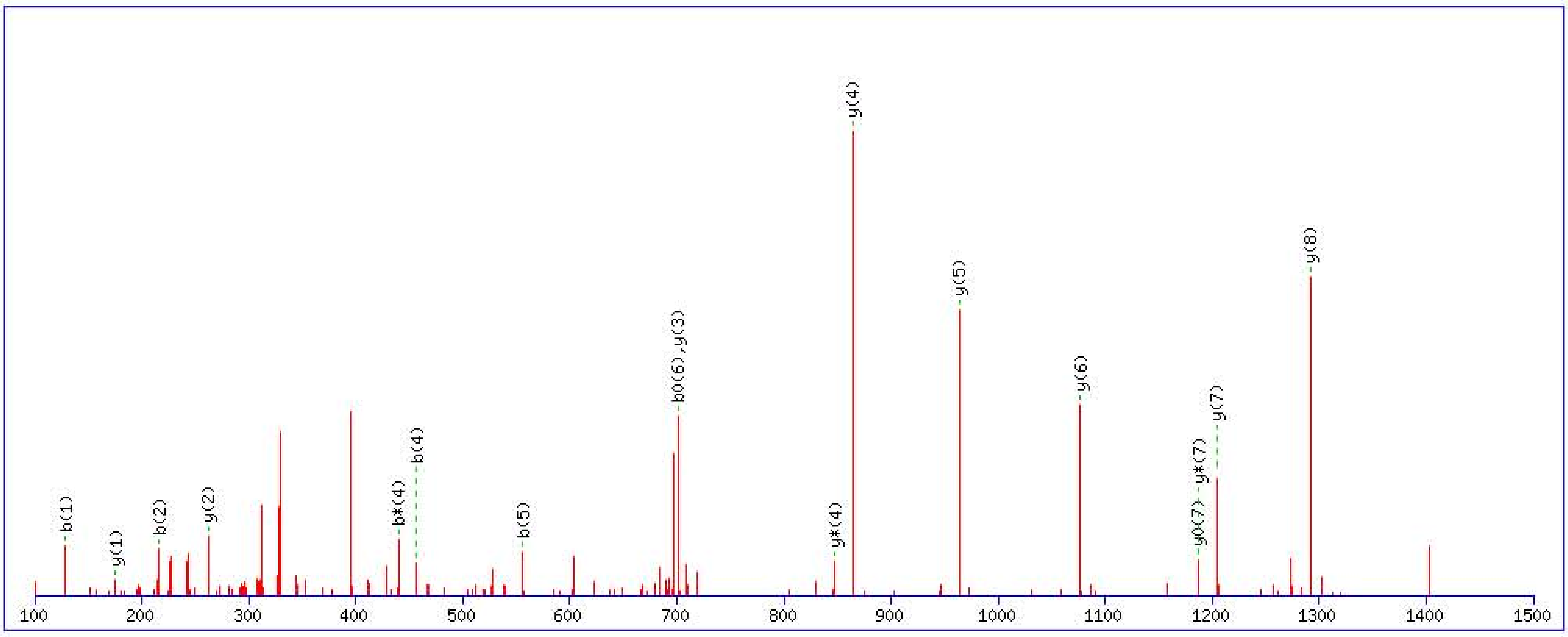
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KSQLVYQSR**
Found in **LG3BP_HUMAN**, Galectin-3-binding protein OS=Homo sapiens GN=LGALS3BP PE=1 SV=1

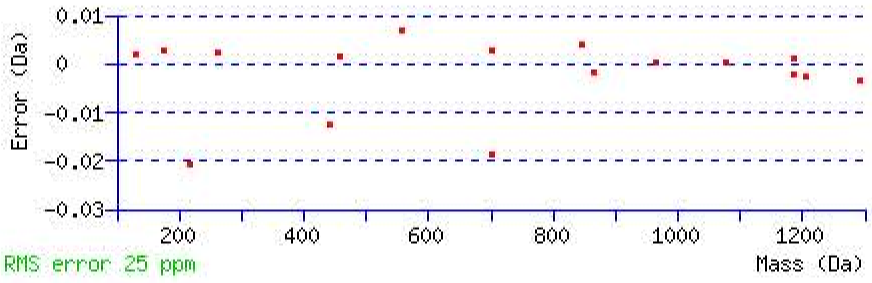
Match to Query 31206: 1418.773788 from(710.394170,2+) rtinseconds(1542) index(49818)
Title: Locus:1.1.1.1152.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

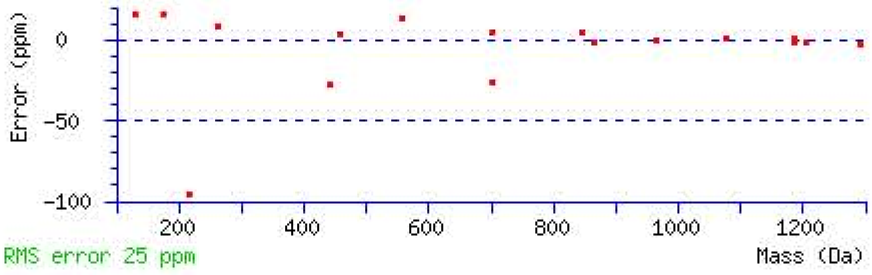
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1418.770386
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 57 **Expect:** 4e-005
**Matches :** 17/92 fragment ions using 27 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 9 |
| 2 | **216.134267** | 108.570771 | 199.107718 | 100.057497 | 198.123702 | 99.565489 | S | ***1291.682719*** | 646.344998 | 1274.656170 | 637.831723 | 1273.672154 | 637.339715 | 8 |
| 3 | 344.192845 | 172.600060 | 327.166296 | 164.086786 | 326.182280 | 163.594778 | Q | ***1204.650691*** | 602.828984 | 1187.624142 | 594.315709 | 1186.640126 | 593.823701 | 7 |
| 4 | **457.276909** | 229.142092 | 440.250360 | 220.628818 | 439.266344 | 220.136810 | L | ***1076.592113*** | 538.799695 | 1059.565564 | 530.286420 | 1058.581548 | 529.794412 | 6 |
| 5 | **556.345323** | 278.676300 | 539.318774 | 270.163025 | 538.334758 | 269.671017 | V | ***963.508049*** | 482.257663 | 946.481500 | 473.744388 | 945.497484 | 473.252380 | 5 |
| 6 | 719.408652 | 360.207964 | 702.382103 | 351.694690 | 701.398087 | 351.202682 | Y | ***864.439635*** | 432.723456 | 847.413086 | 424.210181 | 846.429070 | 423.718173 | 4 |
| 7 | 1158.633978 | 579.820627 | 1141.607429 | 571.307353 | 1140.623413 | 570.815345 | Q | ***701.376306*** | 351.191791 | 684.349757 | 342.678517 | 683.365741 | 342.186509 | 3 |
| 8 | 1245.666006 | 623.336641 | 1228.639457 | 614.823367 | 1227.655441 | 614.331359 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KSQLVYQSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 56.5 | 1418.770386 | 0.003402 | KSQLVYQSR |
| 9.2 | 1418.780273 | -0.006485 | TNQLMETLKTIK |
| 8.7 | 1418.770386 | 0.003402 | KSQLVYQSR |
| 4.9 | 1418.788147 | -0.014359 | QSQVDRLYVALK |
| 4.6 | 1418.787659 | -0.013871 | KEILLAMLMVDK |
| 2.6 | 1418.776886 | -0.003098 | EKAKALEDLAGFK |
| 2.6 | 1418.787659 | -0.013871 | KEILLAMLMVDK |

**Mascot:** http://www.matrixscience.com/

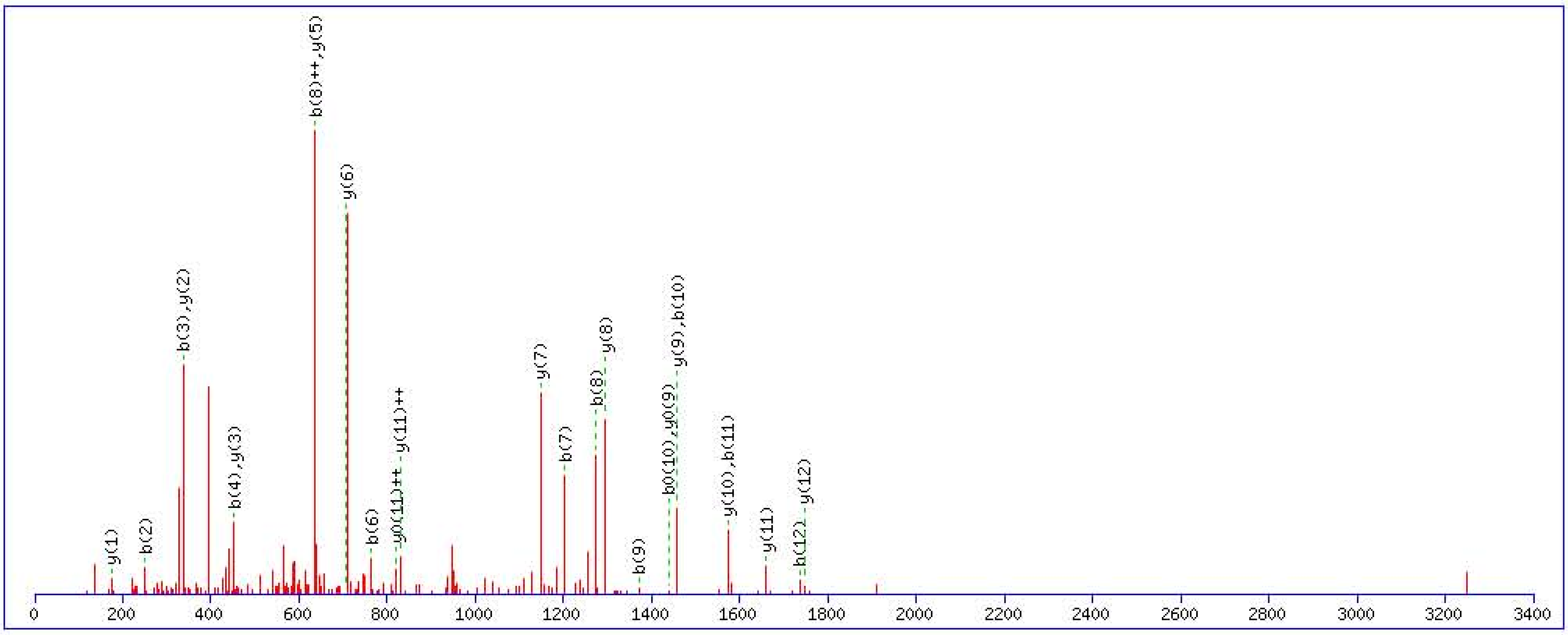
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **YSSDYFQAPSDYR**
Found in **LG3BP_HUMAN**, Galectin-3-binding protein OS=Homo sapiens GN=LGALS3BP PE=1 SV=1

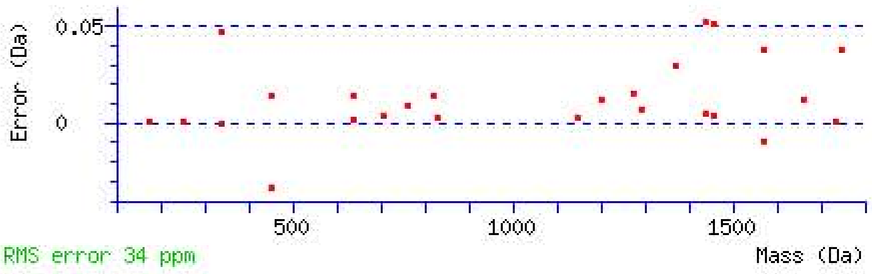
Match to Query 44729: 1908.850168 from(955.432360,2+) rtinseconds(2123) index(53719)
Title: Locus:1.1.1.1354.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

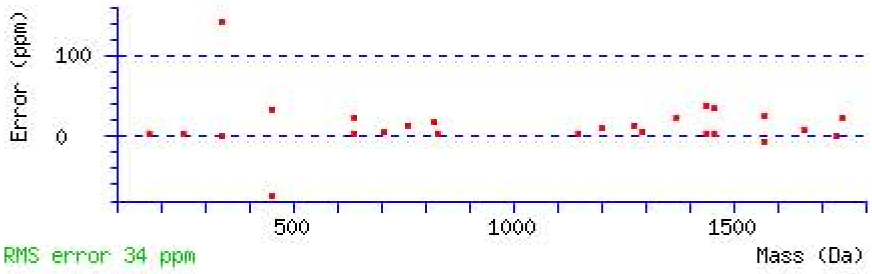
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1908.835236
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 77 **Expect:** 1.5e-007
**Matches :** 26/126 fragment ions using 34 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 13 |
| 2 | ***251.102633*** | 126.054954 | | | 233.092068 | 117.049672 | S | ***1746.779198*** | 873.893237 | 1729.752649 | 865.379963 | 1728.768633 | 864.887955 | 12 |
| 3 | ***338.134661*** | 169.570968 | | | 320.124096 | 160.565686 | S | ***1659.747170*** | 830.377223 | 1642.720621 | 821.863949 | 1641.736605 | 821.371941 | 11 |
| 4 | ***453.161604*** | 227.084440 | | | 435.151039 | 218.079158 | D | ***1572.715142*** | 786.861209 | 1555.688593 | 778.347935 | 1554.704577 | 777.855927 | 10 |
| 5 | 616.224933 | 308.616105 | | | 598.214368 | 299.610822 | Y | ***1457.688199*** | 729.347738 | 1440.661650 | 720.834463 | 1439.677634 | 720.342455 | 9 |
| 6 | ***763.293347*** | 382.150312 | | | 745.282782 | 373.145029 | F | ***1294.624870*** | 647.816073 | 1277.598321 | 639.302799 | 1276.614305 | 638.810791 | 8 |
| 7 | ***1202.518673*** | 601.762975 | 1185.492124 | 593.249700 | 1184.508108 | 592.757692 | Q | ***1147.556456*** | 574.281866 | 1130.529907 | 565.768592 | 1129.545891 | 565.276584 | 7 |
| 8 | ***1273.555787*** | 637.281532 | 1256.529238 | 628.768257 | 1255.545222 | 628.276249 | A | ***708.331130*** | 354.669203 | 691.304581 | 346.155929 | 690.320565 | 345.663921 | 6 |
| 9 | ***1370.608551*** | 685.807914 | 1353.582002 | 677.294639 | 1352.597986 | 676.802631 | P | ***637.294016*** | 319.150646 | 620.267467 | 310.637372 | 619.283451 | 310.145364 | 5 |
| 10 | ***1457.640579*** | 729.323928 | 1440.614030 | 720.810653 | 1439.630014 | 720.318645 | S | 540.241252 | 270.624264 | 523.214703 | 262.110990 | 522.230687 | 261.618982 | 4 |
| 11 | ***1572.667522*** | 786.837399 | 1555.640973 | 778.324125 | 1554.656957 | 777.832117 | D | ***453.209224*** | 227.108250 | 436.182675 | 218.594976 | 435.198659 | 218.102968 | 3 |
| 12 | ***1735.730851*** | 868.369064 | 1718.704302 | 859.855789 | 1717.720286 | 859.363781 | Y | ***338.182281*** | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 13 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of YSSDYFQAPSDYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 76.9 | 1908.835236 | 0.014932 | YSSDYFQAPSDYR |

**Mascot:** http://www.matrixscience.com/

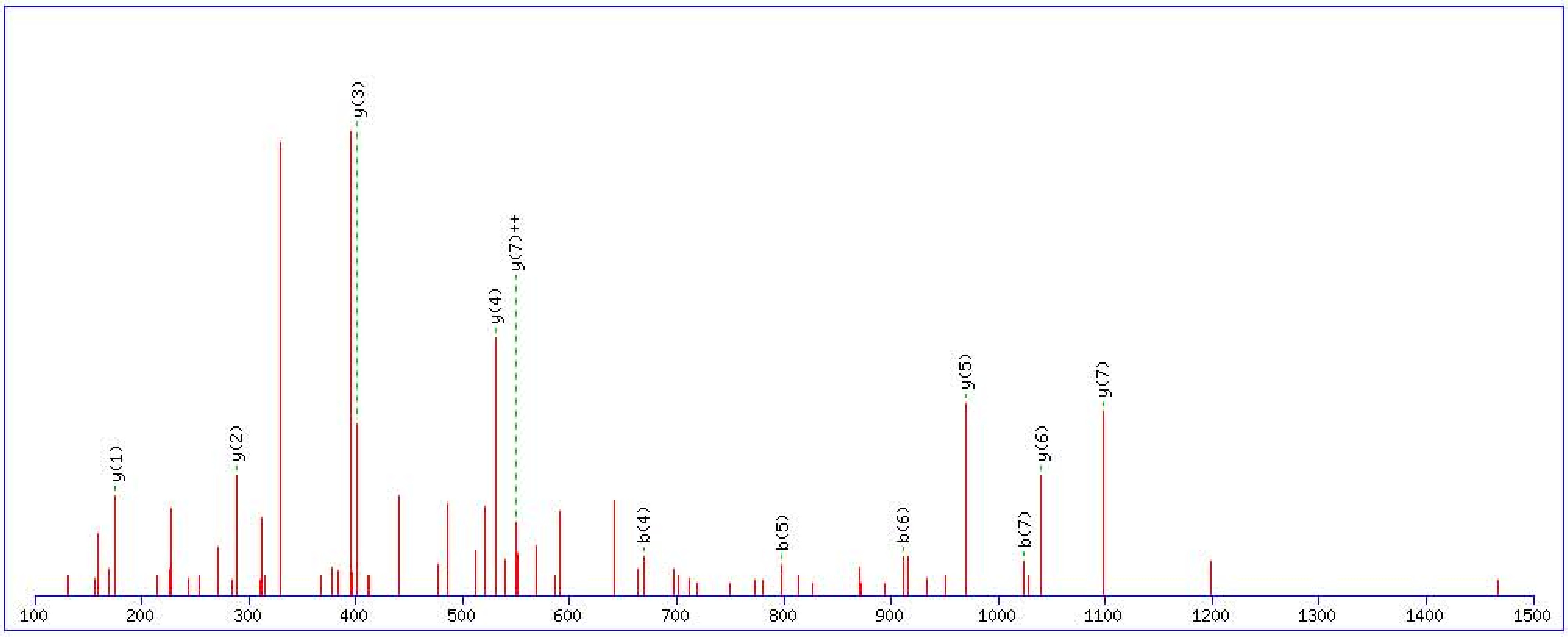
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **TGAQELLR**
Found in **GELS_HUMAN**, Gelsolin OS=Homo sapiens GN=GSN PE=1 SV=1

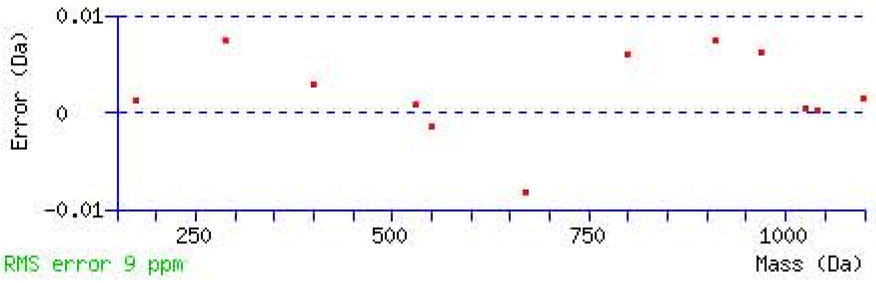
Match to Query 23272: 1197.656788 from(599.835670,2+) rtinseconds(1892) index(5149)
Title: Locus:1.1.1.1468.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

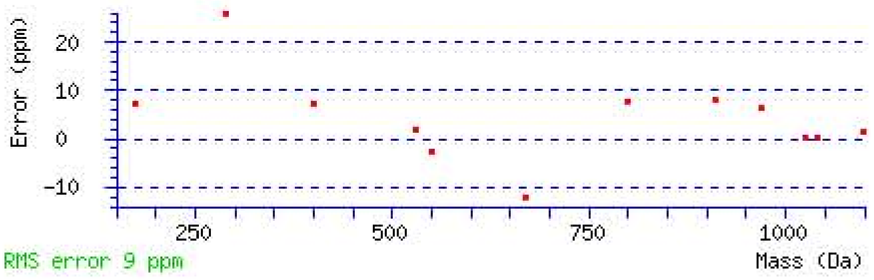
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1197.653961
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 49  Expect: 0.00032
Matches : 12/72 fragment ions using 20 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 8 |
| 2 | 159.076419 | 80.041847 | | | 141.065854 | 71.036565 | G | 1097.613577 | 549.310427 | 1080.587028 | 540.797152 | 1079.603012 | 540.305144 | 7 |
| 3 | 230.113533 | 115.560404 | | | 212.102968 | 106.555122 | A | 1040.592113 | 520.799695 | 1023.565564 | 512.286420 | 1022.581548 | 511.794412 | 6 |
| 4 | 669.338859 | 335.173068 | 652.312310 | 326.659793 | 651.328294 | 326.167785 | Q | 969.554999 | 485.281138 | 952.528450 | 476.767863 | 951.544434 | 476.275855 | 5 |
| 5 | 798.381452 | 399.694364 | 781.354903 | 391.181090 | 780.370887 | 390.689082 | E | 530.329673 | 265.668475 | 513.303124 | 257.155200 | 512.319108 | 256.663192 | 4 |
| 6 | 911.465516 | 456.236396 | 894.438967 | 447.723122 | 893.454951 | 447.231114 | L | 401.287080 | 201.147178 | 384.260531 | 192.633903 | | | 3 |
| 7 | 1024.549580 | 512.778428 | 1007.523031 | 504.265153 | 1006.539015 | 503.773145 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 8 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of TGAQELLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 48.9 | 1197.653961 | 0.002827 | TGAQELLR |
| 25.2 | 1197.653961 | 0.002827 | QTQEILR |
| 23.5 | 1197.653961 | 0.002827 | QTQEILR |
| 18.2 | 1197.653961 | 0.002827 | TQQLLER |
| 16.0 | 1197.646545 | 0.010243 | RSPQEAEILR |
| 15.6 | 1197.671692 | -0.014904 | LGLENAEALIR |
| 12.7 | 1197.653961 | 0.002827 | QTEQLLR |
| 11.8 | 1197.669220 | -0.012432 | TLWAQLR |
| 11.5 | 1197.640045 | 0.016743 | QCQLQRPLR |
| 11.4 | 1197.653961 | 0.002827 | QTEQLLR |

**Mascot:** http://www.matrixscience.com/

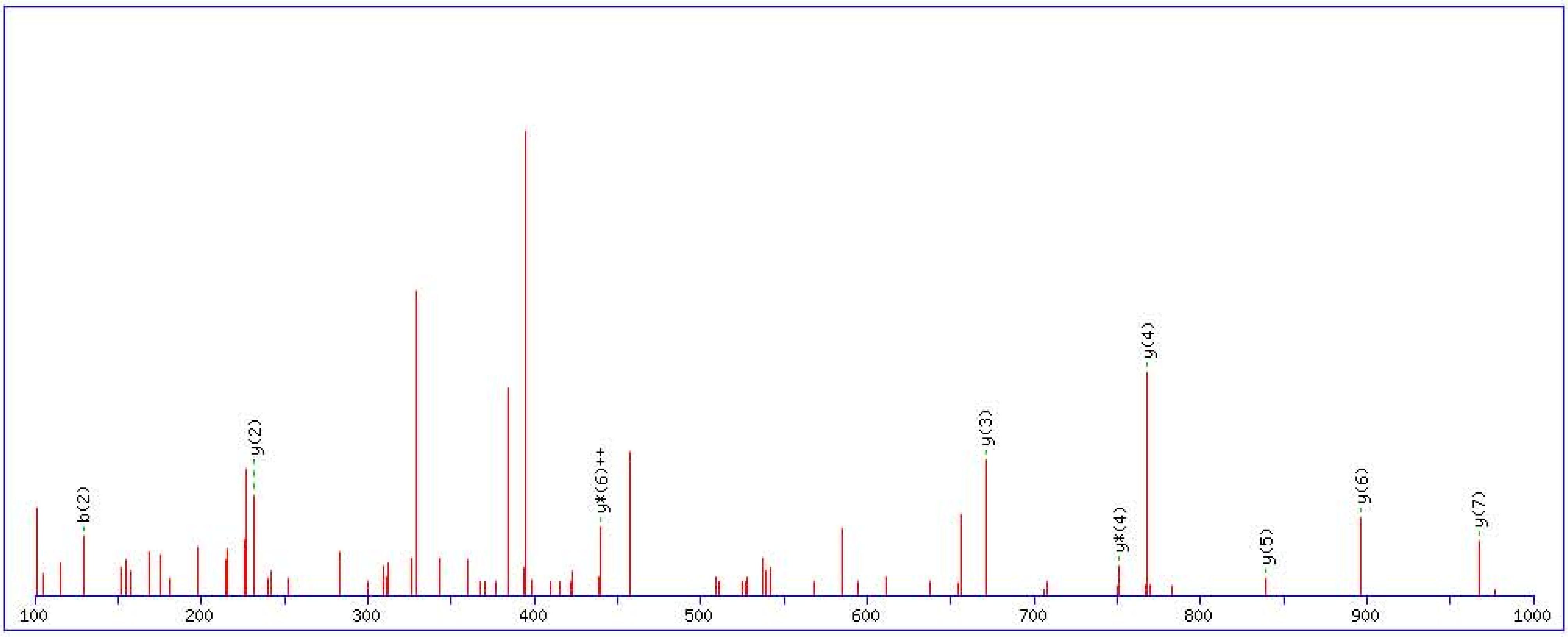
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GASQAGAPQGR**
Found in **GELS_HUMAN**, Gelsolin OS=Homo sapiens GN=GSN PE=1 SV=1

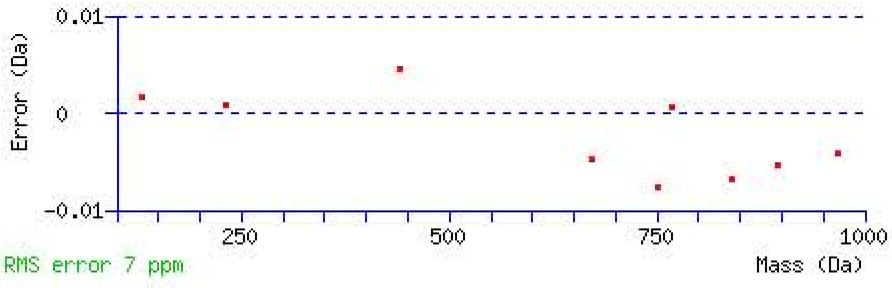
Match to Query 26389: 1309.653792 from(437.558540,3+) rtinseconds(1258) index(1377)
Title: Locus:1.1.1.1247.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

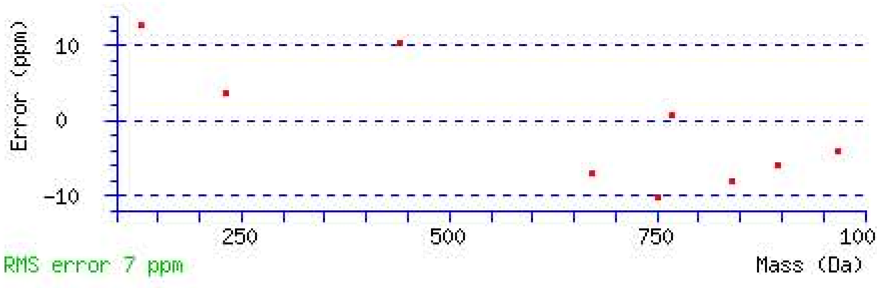
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1309.656097
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.0047
Matches : 9/94 fragment ions using 18 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 11 |
| 2 | 129.065854 | 65.036565 | | | | | A | 1253.641918 | 627.324597 | 1236.615369 | 618.811323 | 1235.631353 | 618.319315 | 10 |
| 3 | 216.097882 | 108.552579 | | | 198.087317 | 99.547296 | S | 1182.604804 | 591.806040 | 1165.578255 | 583.292765 | 1164.594239 | 582.800757 | 9 |
| 4 | 344.156460 | 172.581868 | 327.129911 | 164.068593 | 326.145895 | 163.576585 | Q | 1095.572776 | 548.290026 | 1078.546227 | 539.776752 | | | 8 |
| 5 | 415.193574 | 208.100425 | 398.167025 | 199.587150 | 397.183009 | 199.095142 | A | ***967.514198*** | 484.260737 | 950.487649 | 475.747462 | | | 7 |
| 6 | 472.215038 | 236.611157 | 455.188489 | 228.097882 | 454.204473 | 227.605874 | G | ***896.477084*** | 448.742180 | 879.450535 | 440.228906 | | | 6 |
| 7 | 543.252152 | 272.129714 | 526.225603 | 263.616440 | 525.241587 | 263.124432 | A | ***839.455620*** | 420.231448 | 822.429071 | 411.718173 | | | 5 |
| 8 | 640.304916 | 320.656096 | 623.278367 | 312.142822 | 622.294351 | 311.650814 | P | ***768.418506*** | 384.712891 | 751.391957 | 376.199616 | | | 4 |
| 9 | 1079.530242 | 540.268759 | 1062.503693 | 531.755485 | 1061.519677 | 531.263477 | Q | ***671.365742*** | 336.186509 | 654.339193 | 327.673234 | | | 3 |
| 10 | 1136.551706 | 568.779491 | 1119.525157 | 560.266217 | 1118.541141 | 559.774208 | G | ***232.140416*** | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GASQAGAPQGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.3 | 1309.656097 | -0.002305 | GASQAGAPQGR |
| 23.7 | 1309.656097 | -0.002305 | GASQAGAPQGR |
| 4.5 | 1309.648682 | 0.005110 | SLQAQEDARHR |
| 4.4 | 1309.669998 | -0.016206 | LIETQMERFK |

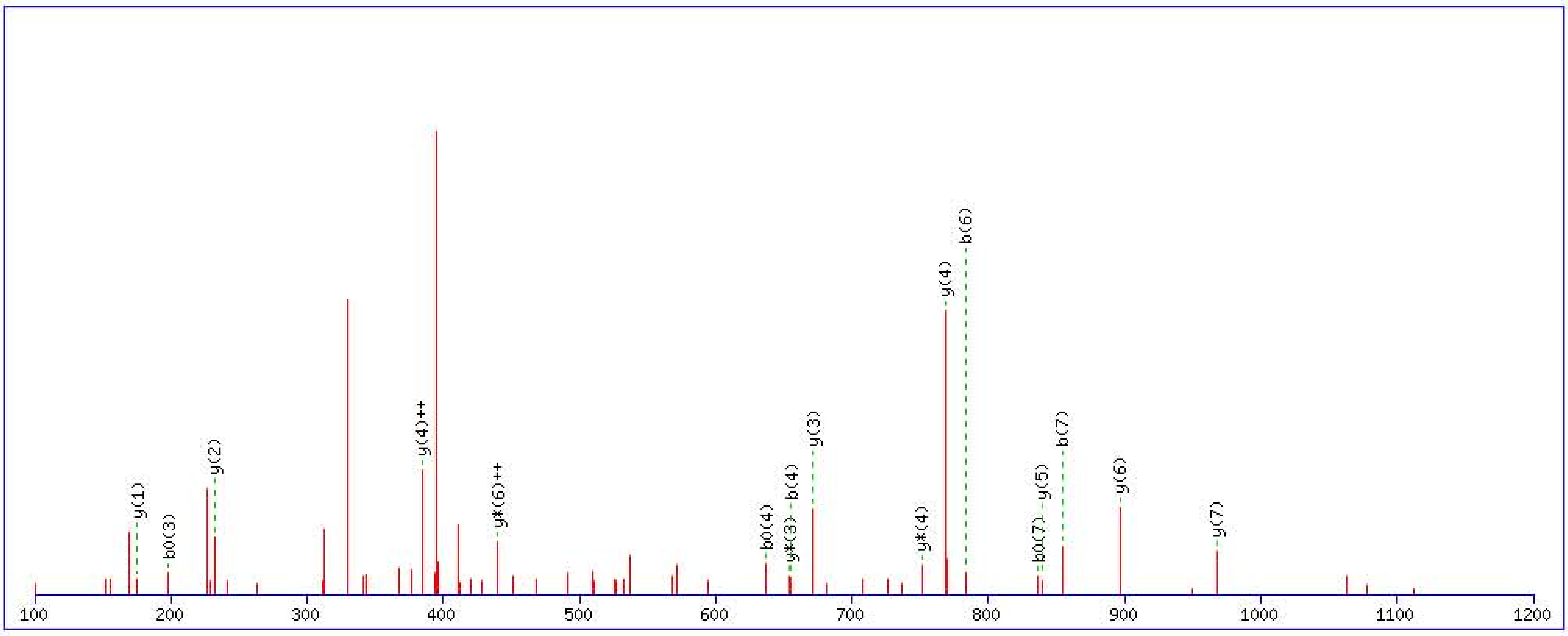
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GASQAGAPQGR**
Found in **GELS_HUMAN**, Gelsolin OS=Homo sapiens GN=GSN PE=1 SV=1

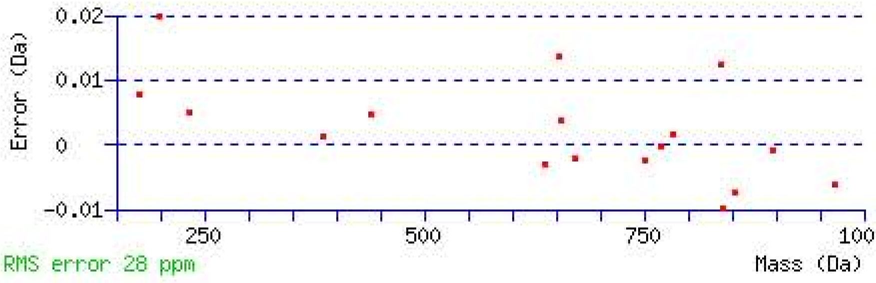
Match to Query 37959: 1620.817722 from(541.279850,3+) rtinseconds(1673) index(3883)
Title: Locus:1.1.1.1392.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●

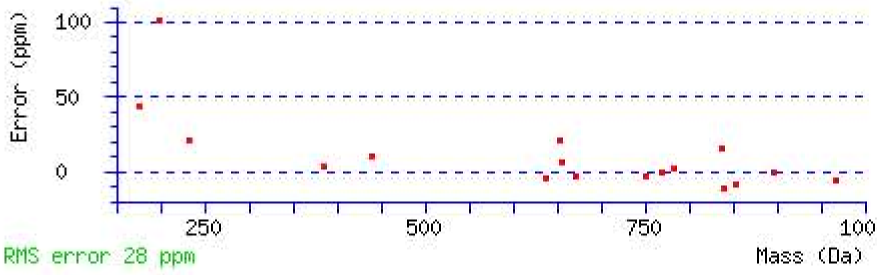


```
Monoisotopic mass of neutral peptide Mr(calc): 1620.822845
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.0074
Matches : 17/94 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 11 |
| 2 | 129.065854 | 65.036565 | | | | | A | 1564.808666 | 782.907971 | 1547.782117 | 774.394697 | 1546.798101 | 773.902689 | 10 |
| 3 | 216.097882 | 108.552579 | | | 198.087317 | 99.547296 | S | 1493.771552 | 747.389414 | 1476.745003 | 738.876140 | 1475.760987 | 738.384131 | 9 |
| 4 | **655.323208** | 328.165242 | 638.296659 | 319.651968 | 637.312643 | 319.159960 | Q | 1406.739524 | 703.873400 | 1389.712975 | 695.360126 | | | 8 |
| 5 | 726.360322 | 363.683799 | 709.333773 | 355.170525 | 708.349757 | 354.678517 | A | ***967.514198*** | 484.260737 | 950.487649 | 475.747463 | | | 7 |
| 6 | **783.381786** | 392.194531 | 766.355237 | 383.681257 | 765.371221 | 383.189249 | G | ***896.477084*** | 448.742180 | 879.450535 | 440.228906 | | | 6 |
| 7 | **854.418900** | 427.713088 | 837.392351 | 419.199814 | 836.408335 | 418.707806 | A | ***839.455620*** | 420.231448 | 822.429071 | 411.718174 | | | 5 |
| 8 | 951.471664 | 476.239470 | 934.445115 | 467.726196 | 933.461099 | 467.234188 | P | ***768.418506*** | 384.712891 | 751.391957 | 376.199617 | | | 4 |
| 9 | 1390.696990 | 695.852133 | 1373.670441 | 687.338859 | 1372.686425 | 686.846851 | Q | ***671.365742*** | 336.186509 | 654.339193 | 327.673235 | | | 3 |
| 10 | 1447.718454 | 724.362865 | 1430.691905 | 715.849591 | 1429.707889 | 715.357583 | G | ***232.140416*** | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 28 ppm



RMS error 28 ppm

NCBI **BLAST** search of GASQAGAPQGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 28.9 | 1620.822845 | -0.005123 | GASQAGAPQGR |
| 5.8 | 1620.815430 | 0.002292 | SLQAQEDARHR |
| 0.2 | 1620.815430 | 0.002292 | SLQAQEDARHR |
| 0.0 | 1620.841232 | -0.023510 | YYFAVRAKDIYGR |

**Mascot:** http://www.matrixscience.com/

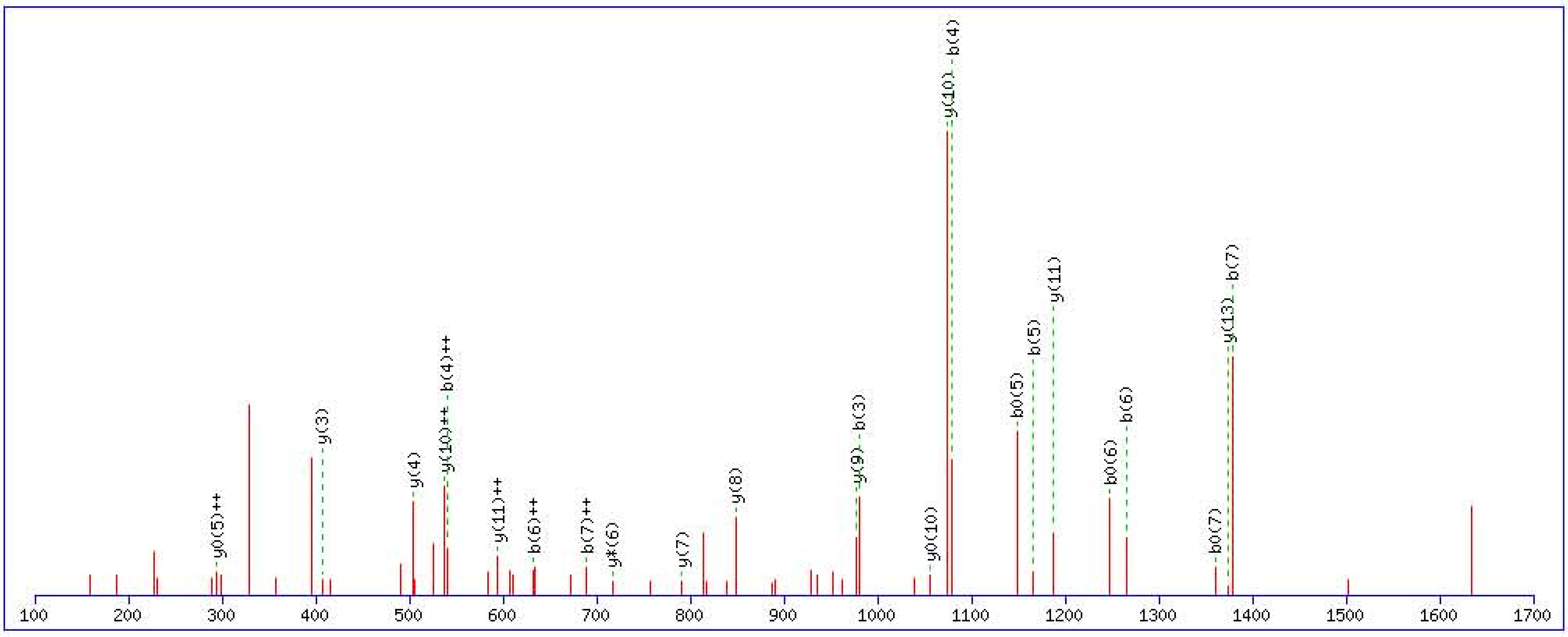
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QTQVSVLPEGGETPLFK**
Found in **GELS_HUMAN**, Gelsolin OS=Homo sapiens GN=GSN PE=1 SV=1

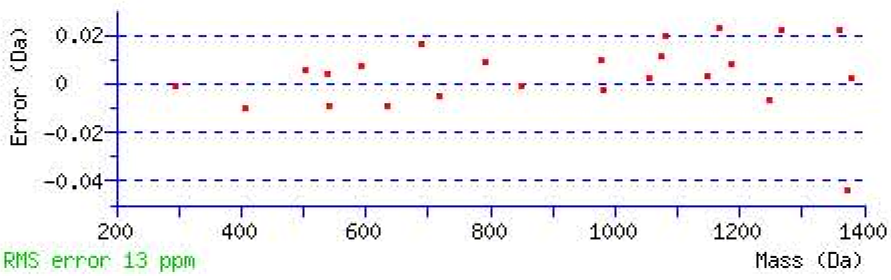
Match to Query 55390: 2451.304362 from(818.108730,3+) rtinseconds(2612) index(40243)
Title: Locus:1.1.1.3328.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

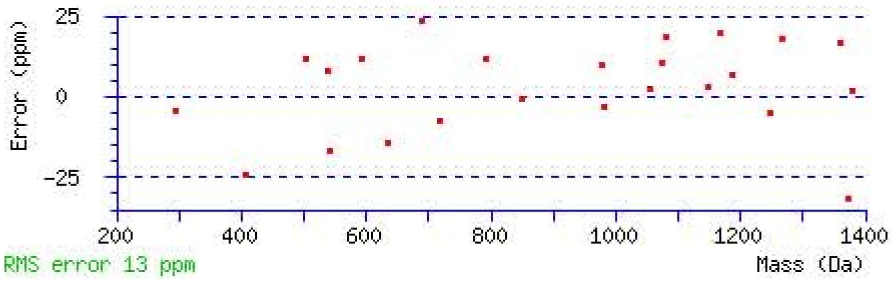
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2451.290588
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 41  Expect: 0.00076
Matches : 25/182 fragment ions using 47 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 17 |
| 2 | 541.280281 | 271.143779 | 524.253732 | 262.630504 | 523.269716 | 262.138496 | T | 2013.072528 | 1007.039902 | 1996.045979 | 998.526628 | 1995.061963 | 998.034620 | 16 |
| 3 | **980.505607** | 490.756442 | 963.479058 | 482.243167 | 962.495042 | 481.751159 | Q | 1912.024849 | 956.516063 | 1894.998300 | 948.002788 | 1894.014284 | 947.510780 | 15 |
| 4 | **1079.574021** | **540.290649** | 1062.547472 | 531.777374 | 1061.563456 | 531.285366 | V | 1472.799523 | 736.903400 | 1455.772974 | 728.390125 | 1454.788958 | 727.898117 | 14 |
| 5 | **1166.606049** | 583.806663 | 1149.579500 | 575.293388 | 1148.595484 | 574.801380 | S | ***1373.731109*** | 687.369193 | 1356.704560 | 678.855918 | 1355.720544 | 678.363910 | 13 |
| 6 | **1265.674463** | **633.340870** | 1248.647914 | 624.827595 | 1247.663898 | 624.335587 | V | 1286.699081 | 643.853179 | 1269.672532 | 635.339904 | 1268.688516 | 634.847896 | 12 |
| 7 | **1378.758527** | **689.882902** | 1361.731978 | 681.369627 | 1360.747962 | 680.877619 | L | ***1187.630667*** | 594.318971 | 1170.604118 | 585.805697 | 1169.620102 | 585.313689 | 11 |
| 8 | 1475.811291 | 738.409284 | 1458.784742 | 729.896009 | 1457.800726 | 729.404001 | P | ***1074.546603*** | 537.776940 | 1057.520054 | 529.263665 | 1056.536038 | 528.771657 | 10 |
| 9 | 1604.853884 | 802.930580 | 1587.827335 | 794.417306 | 1586.843319 | 793.925298 | E | ***977.493839*** | 489.250558 | 960.467290 | 480.737283 | 959.483274 | 480.245275 | 9 |
| 10 | 1661.875348 | 831.441312 | 1644.848799 | 822.928038 | 1643.864783 | 822.436030 | G | ***848.451246*** | 424.729261 | 831.424697 | 416.215986 | 830.440681 | 415.723978 | 8 |
| 11 | 1718.896812 | 859.952044 | 1701.870263 | 851.438770 | 1700.886247 | 850.946762 | G | ***791.429782*** | 396.218529 | 774.403233 | 387.705254 | 773.419217 | 387.213246 | 7 |
| 12 | 1847.939405 | 924.473341 | 1830.912856 | 915.960066 | 1829.928840 | 915.468058 | E | 734.408318 | 367.707797 | 717.381769 | 359.194523 | 716.397753 | 358.702515 | 6 |
| 13 | 1948.987084 | 974.997180 | 1931.960535 | 966.483906 | 1930.976519 | 965.991898 | T | 605.365725 | 303.186500 | 588.339176 | 294.673226 | 587.355160 | 294.181218 | 5 |
| 14 | 2046.039848 | 1023.523562 | 2029.013299 | 1015.010288 | 2028.029283 | 1014.518280 | P | ***504.318046*** | 252.662661 | 487.291497 | 244.149386 | | | 4 |
| 15 | 2159.123912 | 1080.065594 | 2142.097363 | 1071.552319 | 2141.113347 | 1071.060311 | L | ***407.265282*** | 204.136279 | 390.238733 | 195.623004 | | | 3 |
| 16 | 2306.192326 | 1153.599801 | 2289.165777 | 1145.086526 | 2288.181761 | 1144.594518 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080972 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QTQVSVLPEGGETPLFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.9 | 2451.290588 | 0.013774 | QTQVSVLPEGGETPLFK |
| 7.3 | 2451.277130 | 0.027232 | GFPSDTQLLDLRRNHFPSVPR |
| 2.4 | 2451.330780 | -0.026418 | RQFQSQLADLQQLPDILK |
| 2.4 | 2451.330780 | -0.026418 | RQFQSQLADLQQLPDILK |

**Mascot:** http://www.matrixscience.com/

{MATRIX}
{SCIENCE}

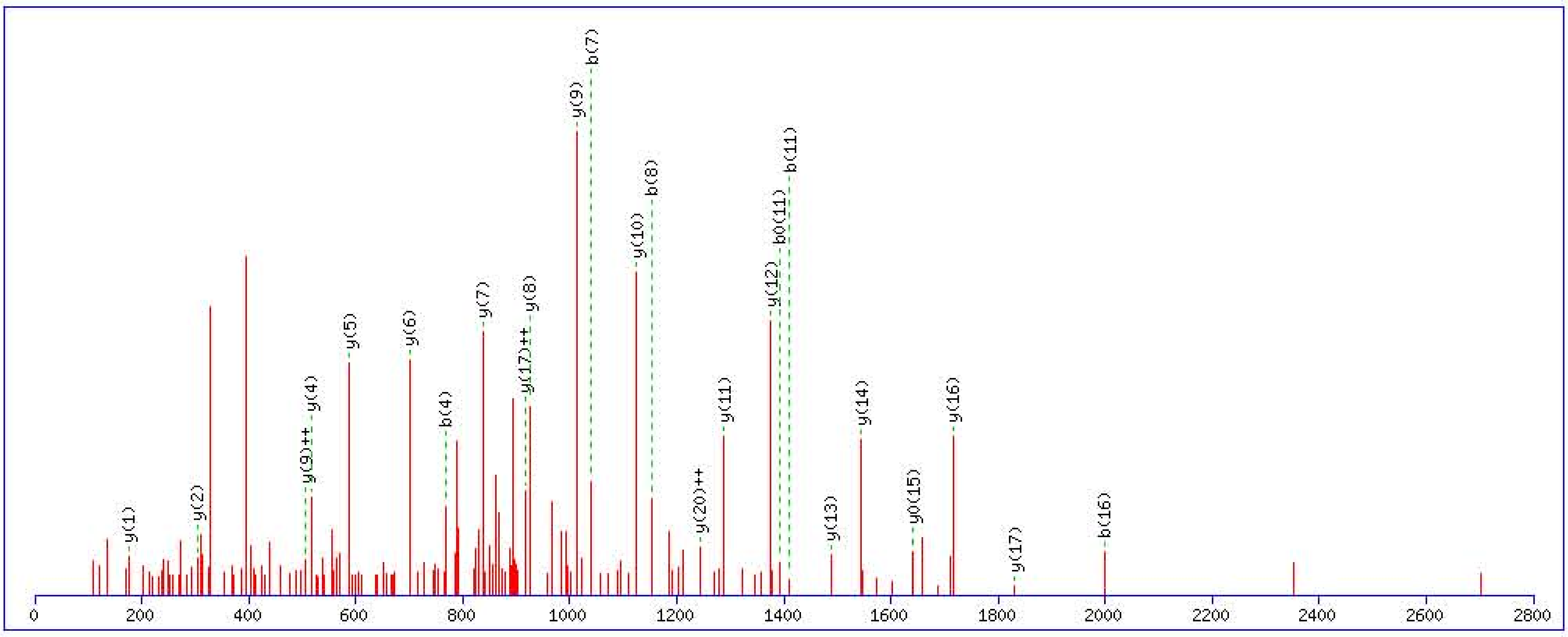
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DPDQTDGLGLSYLSSHIANVER**
Found in **GELS_HUMAN**, Gelsolin OS=Homo sapiens GN=GSN PE=1 SV=1

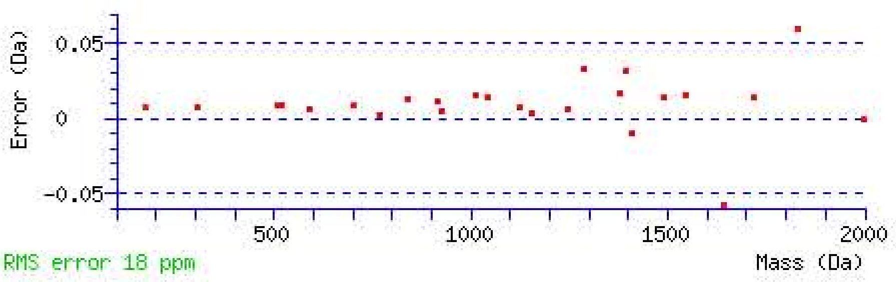
Match to Query 58320: 2697.322722 from(900.114850,3+) rtinseconds(2556) index(24804)
Title: Locus:1.1.1.892.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

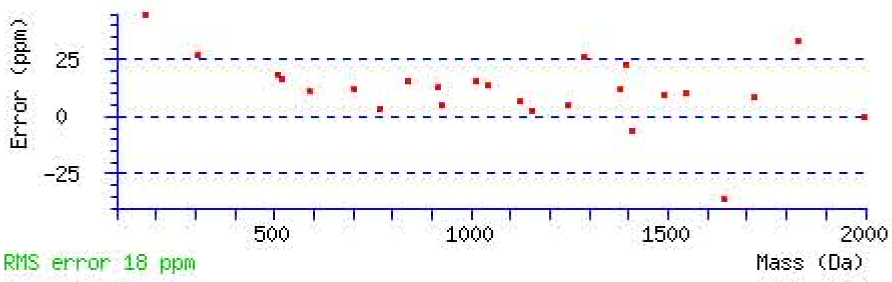
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2697.306824
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q4** : Biotin:Thermo-21345 (Q)
**Ions Score:** 113 **Expect:** 1.5e-010
**Matches :** 25/244 fragment ions using 37 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 22 |
| 2 | 213.086983 | 107.047129 | | | 195.076418 | 98.041847 | P | 2583.287164 | 1292.147220 | 2566.260615 | 1283.633945 | 2565.276599 | 1283.141937 | 21 |
| 3 | 328.113926 | 164.560601 | | | 310.103361 | 155.555319 | D | 2486.234400 | 1243.620838 | 2469.207851 | 1235.107563 | 2468.223835 | 1234.615555 | 20 |
| 4 | **767.339252** | 384.173264 | 750.312703 | 375.659989 | 749.328687 | 375.167982 | Q | 2371.207457 | 1186.107366 | 2354.180908 | 1177.594092 | 2353.196892 | 1177.102084 | 19 |
| 5 | 868.386931 | 434.697104 | 851.360382 | 426.183829 | 850.376366 | 425.691821 | T | 1931.982131 | 966.494704 | 1914.955582 | 957.981429 | 1913.971566 | 957.489421 | 18 |
| 6 | 983.413874 | 492.210575 | 966.387325 | 483.697300 | 965.403309 | 483.205292 | D | ***1830.934452*** | 915.970864 | 1813.907903 | 907.457590 | 1812.923887 | 906.965581 | 17 |
| 7 | **1040.435338** | 520.721307 | 1023.408789 | 512.208032 | 1022.424773 | 511.716025 | G | ***1715.907509*** | 858.457392 | 1698.880960 | 849.944118 | 1697.896944 | 849.452110 | 16 |
| 8 | **1153.519402** | 577.263339 | 1136.492853 | 568.750065 | 1135.508837 | 568.258056 | L | 1658.886045 | 829.946661 | 1641.859496 | 821.433386 | 1640.875480 | 820.941378 | 15 |
| 9 | 1210.540866 | 605.774071 | 1193.514317 | 597.260796 | 1192.530301 | 596.768788 | G | ***1545.801981*** | 773.404629 | 1528.775432 | 764.891354 | 1527.791416 | 764.399346 | 14 |
| 10 | 1323.624930 | 662.316103 | 1306.598381 | 653.802828 | 1305.614365 | 653.310820 | L | ***1488.780517*** | 744.893897 | 1471.753968 | 736.380622 | 1470.769952 | 735.888614 | 13 |
| 11 | **1410.656958** | 705.832117 | 1393.630409 | 697.318842 | 1392.646393 | 696.826834 | S | ***1375.696453*** | 688.351865 | 1358.669904 | 679.838590 | 1357.685888 | 679.346582 | 12 |
| 12 | 1573.720287 | 787.363781 | 1556.693738 | 778.850507 | 1555.709722 | 778.358499 | Y | ***1288.664425*** | 644.835851 | 1271.637876 | 636.322576 | 1270.653860 | 635.830568 | 11 |
| 13 | 1686.804351 | 843.905813 | 1669.777802 | 835.392539 | 1668.793786 | 834.900531 | L | ***1125.601096*** | 563.304186 | 1108.574547 | 554.790912 | 1107.590531 | 554.298904 | 10 |
| 14 | 1773.836379 | 887.421827 | 1756.809830 | 878.908553 | 1755.825814 | 878.416545 | S | ***1012.517032*** | 506.762154 | 995.490483 | 498.248880 | 994.506467 | 497.756872 | 9 |
| 15 | 1860.868407 | 930.937841 | 1843.841858 | 922.424567 | 1842.857842 | 921.932559 | S | ***925.485004*** | 463.246140 | 908.458455 | 454.732866 | 907.474439 | 454.240858 | 8 |
| 16 | **1997.927319** | 999.467297 | 1980.900770 | 990.954023 | 1979.916754 | 990.462015 | H | ***838.452976*** | 419.730126 | 821.426427 | 411.216852 | 820.442411 | 410.724844 | 7 |
| 17 | 2111.011383 | 1056.009329 | 2093.984834 | 1047.496055 | 2093.000818 | 1047.004047 | I | ***701.394064*** | 351.200670 | 684.367515 | 342.687396 | 683.383499 | 342.195388 | 6 |
| 18 | 2182.048497 | 1091.527886 | 2165.021948 | 1083.014612 | 2164.037932 | 1082.522604 | A | ***588.310000*** | 294.658638 | 571.283451 | 286.145364 | 570.299435 | 285.653356 | 5 |
| 19 | 2296.091424 | 1148.549350 | 2279.064875 | 1140.036075 | 2278.080859 | 1139.544067 | N | ***517.272886*** | 259.140081 | 500.246337 | 250.626806 | 499.262321 | 250.134798 | 4 |
| 20 | 2395.159838 | 1198.083557 | 2378.133289 | 1189.570282 | 2377.149273 | 1189.078274 | V | 403.229959 | 202.118617 | 386.203410 | 193.605343 | 385.219394 | 193.113335 | 3 |
| 21 | 2524.202431 | 1262.604853 | 2507.175882 | 1254.091579 | 2506.191866 | 1253.599571 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 22 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DPDQTDGLGLSYLSSHIANVER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 112.7 | 2697.306824 | 0.015898 | DPDQTDGLGLSYLSSHIANVER |

**Mascot:** http://www.matrixscience.com/

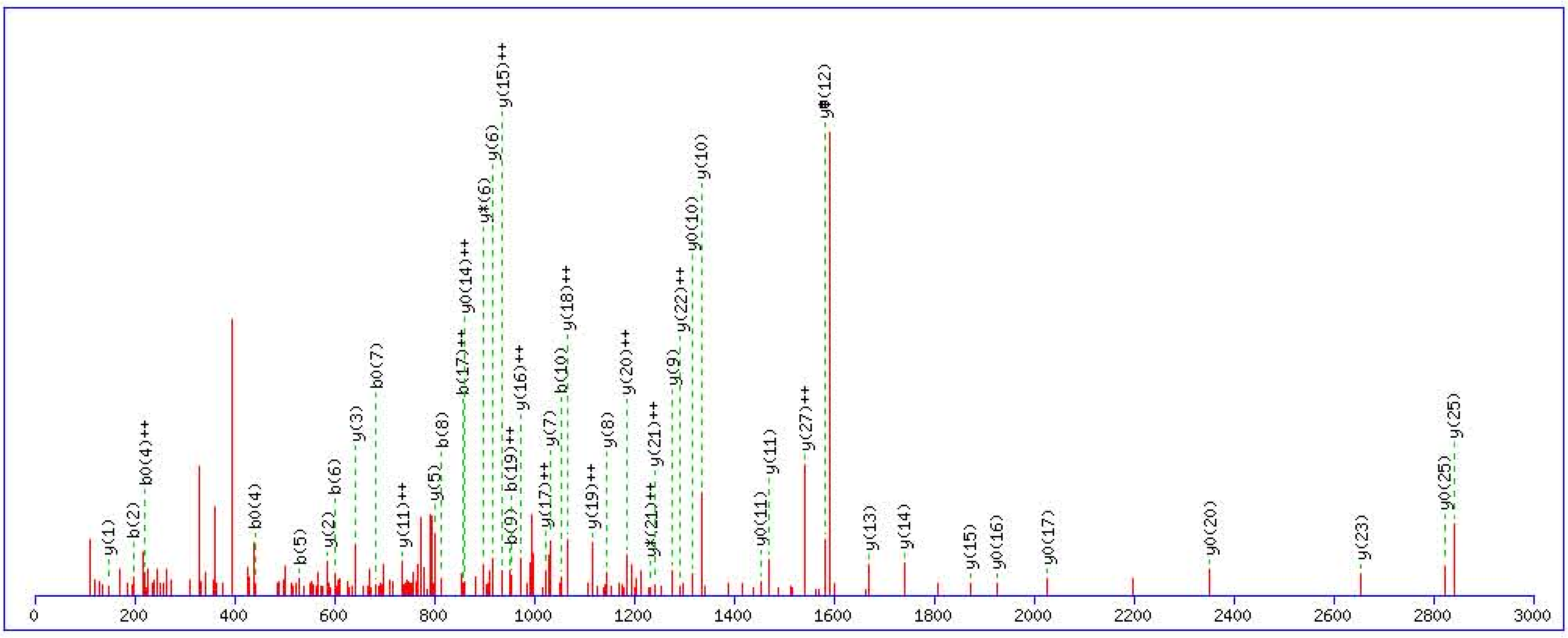
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VPFDAATLHTSTAMAAQHGMDDDGTGQK**
Found in **GELS_HUMAN**, Gelsolin OS=Homo sapiens GN=GSN PE=1 SV=1

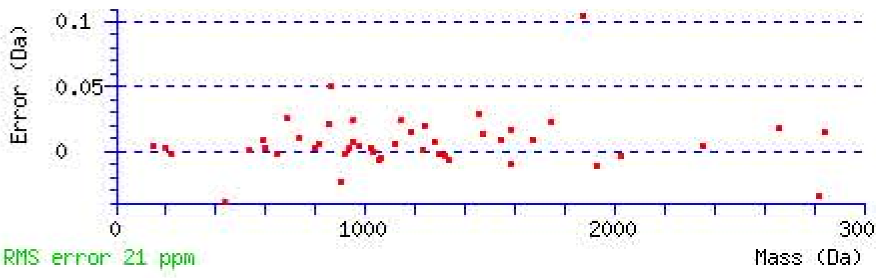
Match to Query 63026: 3183.447776 from(796.869220,4+) rtinseconds(1962) index(5662)
Title: Locus:1.1.1.1492.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

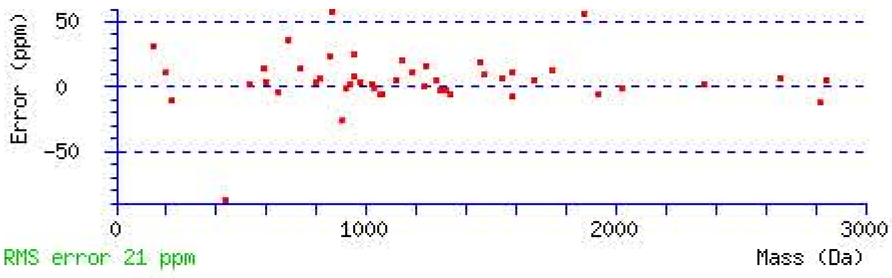
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3183.442383
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q27    : Biotin:Thermo-21345 (Q)
Ions Score: 60  Expect: 1e-005
Matches : 47/280 fragment ions using 139 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 28 |
| 2 | **197.128454** | 99.067865 | | | | | P | 3085.381222 | 1543.194249 | 3068.354673 | 1534.680974 | 3067.370657 | 1534.188966 | 27 |
| 3 | 344.196868 | 172.602072 | | | | | F | 2988.328458 | 1494.667867 | 2971.301909 | 1486.154592 | 2970.317893 | 1485.662584 | 26 |
| 4 | 459.223811 | 230.115543 | | | 441.213246 | 221.110261 | D | ***2841.260044*** | 1421.133660 | 2824.233495 | 1412.620385 | 2823.249479 | 1412.128377 | 25 |
| 5 | **530.260925** | 265.634101 | | | 512.250360 | 256.628818 | A | 2726.233101 | 1363.620188 | 2709.206552 | 1355.106914 | 2708.222536 | 1354.614906 | 24 |
| 6 | **601.298039** | 301.152658 | | | 583.287474 | 292.147375 | A | ***2655.195987*** | 1328.101631 | 2638.169438 | 1319.588357 | 2637.185422 | 1319.096349 | 23 |
| 7 | 702.345718 | 351.676497 | | | 684.335153 | 342.671215 | T | 2584.158873 | 1292.583074 | 2567.132324 | 1284.069800 | 2566.148308 | 1283.577792 | 22 |
| 8 | **815.429782** | 408.218529 | | | 797.419217 | 399.213247 | L | 2483.111194 | 1242.059235 | 2466.084645 | 1233.545960 | 2465.100629 | 1233.053952 | 21 |
| 9 | **952.488694** | 476.747985 | | | 934.478129 | 467.742703 | H | 2370.027130 | 1185.517203 | 2353.000581 | 1177.003928 | 2352.016565 | 1176.511920 | 20 |
| 10 | **1053.536373** | 527.271824 | | | 1035.525808 | 518.266542 | T | 2232.968218 | 1116.987747 | 2215.941669 | 1108.474472 | 2214.957653 | 1107.982464 | 19 |
| 11 | 1140.568401 | 570.787839 | | | 1122.557836 | 561.782556 | S | 2131.920539 | 1066.463907 | 2114.893990 | 1057.950633 | 2113.909974 | 1057.458625 | 18 |
| 12 | 1241.616080 | 621.311678 | | | 1223.605515 | 612.306396 | T | 2044.888511 | 1022.947893 | 2027.861962 | 1014.434619 | 2026.877946 | 1013.942611 | 17 |
| 13 | 1312.653194 | 656.830235 | | | 1294.642629 | 647.824952 | A | 1943.840832 | 972.424054 | 1926.814283 | 963.910779 | 1925.830267 | 963.418771 | 16 |
| 14 | 1443.693679 | 722.350478 | | | 1425.683114 | 713.345195 | M | ***1872.803718*** | 936.905497 | 1855.777169 | 928.392222 | 1854.793153 | 927.900214 | 15 |
| 15 | 1514.730793 | 757.869035 | | | 1496.720228 | 748.863752 | A | ***1741.763233*** | 871.385254 | 1724.736684 | 862.871980 | 1723.752668 | 862.379972 | 14 |
| 16 | 1585.767907 | 793.387591 | | | 1567.757342 | 784.382309 | A | ***1670.726119*** | 835.866697 | 1653.699570 | 827.353423 | 1652.715554 | 826.861415 | 13 |
| 17 | 1713.826485 | 857.416880 | 1696.799936 | 848.903606 | 1695.815920 | 848.411598 | Q | 1599.689005 | 800.348140 | 1582.662456 | 791.834866 | 1581.678440 | 791.342858 | 12 |
| 18 | 1850.885397 | 925.946336 | 1833.858848 | 917.433062 | 1832.874832 | 916.941054 | H | ***1471.630427*** | 736.318851 | 1454.603878 | 727.805577 | 1453.619862 | 727.313569 | 11 |
| 19 | 1907.906861 | 954.457068 | 1890.880312 | 945.943794 | 1889.896296 | 945.451786 | G | ***1334.571515*** | 667.789395 | 1317.544966 | 659.276121 | 1316.560950 | 658.784113 | 10 |
| 20 | 2038.947346 | 1019.977311 | 2021.920797 | 1011.464036 | 2020.936781 | 1010.972028 | M | ***1277.550051*** | 639.278663 | 1260.523502 | 630.765389 | 1259.539486 | 630.273381 | 9 |
| 21 | 2153.974289 | 1077.490782 | 2136.947740 | 1068.977508 | 2135.963724 | 1068.485500 | D | ***1146.509566*** | 573.758421 | 1129.483017 | 565.245146 | 1128.499001 | 564.753138 | 8 |
| 22 | 2269.001232 | 1135.004254 | 2251.974683 | 1126.490979 | 2250.990667 | 1125.998971 | D | ***1031.482623*** | 516.244949 | 1014.456074 | 507.731675 | 1013.472058 | 507.239667 | 7 |
| 23 | 2384.028175 | 1192.517725 | 2367.001626 | 1184.004451 | 2366.017610 | 1183.512443 | D | ***916.455680*** | 458.731478 | 899.429131 | 450.218203 | 898.445115 | 449.726195 | 6 |
| 24 | 2441.049639 | 1221.028457 | 2424.023090 | 1212.515183 | 2423.039074 | 1212.023175 | G | ***801.428737*** | 401.218007 | 784.402188 | 392.704732 | 783.418172 | 392.212724 | 5 |
| 25 | 2542.097318 | 1271.552297 | 2525.070769 | 1263.039022 | 2524.086753 | 1262.547014 | T | 744.407273 | 372.707275 | 727.380724 | 364.194000 | 726.396708 | 363.701992 | 4 |
| 26 | 2599.118782 | 1300.063029 | 2582.092233 | 1291.549754 | 2581.108217 | 1291.057746 | G | ***643.359594*** | 322.183435 | 626.333045 | 313.670161 | | | 3 |
| 27 | 3038.344108 | 1519.675692 | 3021.317559 | 1511.162417 | 3020.333543 | 1510.670409 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 28 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VPFDAATLHTSTAMAAQHGMDDDGTGQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 60.4 | 3183.442383 | 0.005393 | VPFDAATLHTSTAMAAQHGMDDDGTGQK |
| 19.8 | 3183.442383 | 0.005393 | VPFDAATLHTSTAMAAQHGMDDDGTGQK |

**Mascot:** http://www.matrixscience.com/

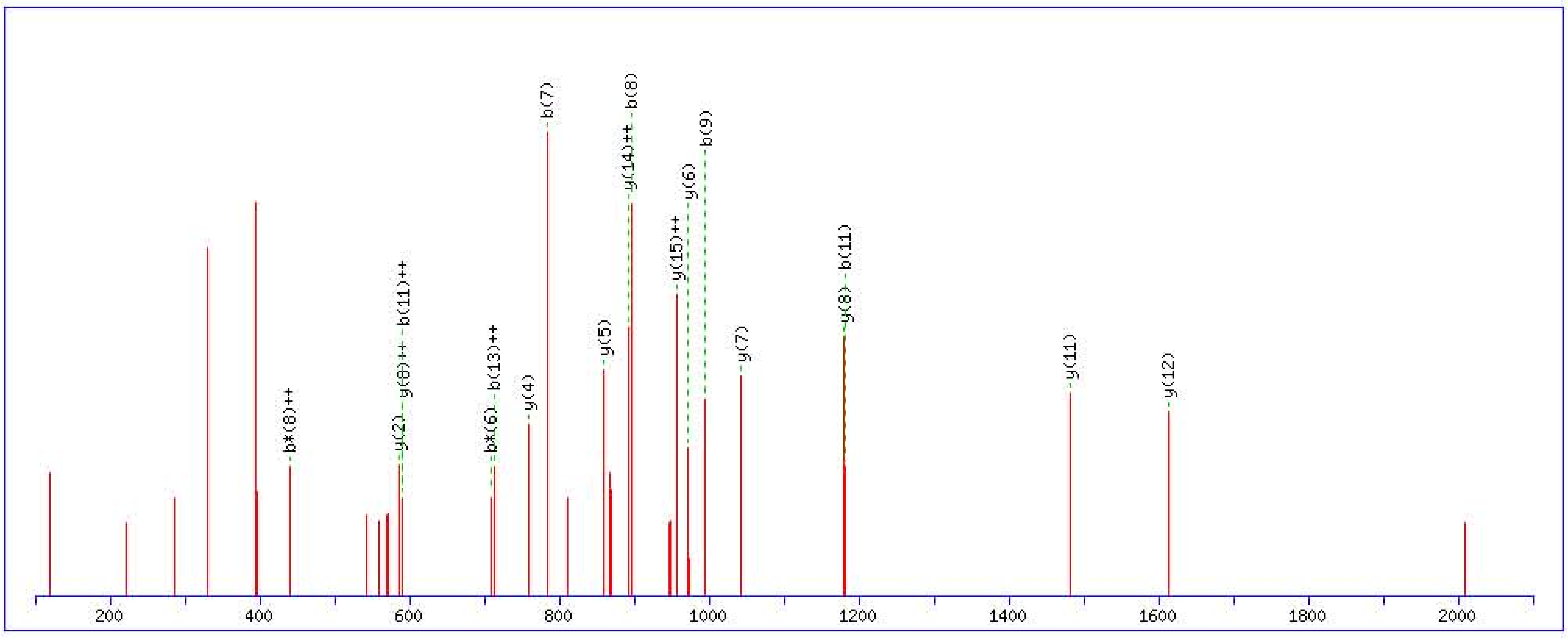
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VIHDNFGIVEGLMTTVHAITATQK**
Found in **G3P_HUMAN**, Glyceraldehyde-3-phosphate dehydrogenase OS=Homo sapiens GN=GAPDH PE=1 SV=3

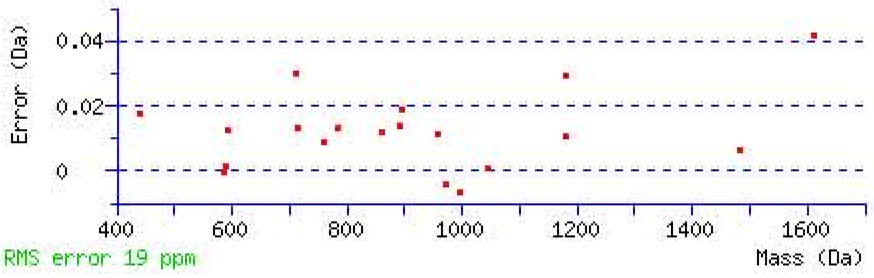
Match to Query 60892: 2905.548856 from(727.394490,4+) rtinseconds(3124) index(60325)
Title: Locus:1.1.1.1699.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

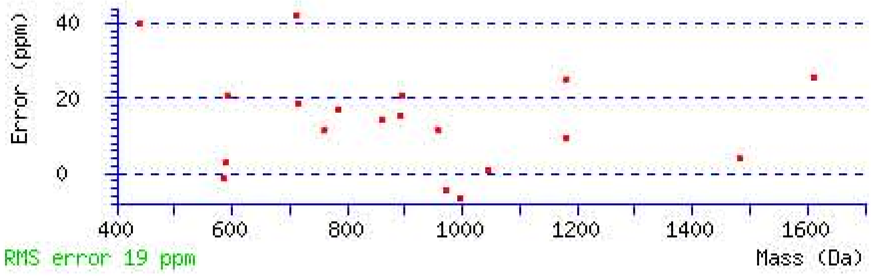
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2905.519424
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q23 : Biotin:Thermo-21345 (Q)
**Ions Score:** 43 **Expect:** 0.00013
**Matches :** 19/258 fragment ions using 32 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 24 |
| 2 | 213.159754 | 107.083515 | | | | | I | 2807.458272 | 1404.232774 | 2790.431723 | 1395.719499 | 2789.447707 | 1395.227491 | 23 |
| 3 | 350.218666 | 175.612971 | | | | | H | 2694.374208 | 1347.690742 | 2677.347659 | 1339.177467 | 2676.363643 | 1338.685459 | 22 |
| 4 | 465.245609 | 233.126443 | | | 447.235044 | 224.121160 | D | 2557.315296 | 1279.161286 | 2540.288747 | 1270.648011 | 2539.304731 | 1270.156003 | 21 |
| 5 | 579.288536 | 290.147906 | 562.261987 | 281.634632 | 561.277971 | 281.142624 | N | 2442.288353 | 1221.647814 | 2425.261804 | 1213.134540 | 2424.277788 | 1212.642532 | 20 |
| 6 | 726.356950 | 363.682113 | 709.330401 | 355.168838 | 708.346385 | 354.676830 | F | 2328.245426 | 1164.626351 | 2311.218877 | 1156.113076 | 2310.234861 | 1155.621068 | 19 |
| 7 | ***783.378414*** | 392.192845 | 766.351865 | 383.679571 | 765.367849 | 383.187563 | G | 2181.177012 | 1091.092144 | 2164.150463 | 1082.578869 | 2163.166447 | 1082.086861 | 18 |
| 8 | ***896.462478*** | 448.734877 | 879.435929 | 440.221603 | 878.451913 | 439.729595 | I | 2124.155548 | 1062.581412 | 2107.128999 | 1054.068137 | 2106.144983 | 1053.576129 | 17 |
| 9 | ***995.530892*** | 498.269084 | 978.504343 | 489.755810 | 977.520327 | 489.263802 | V | 2011.071484 | 1006.039380 | 1994.044935 | 997.526105 | 1993.060919 | 997.034097 | 16 |
| 10 | 1124.573485 | 562.790381 | 1107.546936 | 554.277106 | 1106.562920 | 553.785098 | E | 1912.003070 | 956.505173 | 1894.976521 | 947.991899 | 1893.992505 | 947.499890 | 15 |
| 11 | ***1181.594949*** | **591.301113** | 1164.568400 | 582.787838 | 1163.584384 | 582.295830 | G | 1782.960477 | 891.983876 | 1765.933928 | 883.470602 | 1764.949912 | 882.978594 | 14 |
| 12 | 1294.679013 | 647.843144 | 1277.652464 | 639.329870 | 1276.668448 | 638.837862 | L | 1725.939013 | 863.473144 | 1708.912464 | 854.959870 | 1707.928448 | 854.467862 | 13 |
| 13 | 1425.719498 | **713.363387** | 1408.692949 | 704.850113 | 1407.708933 | 704.358104 | M | ***1612.854949*** | 806.931113 | 1595.828400 | 798.417838 | 1594.844384 | 797.925830 | 12 |
| 14 | 1526.767177 | 763.887227 | 1509.740628 | 755.373952 | 1508.756612 | 754.881944 | T | ***1481.814464*** | 741.410870 | 1464.787915 | 732.897596 | 1463.803899 | 732.405588 | 11 |
| 15 | 1627.814856 | 814.411066 | 1610.788307 | 805.897792 | 1609.804291 | 805.405783 | T | 1380.766785 | 690.887031 | 1363.740236 | 682.373756 | 1362.756220 | 681.881748 | 10 |
| 16 | 1726.883270 | 863.945273 | 1709.856721 | 855.431999 | 1708.872705 | 854.939991 | V | 1279.719106 | 640.363191 | 1262.692557 | 631.849917 | 1261.708541 | 631.357909 | 9 |
| 17 | 1863.942182 | 932.474729 | 1846.915633 | 923.961455 | 1845.931617 | 923.469447 | H | ***1180.650692*** | 590.828984 | 1163.624143 | 582.315710 | 1162.640127 | 581.823701 | 8 |
| 18 | 1934.979296 | 967.993286 | 1917.952747 | 959.480012 | 1916.968731 | 958.988003 | A | ***1043.591780*** | 522.299528 | 1026.565231 | 513.786254 | 1025.581215 | 513.294245 | 7 |
| 19 | 2048.063360 | 1024.535318 | 2031.036811 | 1016.022044 | 2030.052795 | 1015.530036 | I | ***972.554666*** | 486.780971 | 955.528117 | 478.267697 | 954.544101 | 477.775689 | 6 |
| 20 | 2149.111039 | 1075.059157 | 2132.084490 | 1066.545883 | 2131.100474 | 1066.053875 | T | ***859.470602*** | 430.238939 | 842.444053 | 421.725665 | 841.460037 | 421.233657 | 5 |
| 21 | 2220.148153 | 1110.577714 | 2203.121604 | 1102.064440 | 2202.137588 | 1101.572432 | A | ***758.422923*** | 379.715100 | 741.396374 | 371.201825 | 740.412358 | 370.709817 | 4 |
| 22 | 2321.195832 | 1161.101554 | 2304.169283 | 1152.588279 | 2303.185267 | 1152.096271 | T | 687.385809 | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 23 | 2760.421158 | 1380.714217 | 2743.394609 | 1372.200942 | 2742.410593 | 1371.708934 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 24 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VIHDNFGIVEGLMTTVHAITATQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.4 | 2905.519424 | 0.029432 | VIHDNFGIVEGLMTTVHAITATQK |
| 1.9 | 2905.511490 | 0.037366 | TLQEIFQAENTIMLLERSIMAK |
| 1.9 | 2905.511490 | 0.037366 | TLQEIFQAENTIMLLERSIMAK |

**Mascot:** http://www.matrixscience.com/

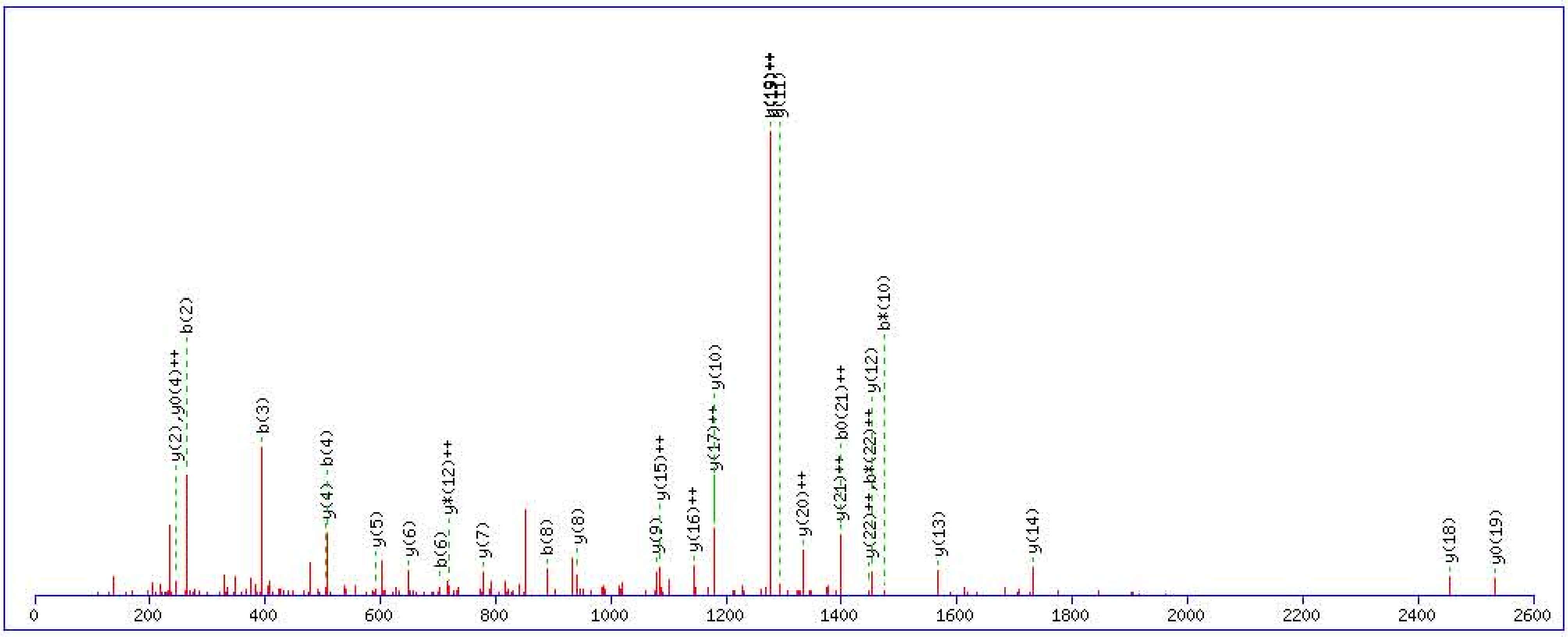
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YVMLPVADQYDCITHYEGSTCPK**
Found in **HPTR_HUMAN**, Haptoglobin-related protein OS=Homo sapiens GN=HPR PE=1 SV=2

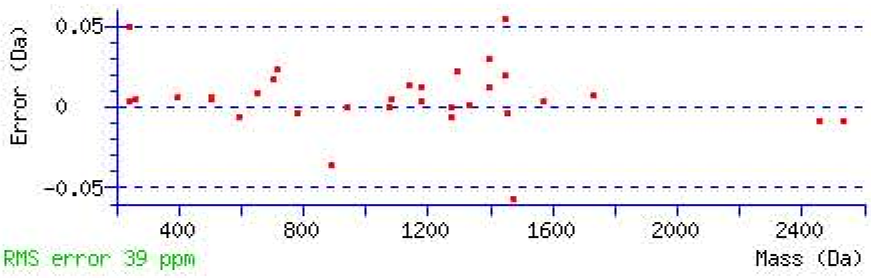
Match to Query 62112: 3057.388722 from(1020.136850,3+) rtinseconds(2453) index(24185)
Title: Locus:1.1.1.856.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

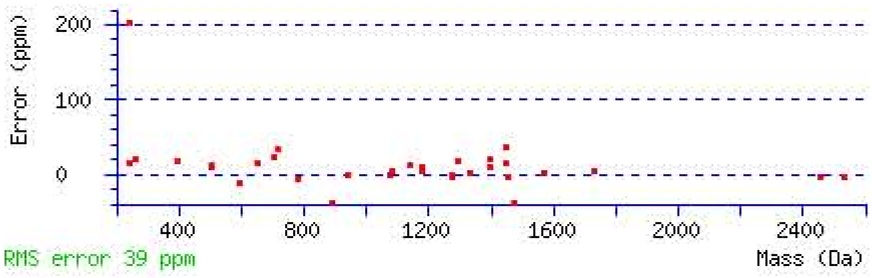
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3057.374466
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q9 : Biotin:Thermo-21345 (Q)
**Ions Score:** 62 **Expect:** 6.9e-006
**Matches :** 32/228 fragment ions using 73 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 23 |
| 2 | **263.139019** | 132.073148 | | | | | V | 2895.318410 | 1448.162843 | 2878.291861 | 1439.649568 | 2877.307845 | 1439.157560 | 22 |
| 3 | **394.179504** | 197.593390 | | | | | M | 2796.249996 | 1398.628636 | 2779.223447 | 1390.115361 | 2778.239431 | 1389.623353 | 21 |
| 4 | **507.263568** | 254.135422 | | | | | L | 2665.209511 | 1333.108393 | 2648.182962 | 1324.595119 | 2647.198946 | 1324.103111 | 20 |
| 5 | 604.316332 | 302.661804 | | | | | P | 2552.125447 | 1276.566361 | 2535.098898 | 1268.053087 | 2534.114882 | 1267.561079 | 19 |
| 6 | **703.384746** | 352.196011 | | | | | V | ***2455.072683*** | 1228.039979 | 2438.046134 | 1219.526705 | 2437.062118 | 1219.034697 | 18 |
| 7 | 774.421860 | 387.714568 | | | | | A | 2356.004269 | 1178.505772 | 2338.977720 | 1169.992498 | 2337.993704 | 1169.500490 | 17 |
| 8 | **889.448803** | 445.228040 | | | 871.438238 | 436.222757 | D | 2284.967155 | 1142.987215 | 2267.940606 | 1134.473941 | 2266.956590 | 1133.981933 | 16 |
| 9 | 1328.674129 | 664.840703 | 1311.647580 | 656.327428 | 1310.663564 | 655.835420 | Q | 2169.940212 | 1085.473744 | 2152.913663 | 1076.960469 | 2151.929647 | 1076.468461 | 15 |
| 10 | 1491.737458 | 746.372367 | 1474.710909 | 737.859093 | 1473.726893 | 737.367085 | Y | ***1730.714886*** | 865.861081 | 1713.688337 | 857.347807 | 1712.704321 | 856.855799 | 14 |
| 11 | 1606.764401 | 803.885839 | 1589.737852 | 795.372564 | 1588.753836 | 794.880556 | D | ***1567.651557*** | 784.329417 | 1550.625008 | 775.816142 | 1549.640992 | 775.324134 | 13 |
| 12 | 1766.795050 | 883.901163 | 1749.768501 | 875.387889 | 1748.784485 | 874.895881 | C | ***1452.624614*** | 726.815945 | 1435.598065 | 718.302671 | 1434.614049 | 717.810663 | 12 |
| 13 | 1879.879114 | 940.443195 | 1862.852565 | 931.929921 | 1861.868549 | 931.437913 | I | ***1292.593965*** | 646.800621 | 1275.567416 | 638.287346 | 1274.583400 | 637.795338 | 11 |
| 14 | 1980.926793 | 990.967035 | 1963.900244 | 982.453760 | 1962.916228 | 981.961752 | T | ***1179.509901*** | 590.258589 | 1162.483352 | 581.745314 | 1161.499336 | 581.253306 | 10 |
| 15 | 2117.985705 | 1059.496490 | 2100.959156 | 1050.983216 | 2099.975140 | 1050.491208 | H | ***1078.462222*** | 539.734749 | 1061.435673 | 531.221475 | 1060.451657 | 530.729467 | 9 |
| 16 | 2281.049034 | 1141.028155 | 2264.022485 | 1132.514880 | 2263.038469 | 1132.022872 | Y | ***941.403310*** | 471.205293 | 924.376761 | 462.692018 | 923.392745 | 462.200010 | 8 |
| 17 | 2410.091627 | 1205.549452 | 2393.065078 | 1197.036177 | 2392.081062 | 1196.544169 | E | ***778.339981*** | 389.673628 | 761.313432 | 381.160354 | 760.329416 | 380.668346 | 7 |
| 18 | 2467.113091 | 1234.060184 | 2450.086542 | 1225.546909 | 2449.102526 | 1225.054901 | G | ***649.297388*** | 325.152332 | 632.270839 | 316.639057 | 631.286823 | 316.147049 | 6 |
| 19 | 2554.145119 | 1277.576198 | 2537.118570 | 1269.062923 | 2536.134554 | 1268.570915 | S | ***592.275924*** | 296.641600 | 575.249375 | 288.128325 | 574.265359 | 287.636317 | 5 |
| 20 | 2655.192798 | 1328.100037 | 2638.166249 | 1319.586762 | 2637.182233 | 1319.094754 | T | ***505.243896*** | 253.125586 | 488.217347 | 244.612311 | 487.233331 | 244.120303 | 4 |
| 21 | 2815.223447 | 1408.115361 | 2798.196898 | 1399.602087 | 2797.212882 | 1399.110079 | C | 404.196217 | 202.601746 | 387.169668 | 194.088472 | | | 3 |
| 22 | 2912.276211 | 1456.641743 | 2895.249662 | 1448.128469 | 2894.265646 | 1447.636461 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 23 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of YVMLPVADQYDCITHYEGSTCPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 61.8 | 3057.374466 | 0.014256 | YVMLPVADQYDCITHYEGSTCPK |

**Mascot:** http://www.matrixscience.com/

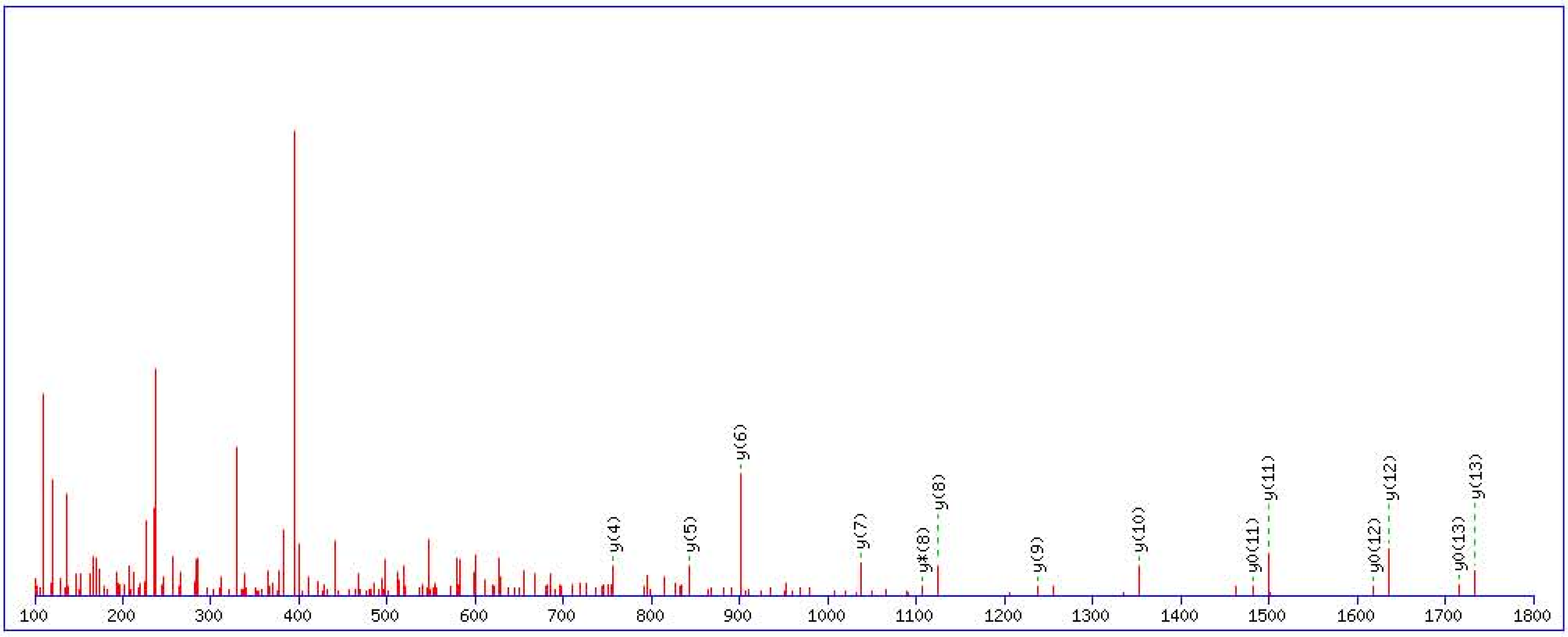
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TYFPHFDLSHGSAQVK**
Found in **HBA_HUMAN**, Hemoglobin subunit alpha OS=Homo sapiens GN=HBA1 PE=1 SV=2

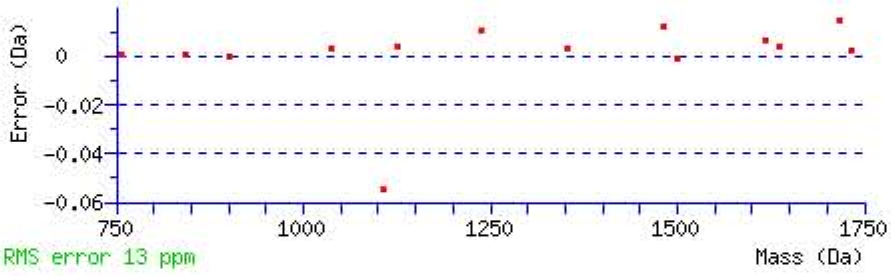
Match to Query 49864: 2144.050976 from(537.020020,4+) rtinseconds(2067) index(6251)
Title: Locus:1.1.1.1529.5 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

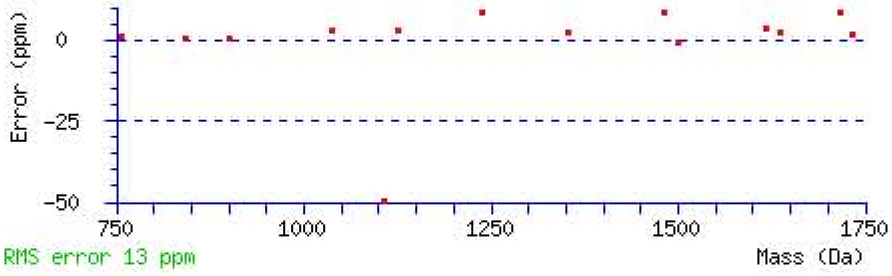
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2144.051346
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q14** : Biotin:Thermo-21345 (Q)
**Ions Score:** 46 **Expect:** 0.00064
**Matches :** 14/146 fragment ions using 32 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 16 |
| 2 | 265.118284 | 133.062780 | | | 247.107719 | 124.057498 | Y | 2044.010930 | 1022.509103 | 2026.984381 | 1013.995829 | 2026.000365 | 1013.503821 | 15 |
| 3 | 412.186698 | 206.596987 | | | 394.176133 | 197.591705 | F | 1880.947601 | 940.977438 | 1863.921052 | 932.464164 | 1862.937036 | 931.972156 | 14 |
| 4 | 509.239462 | 255.123369 | | | 491.228897 | 246.118087 | P | ***1733.879187*** | 867.443231 | 1716.852638 | 858.929957 | 1715.868622 | 858.437949 | 13 |
| 5 | 646.298374 | 323.652825 | | | 628.287809 | 314.647543 | H | ***1636.826423*** | 818.916849 | 1619.799874 | 810.403575 | 1618.815858 | 809.911567 | 12 |
| 6 | 793.366788 | 397.187032 | | | 775.356223 | 388.181750 | F | ***1499.767511*** | 750.387393 | 1482.740962 | 741.874119 | 1481.756946 | 741.382111 | 11 |
| 7 | 908.393731 | 454.700504 | | | 890.383166 | 445.695221 | D | ***1352.699097*** | 676.853186 | 1335.672548 | 668.339912 | 1334.688532 | 667.847904 | 10 |
| 8 | 1021.477795 | 511.242536 | | | 1003.467230 | 502.237253 | L | ***1237.672154*** | 619.339715 | 1220.645605 | 610.826441 | 1219.661589 | 610.334433 | 9 |
| 9 | 1108.509823 | 554.758550 | | | 1090.499258 | 545.753267 | S | ***1124.588090*** | 562.797683 | 1107.561541 | 554.284409 | 1106.577525 | 553.792400 | 8 |
| 10 | 1245.568735 | 623.288006 | | | 1227.558170 | 614.282723 | H | ***1037.556062*** | 519.281669 | 1020.529513 | 510.768394 | 1019.545497 | 510.276386 | 7 |
| 11 | 1302.590199 | 651.798738 | | | 1284.579634 | 642.793455 | G | ***900.497150*** | 450.752213 | 883.470601 | 442.238938 | 882.486585 | 441.746930 | 6 |
| 12 | 1389.622227 | 695.314752 | | | 1371.611662 | 686.309469 | S | ***843.475686*** | 422.241481 | 826.449137 | 413.728207 | 825.465121 | 413.236199 | 5 |
| 13 | 1460.659341 | 730.833309 | | | 1442.648776 | 721.828026 | A | ***756.443658*** | 378.725467 | 739.417109 | 370.212192 | | | 4 |
| 14 | 1899.884667 | 950.445972 | 1882.858118 | 941.932697 | 1881.874102 | 941.440689 | Q | 685.406544 | 343.206910 | 668.379995 | 334.693635 | | | 3 |
| 15 | 1998.953081 | 999.980179 | 1981.926532 | 991.466904 | 1980.942516 | 990.974896 | V | 246.181218 | 123.594247 | 229.154669 | 115.080972 | | | 2 |
| 16 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TYFPHFDLSHGSAQVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.7 | 2144.051346 | -0.000370 | TYFPHFDLSHGSAQVK |

**Mascot:** http://www.matrixscience.com/

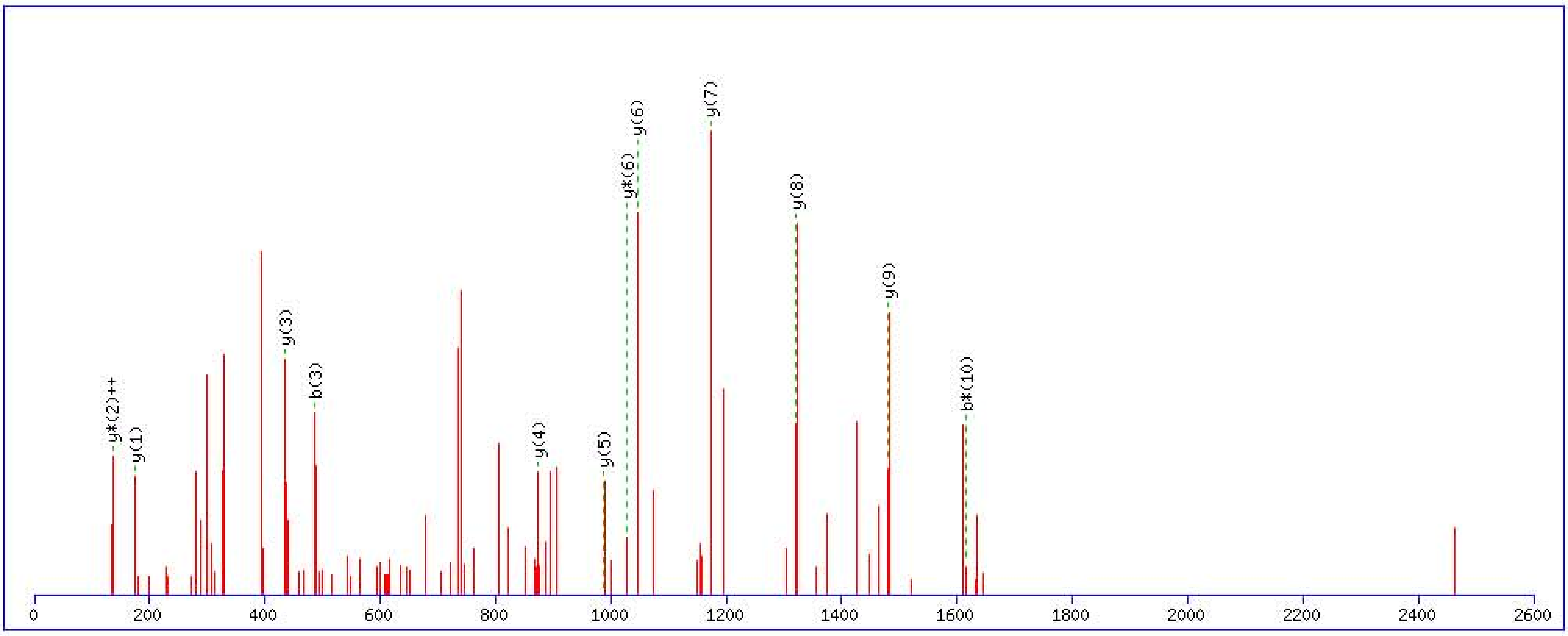
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YYCFQGNQFLR**
Found in **HEMO_HUMAN**, Hemopexin OS=Homo sapiens GN=HPX PE=1 SV=2

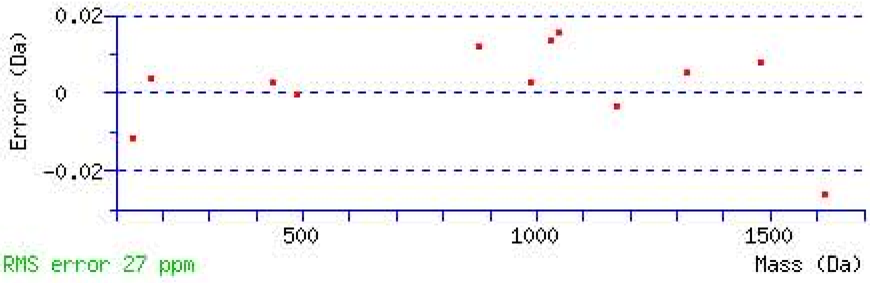
Match to Query 42788: 1805.838108 from(903.926330,2+) rtinseconds(2306) index(70568)
Title: Locus:1.1.1.1740.14 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

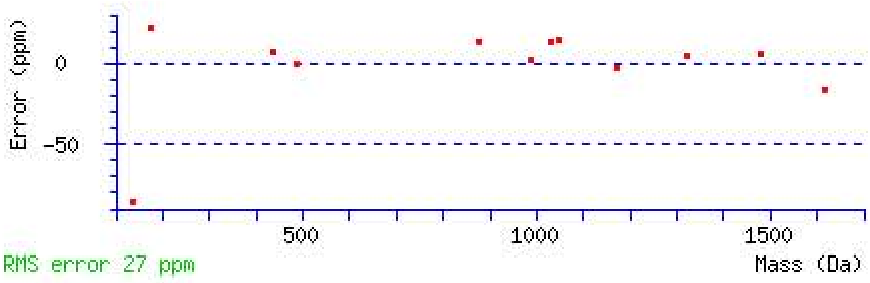
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1805.838165
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.031
Matches : 12/72 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | Y | | | | | 11 |
| 2 | 327.133934 | 164.070605 | | | Y | 1643.782117 | 822.394697 | 1626.755568 | 813.881422 | 10 |
| 3 | 487.164583 | 244.085930 | | | C | ***1480.718788*** | 740.863032 | 1463.692239 | 732.349758 | 9 |
| 4 | 634.232997 | 317.620137 | | | F | ***1320.688139*** | 660.847708 | 1303.661590 | 652.334433 | 8 |
| 5 | 762.291575 | 381.649426 | 745.265026 | 373.136151 | Q | ***1173.619725*** | 587.313501 | 1156.593176 | 578.800226 | 7 |
| 6 | 819.313039 | 410.160158 | 802.286490 | 401.646883 | G | ***1045.561147*** | 523.284212 | 1028.534598 | 514.770937 | 6 |
| 7 | 933.355966 | 467.181621 | 916.329417 | 458.668347 | N | ***988.539683*** | 494.773480 | 971.513134 | 486.260205 | 5 |
| 8 | 1372.581292 | 686.794284 | 1355.554743 | 678.281010 | Q | ***874.496756*** | 437.752016 | 857.470207 | 429.238742 | 4 |
| 9 | 1519.649706 | 760.328491 | 1502.623157 | 751.815217 | F | ***435.271430*** | 218.139353 | 418.244881 | 209.626078 | 3 |
| 10 | 1632.733770 | 816.870523 | 1615.707221 | 808.357249 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | 2 |
| 11 | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | 1 |





NCBI **BLAST** search of YYCFQGNQFLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.0 | 1805.838165 | -0.000057 | YYCFQGNQFLR |
| 24.4 | 1805.838165 | -0.000057 | YYCFQGNQFLR |

**Mascot:** http://www.matrixscience.com/

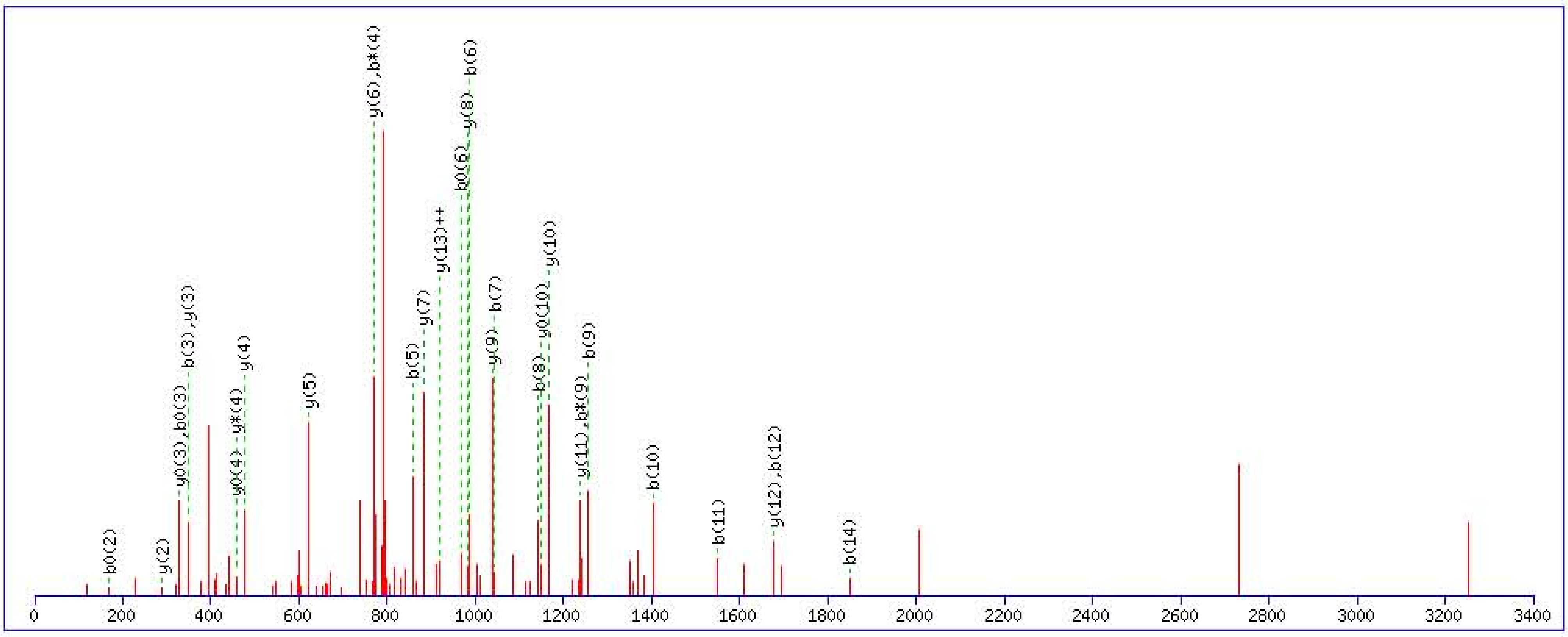
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GECQAEGVLFFQGDR**
Found in **HEMO_HUMAN**, Hemopexin OS=Homo sapiens GN=HPX PE=1 SV=2

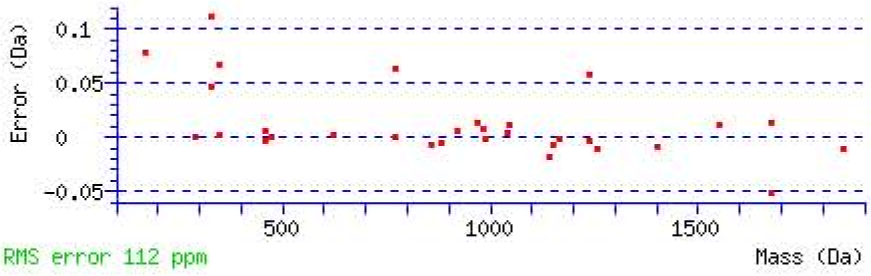
Match to Query 47745: 2022.931888 from(1012.473220,2+) rtinseconds(2415) index(71158)
Title: Locus:1.1.1.1778.18 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

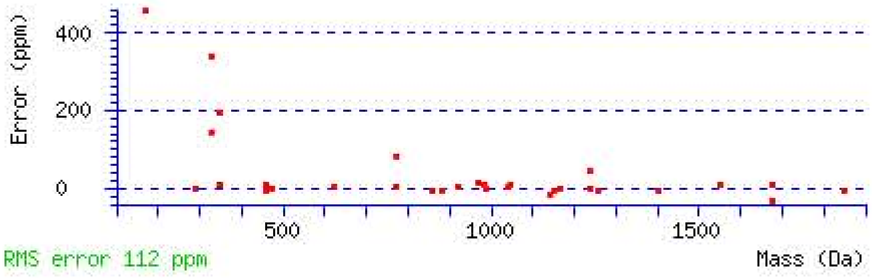
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2022.929184
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 58  Expect: 2.3e-005
Matches : 31/158 fragment ions using 55 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 15 |
| 2 | 187.071333 | 94.039305 | | | 169.060768 | 85.034022 | E | 1966.914982 | 983.961129 | 1949.888433 | 975.447855 | 1948.904417 | 974.955847 | 14 |
| 3 | ***347.101982*** | 174.054629 | | | 329.091417 | 165.049347 | C | 1837.872389 | 919.439833 | 1820.845840 | 910.926558 | 1819.861824 | 910.434550 | 13 |
| 4 | 786.327308 | 393.667292 | 769.300759 | 385.154018 | 768.316743 | 384.662010 | Q | ***1677.841740*** | 839.424508 | 1660.815191 | 830.911234 | 1659.831175 | 830.419226 | 12 |
| 5 | ***857.364422*** | 429.185849 | 840.337873 | 420.672575 | 839.353857 | 420.180567 | A | ***1238.616414*** | 619.811845 | 1221.589865 | 611.298571 | 1220.605849 | 610.806563 | 11 |
| 6 | ***986.407015*** | 493.707146 | 969.380466 | 485.193871 | 968.396450 | 484.701863 | E | ***1167.579300*** | 584.293288 | 1150.552751 | 575.780014 | 1149.568735 | 575.288006 | 10 |
| 7 | ***1043.428479*** | 522.217878 | 1026.401930 | 513.704603 | 1025.417914 | 513.212595 | G | ***1038.536707*** | 519.771992 | 1021.510158 | 511.258717 | 1020.526142 | 510.766709 | 9 |
| 8 | ***1142.496893*** | 571.752085 | 1125.470344 | 563.238810 | 1124.486328 | 562.746802 | V | ***981.515243*** | 491.261260 | 964.488694 | 482.747985 | 963.504678 | 482.255977 | 8 |
| 9 | ***1255.580957*** | 628.294117 | 1238.554408 | 619.780842 | 1237.570392 | 619.288834 | L | ***882.446829*** | 441.727053 | 865.420280 | 433.213778 | 864.436264 | 432.721770 | 7 |
| 10 | ***1402.649371*** | 701.828324 | 1385.622822 | 693.315049 | 1384.638806 | 692.823041 | F | ***769.362765*** | 385.185021 | 752.336216 | 376.671746 | 751.352200 | 376.179738 | 6 |
| 11 | ***1549.717785*** | 775.362531 | 1532.691236 | 766.849256 | 1531.707220 | 766.357248 | F | ***622.294351*** | 311.650814 | 605.267802 | 303.137539 | 604.283786 | 302.645531 | 5 |
| 12 | ***1677.776363*** | 839.391820 | 1660.749814 | 830.878545 | 1659.765798 | 830.386537 | Q | ***475.225937*** | 238.116606 | 458.199388 | 229.603332 | 457.215372 | 229.111324 | 4 |
| 13 | 1734.797827 | 867.902552 | 1717.771278 | 859.389277 | 1716.787262 | 858.897269 | G | ***347.167359*** | 174.087317 | 330.140810 | 165.574043 | 329.156794 | 165.082035 | 3 |
| 14 | ***1849.824770*** | 925.416023 | 1832.798221 | 916.902749 | 1831.814205 | 916.410741 | D | ***290.145895*** | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 15 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GECQAEGVLFFQGDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.8 | 2022.929184 | 0.002704 | GECQAEGVLFFQGDR |
| 11.9 | 2022.929184 | 0.002704 | GECQAEGVLFFQGDR |

**Mascot:** http://www.matrixscience.com/

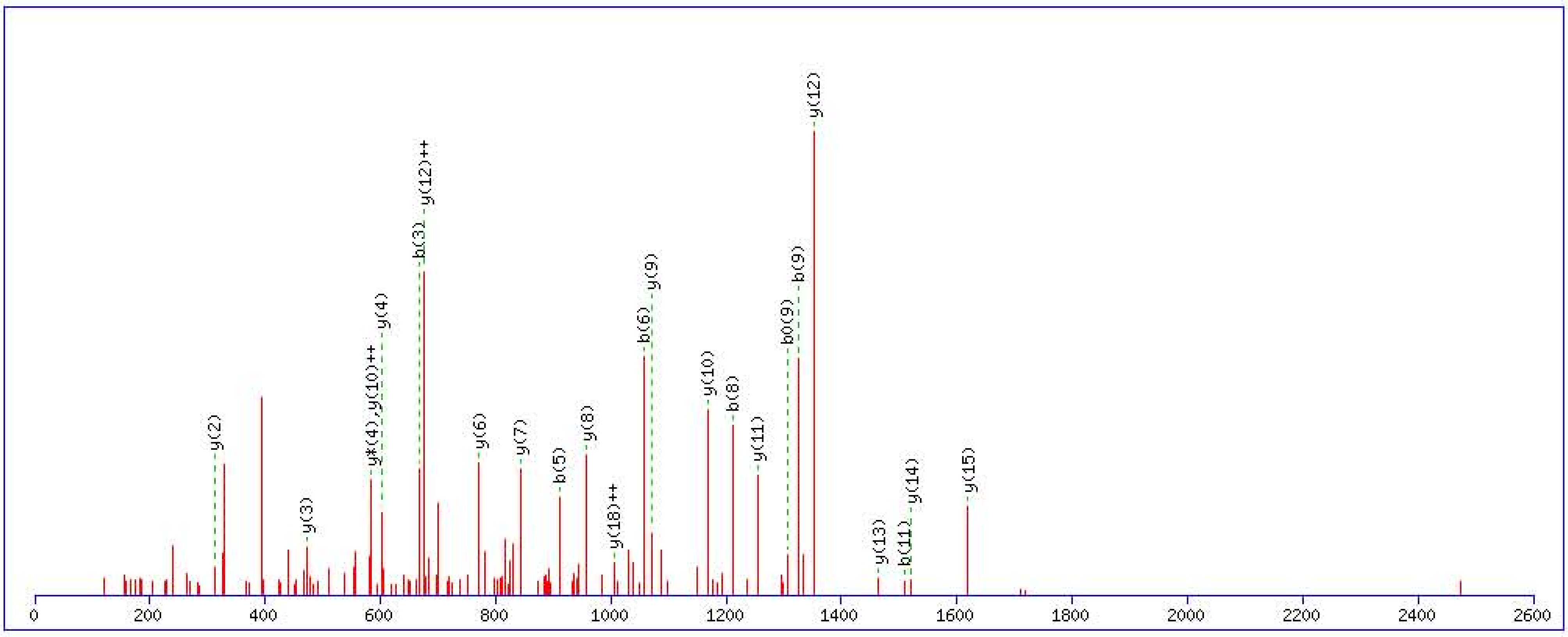
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LLQDEFPGIPSPLDAAVECHR**
Found in **HEMO_HUMAN**, Hemopexin OS=Homo sapiens GN=HPX PE=1 SV=2

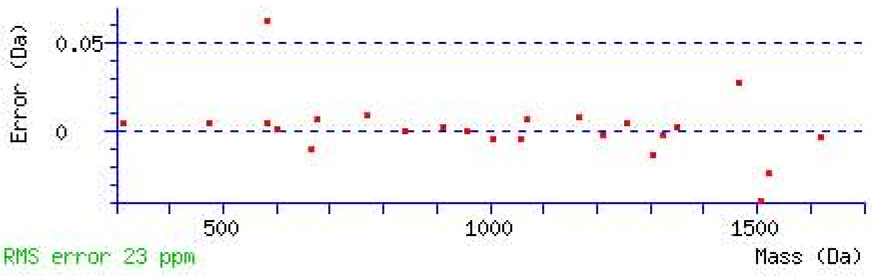
Match to Query 58136: 2674.329492 from(892.450440,3+) rtinseconds(2665) index(72484)
Title: Locus:1.1.1.1865.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

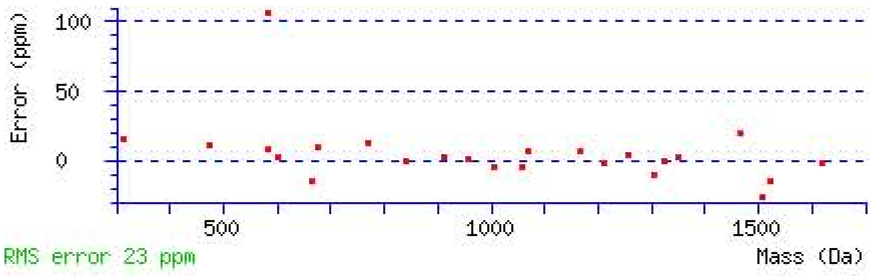
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2674.324722
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 95  Expect: 7.9e-009
Matches : 24/224 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 21 |
| 2 | 227.175404 | 114.091340 | | | | | L | 2562.247943 | 1281.627609 | 2545.221394 | 1273.114335 | 2544.237378 | 1272.622327 | 20 |
| 3 | **666.400730** | 333.704003 | 649.374181 | 325.190729 | | | Q | 2449.163879 | 1225.085577 | 2432.137330 | 1216.572303 | 2431.153314 | 1216.080295 | 19 |
| 4 | 781.427673 | 391.217475 | 764.401124 | 382.704200 | 763.417108 | 382.212192 | D | 2009.938553 | 1005.472914 | 1992.912004 | 996.959640 | 1991.927988 | 996.467632 | 18 |
| 5 | **910.470266** | 455.738771 | 893.443717 | 447.225497 | 892.459701 | 446.733489 | E | 1894.911610 | 947.959443 | 1877.885061 | 939.446169 | 1876.901045 | 938.954160 | 17 |
| 6 | **1057.538680** | 529.272978 | 1040.512131 | 520.759704 | 1039.528115 | 520.267696 | F | 1765.869017 | 883.438146 | 1748.842468 | 874.924872 | 1747.858452 | 874.432864 | 16 |
| 7 | 1154.591444 | 577.799360 | 1137.564895 | 569.286086 | 1136.580879 | 568.794078 | P | ***1618.800603*** | 809.903939 | 1601.774054 | 801.390665 | 1600.790038 | 800.898657 | 15 |
| 8 | **1211.612908** | 606.310092 | 1194.586359 | 597.796818 | 1193.602343 | 597.304810 | G | ***1521.747839*** | 761.377557 | 1504.721290 | 752.864283 | 1503.737274 | 752.372275 | 14 |
| 9 | **1324.696972** | 662.852124 | 1307.670423 | 654.338850 | 1306.686407 | 653.846841 | I | ***1464.726375*** | 732.866825 | 1447.699826 | 724.353551 | 1446.715810 | 723.861543 | 13 |
| 10 | 1421.749736 | 711.378506 | 1404.723187 | 702.865232 | 1403.739171 | 702.373223 | P | ***1351.642311*** | 676.324793 | 1334.615762 | 667.811519 | 1333.631746 | 667.319511 | 12 |
| 11 | **1508.781764** | 754.894520 | 1491.755215 | 746.381246 | 1490.771199 | 745.889238 | S | ***1254.589547*** | 627.798411 | 1237.562998 | 619.285137 | 1236.578982 | 618.793129 | 11 |
| 12 | 1605.834528 | 803.420902 | 1588.807979 | 794.907628 | 1587.823963 | 794.415620 | P | ***1167.557519*** | 584.282397 | 1150.530970 | 575.769123 | 1149.546954 | 575.277115 | 10 |
| 13 | 1718.918592 | 859.962934 | 1701.892043 | 851.449660 | 1700.908027 | 850.957652 | L | ***1070.504755*** | 535.756015 | 1053.478206 | 527.242741 | 1052.494190 | 526.750733 | 9 |
| 14 | 1833.945535 | 917.476406 | 1816.918986 | 908.963131 | 1815.934970 | 908.471123 | D | ***957.420691*** | 479.213983 | 940.394142 | 470.700709 | 939.410126 | 470.208701 | 8 |
| 15 | 1904.982649 | 952.994963 | 1887.956100 | 944.481688 | 1886.972084 | 943.989680 | A | ***842.393748*** | 421.700512 | 825.367199 | 413.187237 | 824.383183 | 412.695229 | 7 |
| 16 | 1976.019763 | 988.513520 | 1958.993214 | 980.000245 | 1958.009198 | 979.508237 | A | ***771.356634*** | 386.181955 | 754.330085 | 377.668680 | 753.346069 | 377.176672 | 6 |
| 17 | 2075.088177 | 1038.047726 | 2058.061628 | 1029.534452 | 2057.077612 | 1029.042444 | V | 700.319520 | 350.663398 | 683.292971 | 342.150123 | 682.308955 | 341.658115 | 5 |
| 18 | 2204.130770 | 1102.569023 | 2187.104221 | 1094.055748 | 2186.120205 | 1093.563740 | E | ***601.251106*** | 301.129191 | 584.224557 | 292.615916 | 583.240541 | 292.123908 | 4 |
| 19 | 2364.161419 | 1182.584347 | 2347.134870 | 1174.071073 | 2346.150854 | 1173.579065 | C | ***472.208513*** | 236.607894 | 455.181964 | 228.094620 | | | 3 |
| 20 | 2501.220331 | 1251.113803 | 2484.193782 | 1242.600529 | 2483.209766 | 1242.108521 | H | ***312.177864*** | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 21 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LLQDEFPGIPSPLDAAVECHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 95.4 | 2674.324722 | 0.004770 | LLQDEFPGIPSPLDAAVECHR |

**Mascot:** http://www.matrixscience.com/

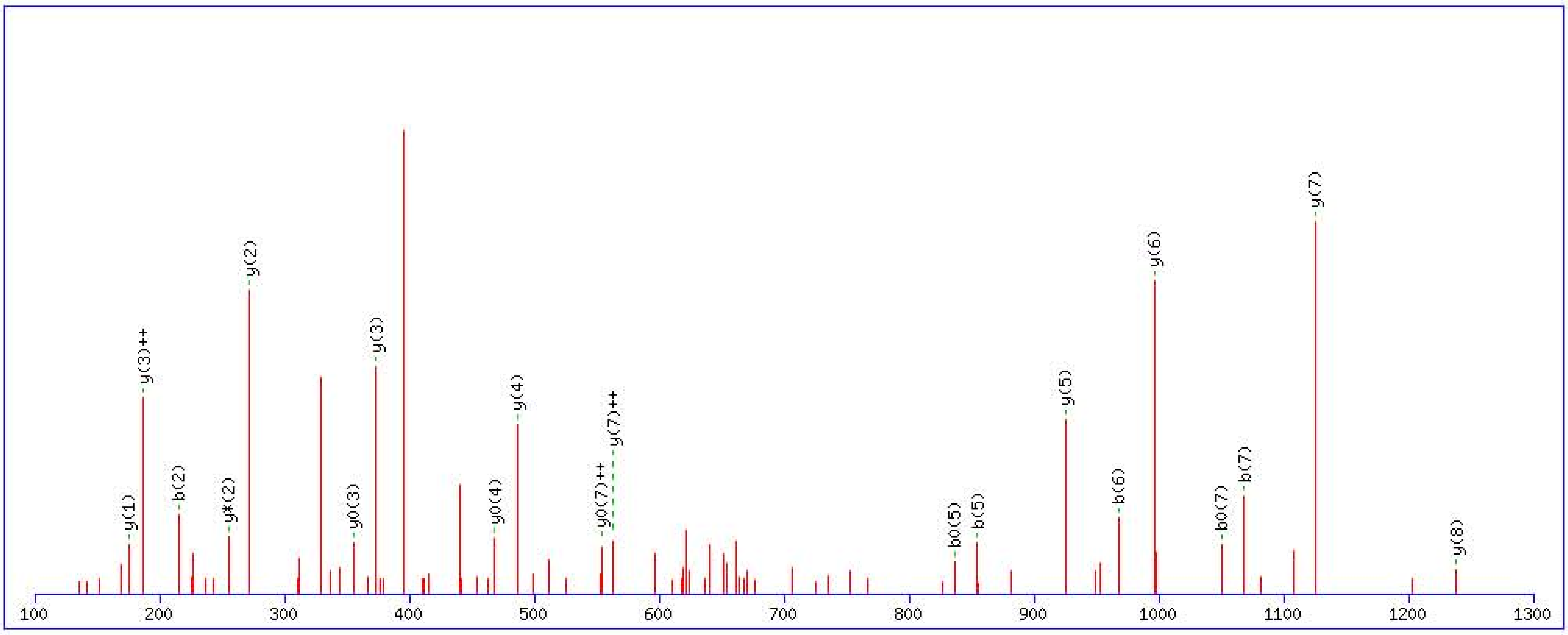
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **TLEAQLTPR**
Found in **HEP2_HUMAN**, Heparin cofactor 2 OS=Homo sapiens GN=SERPIND1 PE=1 SV=3

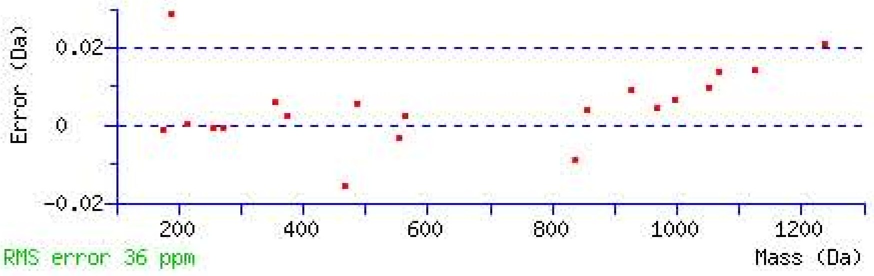
Match to Query 26949: 1338.735848 from(670.375200,2+) rtinseconds(1940) index(36007)
Title: Locus:1.1.1.3095.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

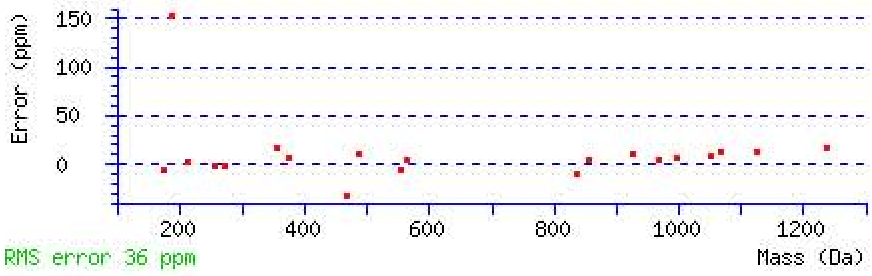
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1338.732941
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 58  Expect: 2.7e-005
Matches : 20/84 fragment ions using 32 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 9 |
| 2 | **215.139019** | 108.073147 | | | 197.128454 | 99.067865 | L | ***1238.692556*** | 619.849916 | 1221.666007 | 611.336642 | 1220.681991 | 610.844633 | 8 |
| 3 | 344.181612 | 172.594444 | | | 326.171047 | 163.589162 | E | ***1125.608492*** | 563.307884 | 1108.581943 | 554.794610 | 1107.597927 | 554.302602 | 7 |
| 4 | 415.218726 | 208.113001 | | | 397.208161 | 199.107719 | A | ***996.565899*** | 498.786588 | 979.539350 | 490.273313 | 978.555334 | 489.781305 | 6 |
| 5 | **854.444052** | 427.725664 | 837.417503 | 419.212390 | 836.433487 | 418.720382 | Q | ***925.528785*** | 463.268031 | 908.502236 | 454.754756 | 907.518220 | 454.262748 | 5 |
| 6 | **967.528116** | 484.267696 | 950.501567 | 475.754422 | 949.517551 | 475.262414 | L | ***486.303459*** | 243.655367 | 469.276910 | 235.142093 | 468.292894 | 234.650085 | 4 |
| 7 | **1068.575795** | 534.791536 | 1051.549246 | 526.278261 | 1050.565230 | 525.786253 | T | ***373.219395*** | 187.113335 | 356.192846 | 178.600061 | 355.208830 | 178.108053 | 3 |
| 8 | 1165.628559 | 583.317918 | 1148.602010 | 574.804643 | 1147.617994 | 574.312635 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of TLEAQLTPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 58.3 | 1338.732941 | 0.002907 | TLEAQLTPR |
| 11.8 | 1338.732956 | 0.002892 | VDLQSLPTR |
| 5.9 | 1338.725555 | 0.010293 | VDTVAAEHLTRK |
| 2.5 | 1338.744171 | -0.008323 | MKEALHQIVVR |
| 2.3 | 1338.725555 | 0.010293 | RSPTVEPSTLPR |

**Mascot:** http://www.matrixscience.com/

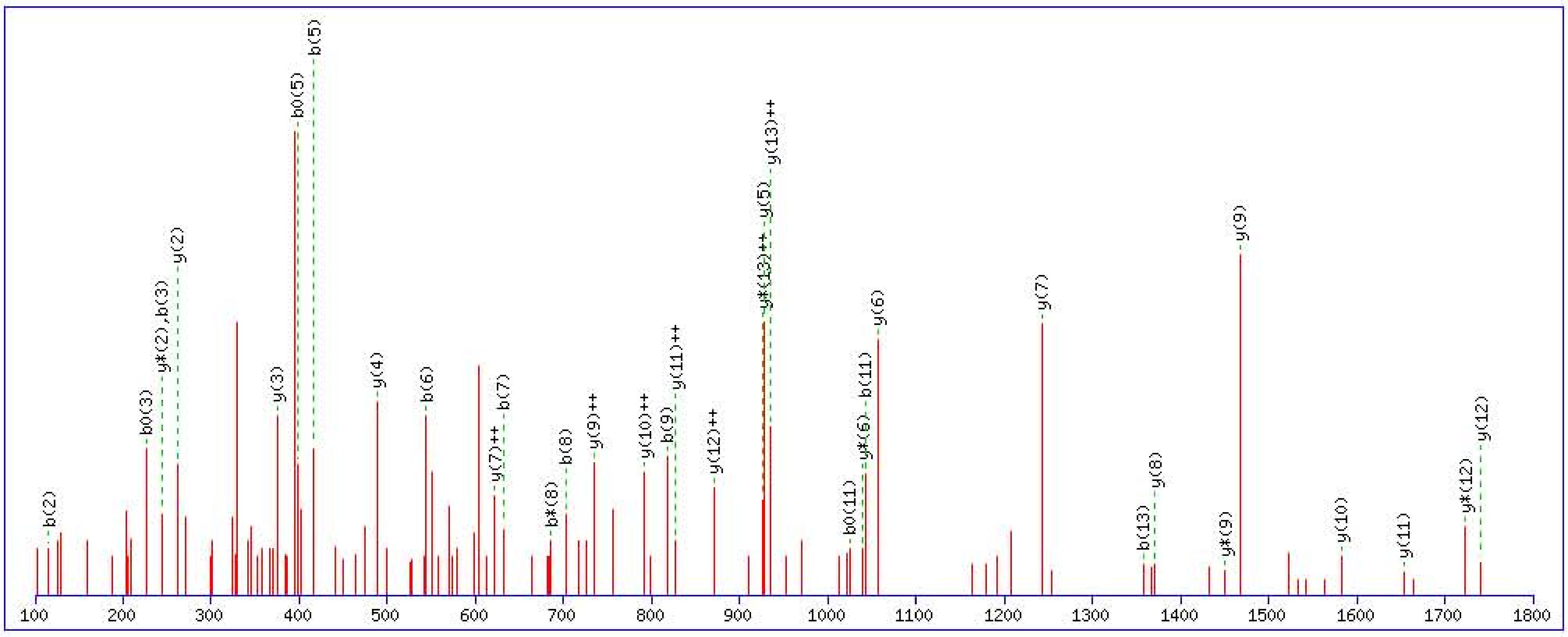
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GGETAQSADPQWEQLNNK**
Found in **HEP2_HUMAN**, Heparin cofactor 2 OS=Homo sapiens GN=SERPIND1 PE=1 SV=3

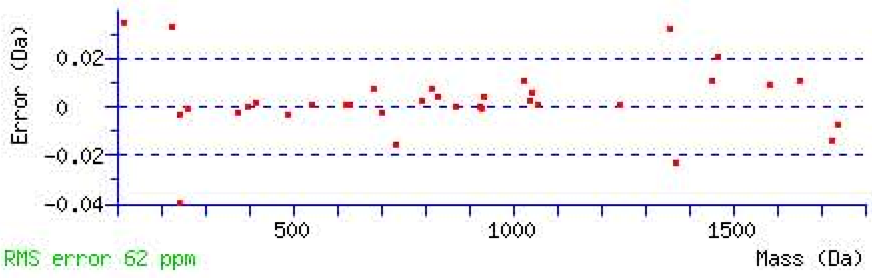
Match to Query 52730: 2283.056322 from(762.026050,3+) rtinseconds(1912) index(35769)
Title: Locus:1.1.1.3085.21 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

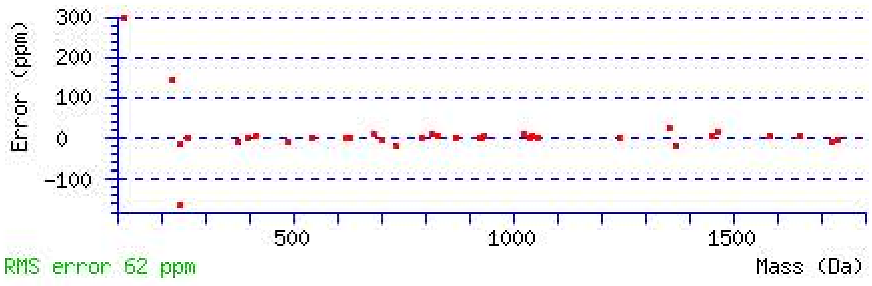
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2283.058975
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q14     : Biotin:Thermo-21345 (Q)
Ions Score: 65  Expect: 4.1e-006
Matches : 35/180 fragment ions using 60 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 18 |
| 2 | ***115.050204*** | 58.028740 | | | | | G | 2227.044809 | 1114.026042 | 2210.018260 | 1105.512768 | 2209.034244 | 1105.020760 | 17 |
| 3 | ***244.092797*** | 122.550037 | | | 226.082232 | 113.544754 | E | 2170.023345 | 1085.515310 | 2152.996796 | 1077.002036 | 2152.012780 | 1076.510028 | 16 |
| 4 | 345.140476 | 173.073876 | | | 327.129911 | 164.068594 | T | 2040.980752 | 1020.994014 | 2023.954203 | 1012.480740 | 2022.970187 | 1011.988732 | 15 |
| 5 | ***416.177590*** | 208.592433 | | | 398.167025 | 199.587151 | A | 1939.933073 | 970.470175 | 1922.906524 | 961.956900 | 1921.922508 | 961.464892 | 14 |
| 6 | ***544.236168*** | 272.621722 | 527.209619 | 264.108448 | 526.225603 | 263.616440 | Q | 1868.895959 | 934.951618 | 1851.869410 | 926.438343 | 1850.885394 | 925.946335 | 13 |
| 7 | ***631.268196*** | 316.137736 | 614.241647 | 307.624462 | 613.257631 | 307.132454 | S | ***1740.837381*** | 870.922329 | 1723.810832 | 862.409054 | 1722.826816 | 861.917046 | 12 |
| 8 | ***702.305310*** | 351.656293 | 685.278761 | 343.143019 | 684.294745 | 342.651011 | A | ***1653.805353*** | 827.406315 | 1636.778804 | 818.893040 | 1635.794788 | 818.401032 | 11 |
| 9 | ***817.332253*** | 409.169765 | 800.305704 | 400.656490 | 799.321688 | 400.164482 | D | ***1582.768239*** | 791.887758 | 1565.741690 | 783.374483 | 1564.757674 | 782.882475 | 10 |
| 10 | 914.385017 | 457.696147 | 897.358468 | 449.182872 | 896.374452 | 448.690864 | P | ***1467.741296*** | 734.374286 | 1450.714747 | 725.861012 | 1449.730731 | 725.369004 | 9 |
| 11 | ***1042.443595*** | 521.725436 | 1025.417046 | 513.212161 | 1024.433030 | 512.720153 | Q | ***1370.688532*** | 685.847904 | 1353.661983 | 677.334630 | 1352.677967 | 676.842622 | 8 |
| 12 | 1228.522908 | 614.765092 | 1211.496359 | 606.251818 | 1210.512343 | 605.759809 | W | ***1242.629954*** | 621.818615 | 1225.603405 | 613.305341 | 1224.619389 | 612.813333 | 7 |
| 13 | ***1357.565501*** | 679.286388 | 1340.538952 | 670.773114 | 1339.554936 | 670.281106 | E | ***1056.550641*** | 528.778959 | 1039.524092 | 520.265684 | 1038.540076 | 519.773676 | 6 |
| 14 | 1796.790827 | 898.899052 | 1779.764278 | 890.385777 | 1778.780262 | 889.893769 | Q | ***927.508048*** | 464.257662 | 910.481499 | 455.744388 | | | 5 |
| 15 | 1909.874891 | 955.441083 | 1892.848342 | 946.927809 | 1891.864326 | 946.435801 | L | ***488.282722*** | 244.644999 | 471.256173 | 236.131725 | | | 4 |
| 16 | 2023.917818 | 1012.462547 | 2006.891269 | 1003.949273 | 2005.907253 | 1003.457265 | N | ***375.198658*** | 188.102967 | 358.172109 | 179.589693 | | | 3 |
| 17 | 2137.960745 | 1069.484010 | 2120.934196 | 1060.970736 | 2119.950180 | 1060.478728 | N | ***261.155731*** | 131.081504 | 244.129182 | 122.568229 | | | 2 |
| 18 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GGETAQSADPQWEQLNNK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 64.8 | 2283.058975 | -0.002653 | GGETAQSADPQWEQLNNK |
| 32.9 | 2283.058975 | -0.002653 | GGETAQSADPQWEQLNNK |

**Mascot:** http://www.matrixscience.com/

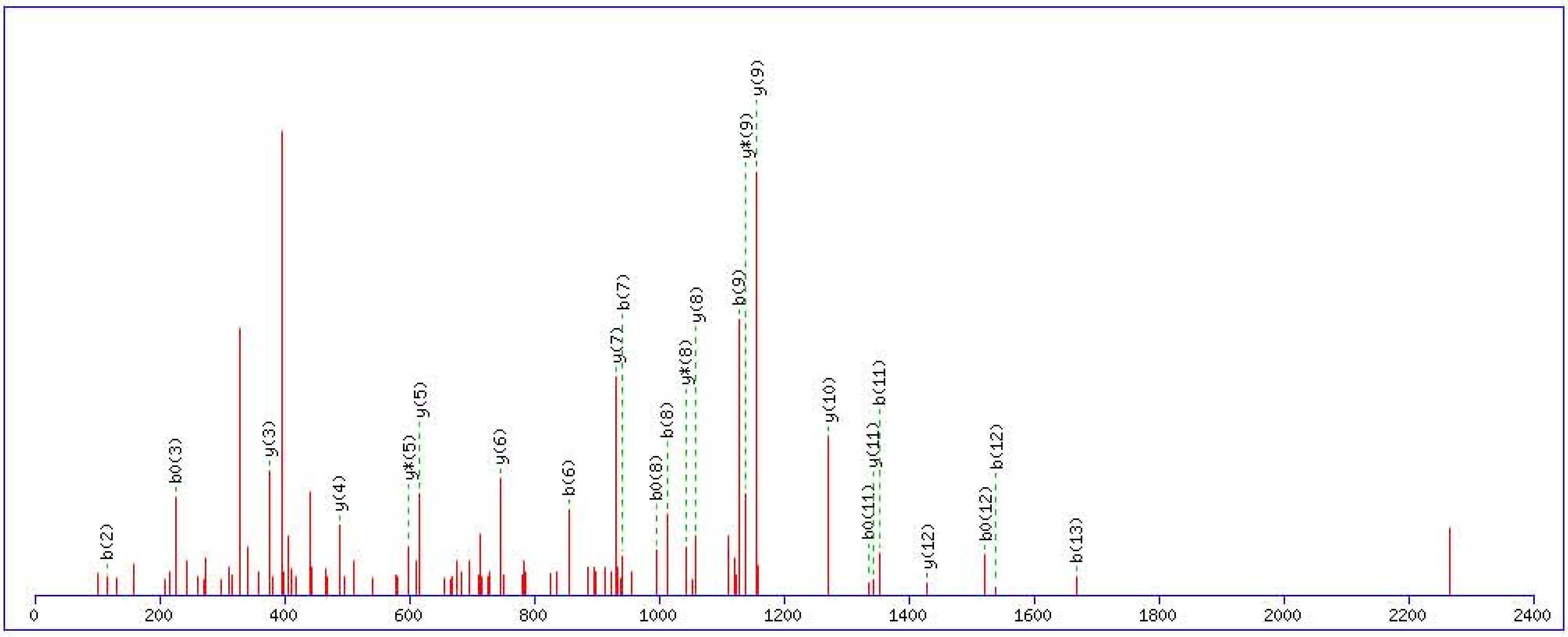
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GGETAQSADPQWEQLNNK**
Found in **HEP2_HUMAN**, Heparin cofactor 2 OS=Homo sapiens GN=SERPIND1 PE=1 SV=3

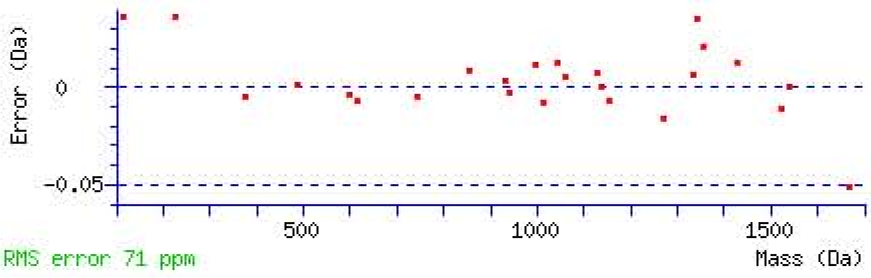
Match to Query 52731: 2283.062952 from(762.028260,3+) rtinseconds(1890) index(35573)
Title: Locus:1.1.1.3077.25 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

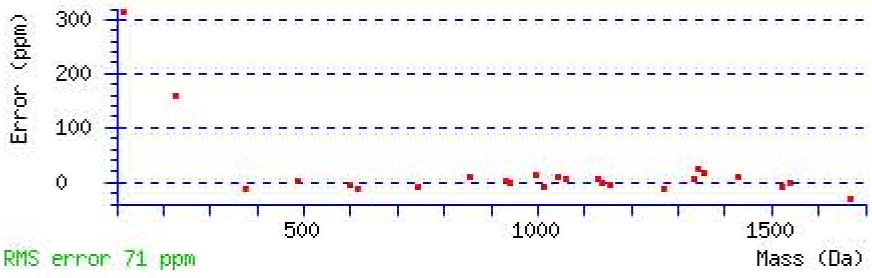
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2283.058975
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 59 **Expect:** 1.8e-005
**Matches :** 25/180 fragment ions using 42 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 18 |
| 2 | **115.050204** | 58.028740 | | | | | G | 2227.044809 | 1114.026042 | 2210.018260 | 1105.512768 | 2209.034244 | 1105.020760 | 17 |
| 3 | 244.092797 | 122.550037 | | | 226.082232 | 113.544754 | E | 2170.023345 | 1085.515310 | 2152.996796 | 1077.002036 | 2152.012780 | 1076.510028 | 16 |
| 4 | 345.140476 | 173.073876 | | | 327.129911 | 164.068594 | T | 2040.980752 | 1020.994014 | 2023.954203 | 1012.480740 | 2022.970187 | 1011.988732 | 15 |
| 5 | 416.177590 | 208.592433 | | | 398.167025 | 199.587151 | A | 1939.933073 | 970.470175 | 1922.906524 | 961.956900 | 1921.922508 | 961.464892 | 14 |
| 6 | **855.402916** | 428.205096 | 838.376367 | 419.691822 | 837.392351 | 419.199814 | Q | 1868.895959 | 934.951618 | 1851.869410 | 926.438343 | 1850.885394 | 925.946335 | 13 |
| 7 | **942.434944** | 471.721110 | 925.408395 | 463.207836 | 924.424379 | 462.715828 | S | ***1429.670633*** | 715.338955 | 1412.644084 | 706.825680 | 1411.660068 | 706.333672 | 12 |
| 8 | **1013.472058** | 507.239667 | 996.445509 | 498.726393 | 995.461493 | 498.234385 | A | ***1342.638605*** | 671.822941 | 1325.612056 | 663.309666 | 1324.628040 | 662.817658 | 11 |
| 9 | **1128.499001** | 564.753139 | 1111.472452 | 556.239864 | 1110.488436 | 555.747856 | D | ***1271.601491*** | 636.304384 | 1254.574942 | 627.791109 | 1253.590926 | 627.299101 | 10 |
| 10 | 1225.551765 | 613.279521 | 1208.525216 | 604.766246 | 1207.541200 | 604.274238 | P | ***1156.574548*** | 578.790912 | 1139.547999 | 570.277638 | 1138.563983 | 569.785630 | 9 |
| 11 | **1353.610343** | 677.308810 | 1336.583794 | 668.795535 | 1335.599778 | 668.303527 | Q | ***1059.521784*** | 530.264530 | 1042.495235 | 521.751256 | 1041.511219 | 521.259248 | 8 |
| 12 | **1539.689656** | 770.348466 | 1522.663107 | 761.835192 | 1521.679091 | 761.343184 | W | ***931.463206*** | 466.235241 | 914.436657 | 457.721967 | 913.452641 | 457.229959 | 7 |
| 13 | **1668.732249** | 834.869762 | 1651.705700 | 826.356488 | 1650.721684 | 825.864480 | E | ***745.383893*** | 373.195585 | 728.357344 | 364.682310 | 727.373328 | 364.190302 | 6 |
| 14 | 1796.790827 | 898.899052 | 1779.764278 | 890.385777 | 1778.780262 | 889.893769 | Q | ***616.341300*** | 308.674288 | 599.314751 | 300.161014 | | | 5 |
| 15 | 1909.874891 | 955.441083 | 1892.848342 | 946.927809 | 1891.864326 | 946.435801 | L | ***488.282722*** | 244.644999 | 471.256173 | 236.131725 | | | 4 |
| 16 | 2023.917818 | 1012.462547 | 2006.891269 | 1003.949273 | 2005.907253 | 1003.457265 | N | ***375.198658*** | 188.102967 | 358.172109 | 179.589693 | | | 3 |
| 17 | 2137.960745 | 1069.484010 | 2120.934196 | 1060.970736 | 2119.950180 | 1060.478728 | N | 261.155731 | 131.081504 | 244.129182 | 122.568229 | | | 2 |
| 18 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GGETAQSADPQWEQLNNK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 58.9 | 2283.058975 | 0.003977 | GGETAQSADPQWEQLNNK |
| 14.5 | 2283.058975 | 0.003977 | GGETAQSADPQWEQLNNK |

**Mascot:** http://www.matrixscience.com/

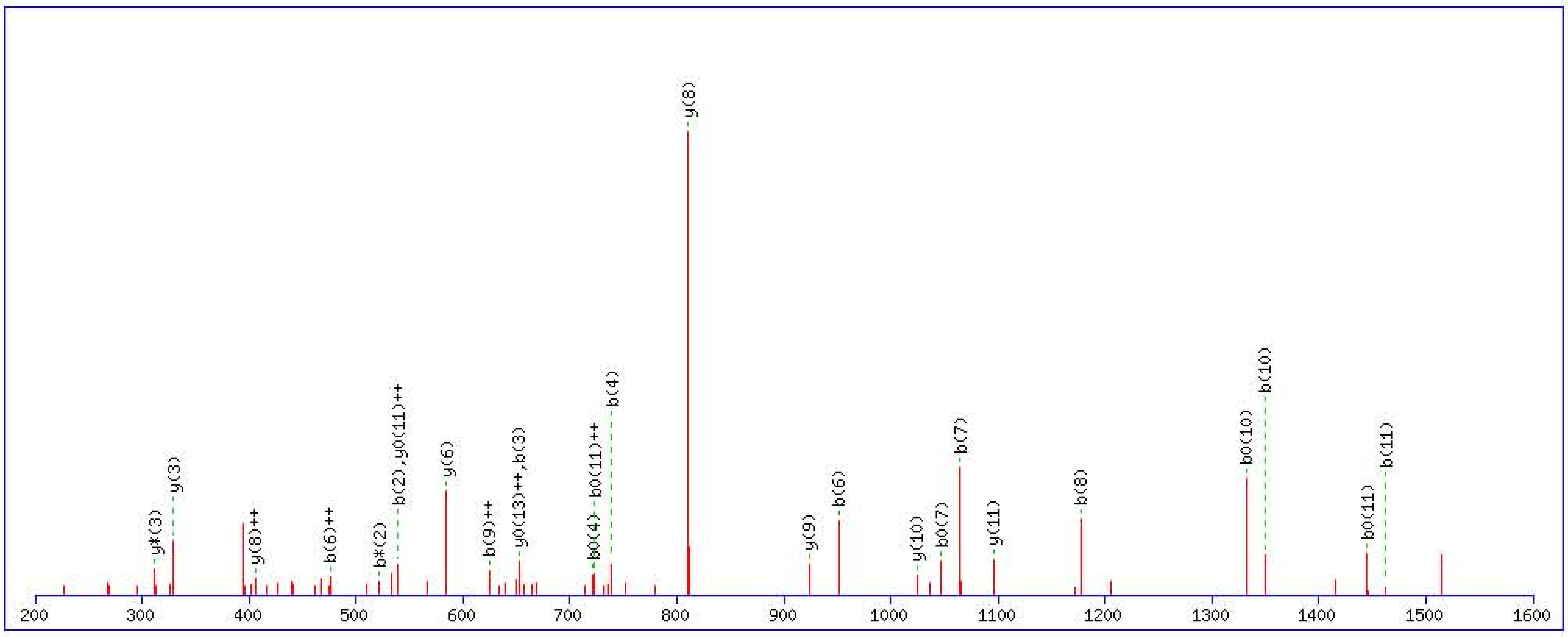
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VQLSPDLLATLPEPASPGR**
Found in **HGFA_HUMAN**, Hepatocyte growth factor activator OS=Homo sapiens GN=HGFAC PE=1 SV=1

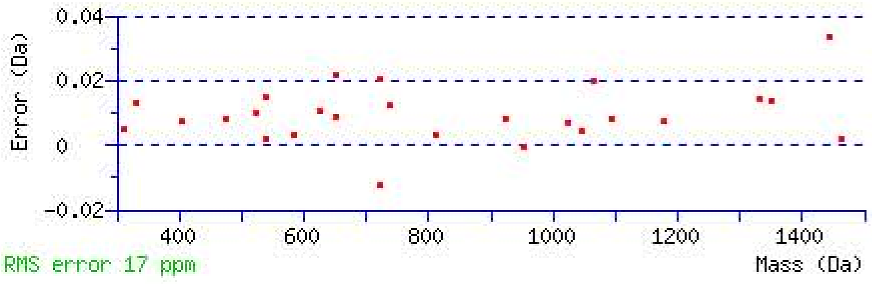
Match to Query 52481: 2271.227832 from(758.083220,3+) rtinseconds(2669) index(9512)
Title: Locus:1.1.1.1738.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

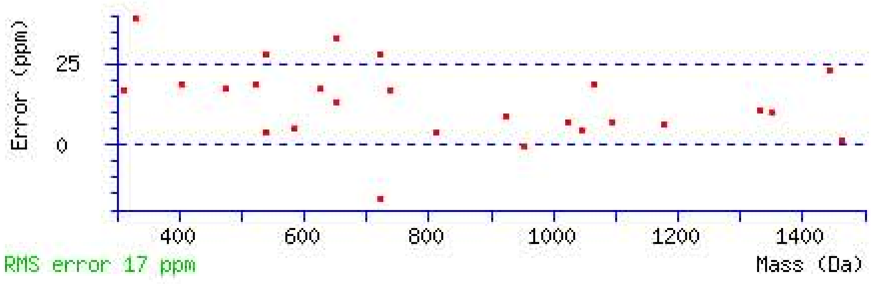
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 200 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2271.229675
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 1.4e-005
Matches : 26/202 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 19 |
| 2 | ***539.301016*** | 270.154146 | 522.274467 | 261.640872 | | | Q | 2173.168553 | 1087.087914 | 2156.142004 | 1078.574640 | 2155.157988 | 1078.082632 | 18 |
| 3 | ***652.385080*** | 326.696178 | 635.358531 | 318.182904 | | | L | 1733.943227 | 867.475252 | 1716.916678 | 858.961977 | 1715.932662 | 858.469969 | 17 |
| 4 | ***739.417108*** | 370.212192 | 722.390559 | 361.698918 | 721.406543 | 361.206910 | S | 1620.859163 | 810.933219 | 1603.832614 | 802.419945 | 1602.848598 | 801.927937 | 16 |
| 5 | 836.469872 | 418.738574 | 819.443323 | 410.225300 | 818.459307 | 409.733292 | P | 1533.827135 | 767.417206 | 1516.800586 | 758.903931 | 1515.816570 | 758.411923 | 15 |
| 6 | ***951.496815*** | **476.252046** | 934.470266 | 467.738771 | 933.486250 | 467.246763 | D | 1436.774371 | 718.890824 | 1419.747822 | 710.377549 | 1418.763806 | 709.885541 | 14 |
| 7 | ***1064.580879*** | 532.794078 | 1047.554330 | 524.280803 | 1046.570314 | 523.788795 | L | 1321.747428 | 661.377352 | 1304.720879 | 652.864078 | 1303.736863 | 652.372069 | 13 |
| 8 | ***1177.664943*** | 589.336110 | 1160.638394 | 580.822835 | 1159.654378 | 580.330827 | L | 1208.663364 | 604.835320 | 1191.636815 | 596.322046 | 1190.652799 | 595.830038 | 12 |
| 9 | 1248.702057 | **624.854667** | 1231.675508 | 616.341392 | 1230.691492 | 615.849384 | A | ***1095.579300*** | 548.293288 | 1078.552751 | 539.780014 | 1077.568735 | 539.288006 | 11 |
| 10 | ***1349.749736*** | 675.378506 | 1332.723187 | 666.865232 | 1331.739171 | 666.373223 | T | ***1024.542186*** | 512.774731 | 1007.515637 | 504.261456 | 1006.531621 | 503.769448 | 10 |
| 11 | ***1462.833800*** | 731.920538 | 1445.807251 | 723.407264 | 1444.823235 | 722.915255 | L | ***923.494507*** | 462.250892 | 906.467958 | 453.737617 | 905.483942 | 453.245609 | 9 |
| 12 | 1559.886564 | 780.446920 | 1542.860015 | 771.933646 | 1541.875999 | 771.441637 | P | ***810.410443*** | 405.708860 | 793.383894 | 397.195585 | 792.399878 | 396.703577 | 8 |
| 13 | 1688.929157 | 844.968216 | 1671.902608 | 836.454942 | 1670.918592 | 835.962934 | E | 713.357679 | 357.182478 | 696.331130 | 348.669203 | 695.347114 | 348.177195 | 7 |
| 14 | 1785.981921 | 893.494598 | 1768.955372 | 884.981324 | 1767.971356 | 884.489316 | P | ***584.315086*** | 292.661181 | 567.288537 | 284.147907 | 566.304521 | 283.655899 | 6 |
| 15 | 1857.019035 | 929.013155 | 1839.992486 | 920.499881 | 1839.008470 | 920.007873 | A | 487.262322 | 244.134799 | 470.235773 | 235.621525 | 469.251757 | 235.129517 | 5 |
| 16 | 1944.051063 | 972.529169 | 1927.024514 | 964.015895 | 1926.040498 | 963.523887 | S | 416.225208 | 208.616242 | 399.198659 | 200.102968 | 398.214643 | 199.610960 | 4 |
| 17 | 2041.103827 | 1021.055552 | 2024.077278 | 1012.542277 | 2023.093262 | 1012.050269 | P | ***329.193180*** | 165.100228 | 312.166631 | 156.586954 | | | 3 |
| 18 | 2098.125291 | 1049.566283 | 2081.098742 | 1041.053009 | 2080.114726 | 1040.561001 | G | 232.140416 | 116.573846 | 215.113867 | 108.060572 | | | 2 |
| 19 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VQLSPDLLATLPEPASPGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 56.8 | 2271.229675 | -0.001843 | VQLSPDLLATLPEPASPGR |
| 5.0 | 2271.226303 | 0.001529 | IAKSDPPTLLTPSKWSVEFR |

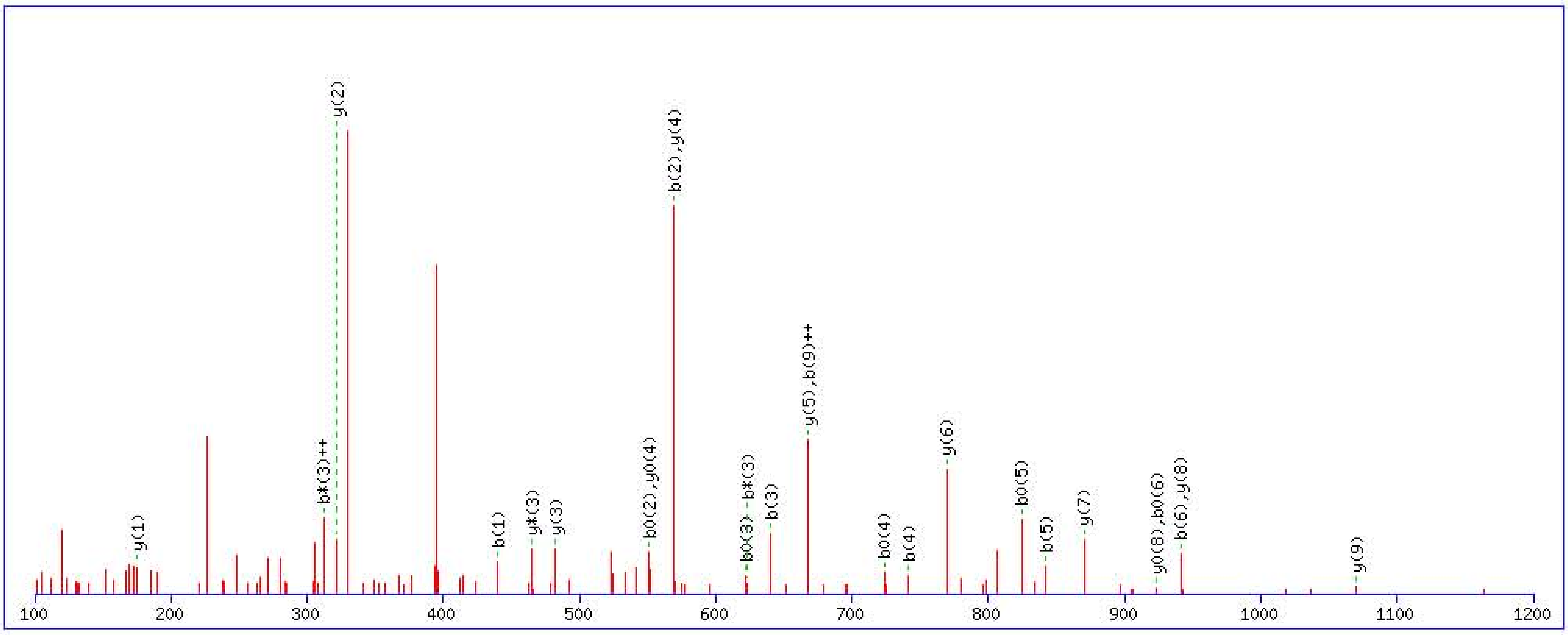
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QEATTVSCFR**
Found in **HGFL_HUMAN**, Hepatocyte growth factor-like protein OS=Homo sapiens GN=MST1 PE=1 SV=2

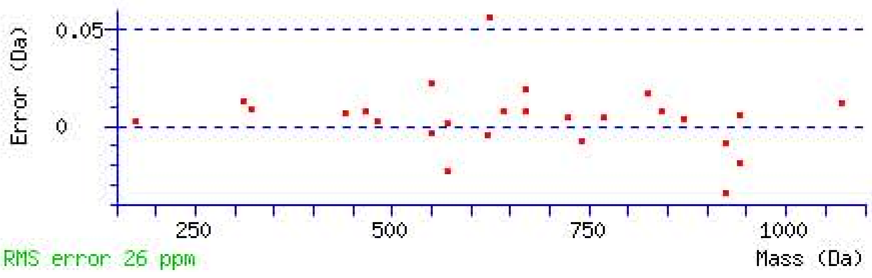
Match to Query 34167: 1508.710602 from(503.910810,3+) rtinseconds(1757) index(67243)
Title: Locus:1.1.1.1549.15 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

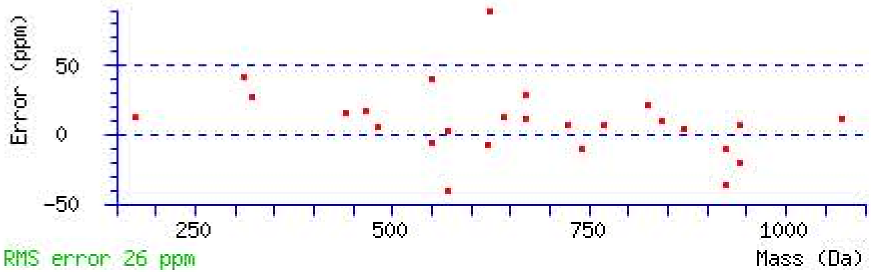
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1508.711578
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 53  Expect: 1.2e-005
Matches : 26/100 fragment ions using 40 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **440.232602** | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 10 |
| 2 | **569.275195** | 285.141236 | 552.248646 | 276.627961 | 551.264630 | 276.135953 | E | ***1070.493522*** | 535.750399 | 1053.466973 | 527.237125 | 1052.482957 | 526.745117 | 9 |
| 3 | **640.312309** | 320.659793 | 623.285760 | 312.146518 | 622.301744 | 311.654510 | A | ***941.450929*** | 471.229103 | 924.424380 | 462.715828 | 923.440364 | 462.223820 | 8 |
| 4 | **741.359988** | 371.183632 | 724.333439 | 362.670358 | 723.349423 | 362.178350 | T | ***870.413815*** | 435.710546 | 853.387266 | 427.197271 | 852.403250 | 426.705263 | 7 |
| 5 | **842.407667** | 421.707472 | 825.381118 | 413.194197 | 824.397102 | 412.702189 | T | ***769.366136*** | 385.186706 | 752.339587 | 376.673432 | 751.355571 | 376.181424 | 6 |
| 6 | **941.476081** | 471.241679 | 924.449532 | 462.728404 | 923.465516 | 462.236396 | V | ***668.318457*** | 334.662867 | 651.291908 | 326.149592 | 650.307892 | 325.657584 | 5 |
| 7 | 1028.508109 | 514.757693 | 1011.481560 | 506.244418 | 1010.497544 | 505.752410 | S | ***569.250043*** | 285.128660 | 552.223494 | 276.615385 | 551.239478 | 276.123377 | 4 |
| 8 | 1188.538758 | 594.773017 | 1171.512209 | 586.259743 | 1170.528193 | 585.767735 | C | ***482.218015*** | 241.612646 | 465.191466 | 233.099371 | | | 3 |
| 9 | 1335.607172 | 668.307224 | 1318.580623 | 659.793950 | 1317.596607 | 659.301942 | F | ***322.187366*** | 161.597321 | 305.160817 | 153.084047 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QEATTVSCFR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.9 | 1508.711578 | -0.000976 | QEATTVSCFR |
| 0.5 | 1508.692932 | 0.017670 | THTLSMEEDKFR |

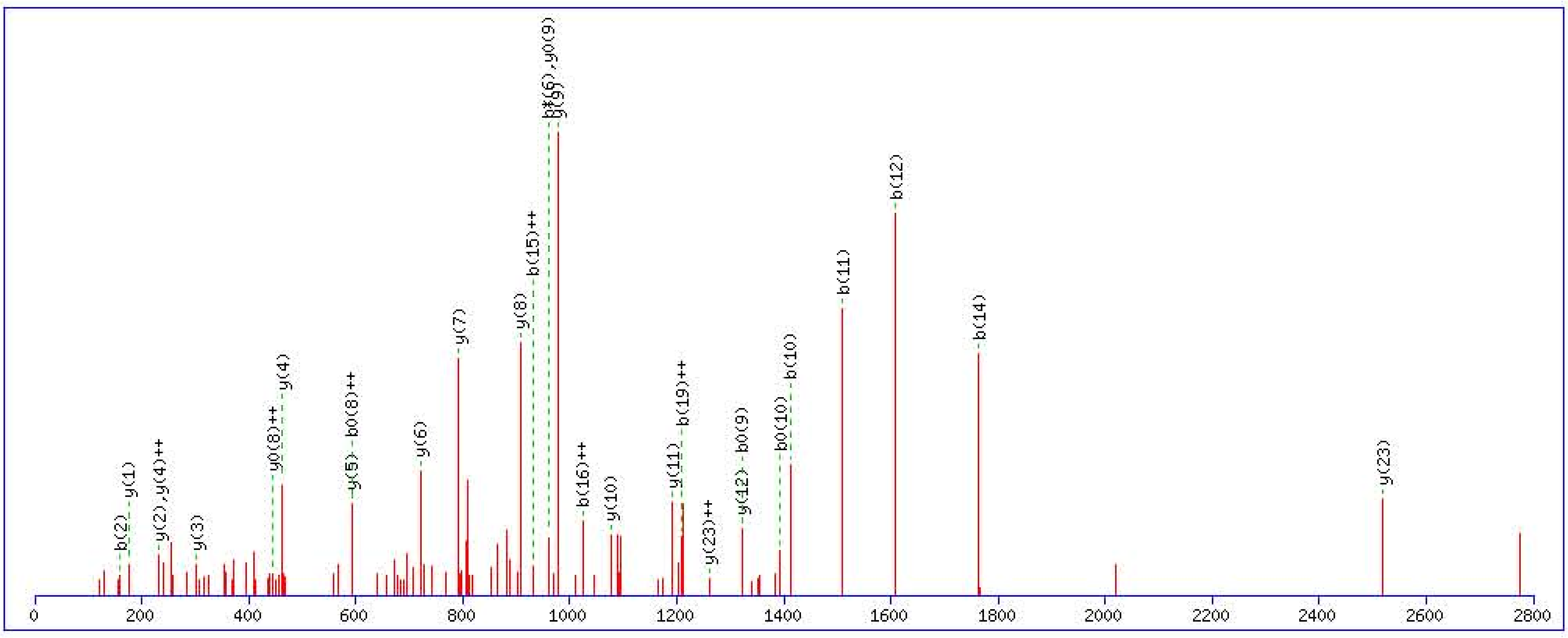
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GTELQHLLHAVVPGPWQEDVADAEECAGR**
Found in **HGFL_HUMAN**, Hepatocyte growth factor-like protein OS=Homo sapiens GN=MST1 PE=1 SV=2

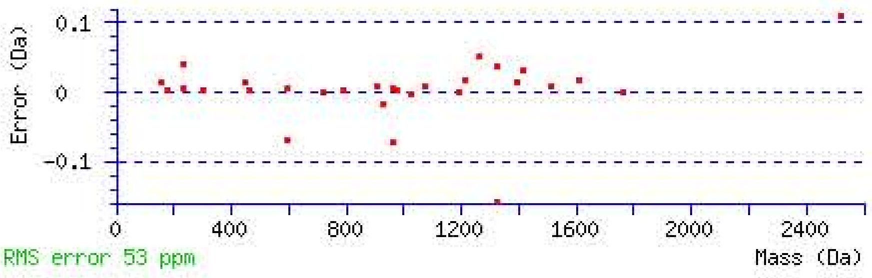
Match to Query 66936: 3494.682736 from(874.677960,4+) rtinseconds(2821) index(73773)
Title: Locus:1.1.1.1918.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

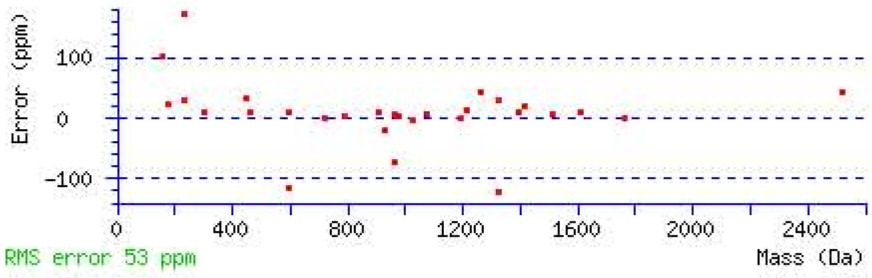
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3494.671112
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 59  Expect: 2.7e-005
Matches : 29/318 fragment ions using 56 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 29 |
| 2 | **159.076419** | 80.041847 | | | 141.065854 | 71.036565 | T | 3438.656925 | 1719.832100 | 3421.630376 | 1711.318826 | 3420.646360 | 1710.826818 | 28 |
| 3 | 288.119012 | 144.563144 | | | 270.108447 | 135.557862 | E | 3337.609246 | 1669.308261 | 3320.582697 | 1660.794986 | 3319.598681 | 1660.302978 | 27 |
| 4 | 401.203076 | 201.105176 | | | 383.192511 | 192.099894 | L | 3208.566653 | 1604.786964 | 3191.540104 | 1596.273690 | 3190.556088 | 1595.781682 | 26 |
| 5 | 840.428402 | 420.717839 | 823.401853 | 412.204565 | 822.417837 | 411.712557 | Q | 3095.482589 | 1548.244932 | 3078.456040 | 1539.731658 | 3077.472024 | 1539.239650 | 25 |
| 6 | 977.487314 | 489.247295 | 960.460765 | 480.734021 | 959.476749 | 480.242013 | H | 2656.257263 | 1328.632269 | 2639.230714 | 1320.118995 | 2638.246698 | 1319.626987 | 24 |
| 7 | 1090.571378 | 545.789327 | 1073.544829 | 537.276053 | 1072.560813 | 536.784045 | L | ***2519.198351*** | 1260.102813 | 2502.171802 | 1251.589539 | 2501.187786 | 1251.097531 | 23 |
| 8 | 1203.655442 | 602.331359 | 1186.628893 | 593.818085 | 1185.644877 | 593.326077 | L | 2406.114287 | 1203.560781 | 2389.087738 | 1195.047507 | 2388.103722 | 1194.555499 | 22 |
| 9 | 1340.714354 | 670.860815 | 1323.687805 | 662.347541 | 1322.703789 | 661.855532 | H | 2293.030223 | 1147.018749 | 2276.003674 | 1138.505475 | 2275.019658 | 1138.013467 | 21 |
| 10 | **1411.751468** | 706.379372 | 1394.724919 | 697.866098 | 1393.740903 | 697.374089 | A | 2155.971311 | 1078.489293 | 2138.944762 | 1069.976019 | 2137.960746 | 1069.484011 | 20 |
| 11 | **1510.819882** | 755.913579 | 1493.793333 | 747.400305 | 1492.809317 | 746.908297 | V | 2084.934197 | 1042.970736 | 2067.907648 | 1034.457462 | 2066.923632 | 1033.965454 | 19 |
| 12 | **1609.888296** | 805.447786 | 1592.861747 | 796.934512 | 1591.877731 | 796.442504 | V | 1985.865783 | 993.436530 | 1968.839234 | 984.923255 | 1967.855218 | 984.431247 | 18 |
| 13 | 1706.941060 | 853.974168 | 1689.914511 | 845.460894 | 1688.930495 | 844.968886 | P | 1886.797369 | 943.902323 | 1869.770820 | 935.389048 | 1868.786804 | 934.897040 | 17 |
| 14 | **1763.962524** | 882.484900 | 1746.935975 | 873.971626 | 1745.951959 | 873.479618 | G | 1789.744605 | 895.375941 | 1772.718056 | 886.862666 | 1771.734040 | 886.370658 | 16 |
| 15 | 1861.015288 | **931.011282** | 1843.988739 | 922.498008 | 1843.004723 | 922.006000 | P | 1732.723141 | 866.865209 | 1715.696592 | 858.351934 | 1714.712576 | 857.859926 | 15 |
| 16 | 2047.094601 | **1024.050939** | 2030.068052 | 1015.537664 | 2029.084036 | 1015.045656 | W | 1635.670377 | 818.338827 | 1618.643828 | 809.825552 | 1617.659812 | 809.333544 | 14 |
| 17 | 2175.153179 | 1088.080227 | 2158.126630 | 1079.566953 | 2157.142614 | 1079.074945 | Q | 1449.591064 | 725.299170 | 1432.564515 | 716.785896 | 1431.580499 | 716.293888 | 13 |
| 18 | 2304.195772 | 1152.601524 | 2287.169223 | 1144.088249 | 2286.185207 | 1143.596241 | E | ***1321.532486*** | 661.269881 | 1304.505937 | 652.756607 | 1303.521921 | 652.264599 | 12 |
| 19 | 2419.222715 | **1210.114995** | 2402.196166 | 1201.601721 | 2401.212150 | 1201.109713 | D | ***1192.489893*** | 596.748585 | 1175.463344 | 588.235310 | 1174.479328 | 587.743302 | 11 |
| 20 | 2518.291129 | 1259.649202 | 2501.264580 | 1251.135928 | 2500.280564 | 1250.643920 | V | ***1077.462950*** | 539.235113 | 1060.436401 | 530.721839 | 1059.452385 | 530.229831 | 10 |
| 21 | 2589.328243 | 1295.167759 | 2572.301694 | 1286.654485 | 2571.317678 | 1286.162477 | A | ***978.394536*** | 489.700906 | 961.367987 | 481.187632 | 960.383971 | 480.695624 | 9 |
| 22 | 2704.355186 | 1352.681231 | 2687.328637 | 1344.167956 | 2686.344621 | 1343.675948 | D | ***907.357422*** | 454.182349 | 890.330873 | 445.669075 | 889.346857 | 445.177067 | 8 |
| 23 | 2775.392300 | 1388.199788 | 2758.365751 | 1379.686513 | 2757.381735 | 1379.194505 | A | ***792.330479*** | 396.668878 | 775.303930 | 388.155603 | 774.319914 | 387.663595 | 7 |
| 24 | 2904.434893 | 1452.721085 | 2887.408344 | 1444.207810 | 2886.424328 | 1443.715802 | E | ***721.293365*** | 361.150321 | 704.266816 | 352.637046 | 703.282800 | 352.145038 | 6 |
| 25 | 3033.477486 | 1517.242381 | 3016.450937 | 1508.729106 | 3015.466921 | 1508.237099 | E | ***592.250772*** | 296.629024 | 575.224223 | 288.115750 | 574.240207 | 287.623742 | 5 |
| 26 | 3193.508135 | 1597.257705 | 3176.481586 | 1588.744431 | 3175.497570 | 1588.252423 | C | ***463.208179*** | 232.107727 | 446.181630 | 223.594453 | | | 4 |
| 27 | 3264.545249 | 1632.776263 | 3247.518700 | 1624.262988 | 3246.534684 | 1623.770980 | A | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 3 |
| 28 | 3321.566713 | 1661.286995 | 3304.540164 | 1652.773720 | 3303.556148 | 1652.281712 | G | ***232.140416*** | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 29 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GTELQHLLHAVVPGPWQEDVADAEECAGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 59.0 | 3494.671112 | 0.011624 | GTELQHLLHAVVPGPWQEDVADAEECAGR |
| 29.8 | 3494.671112 | 0.011624 | GTELQHLLHAVVPGPWQEDVADAEECAGR |

**Mascot:** http://www.matrixscience.com/

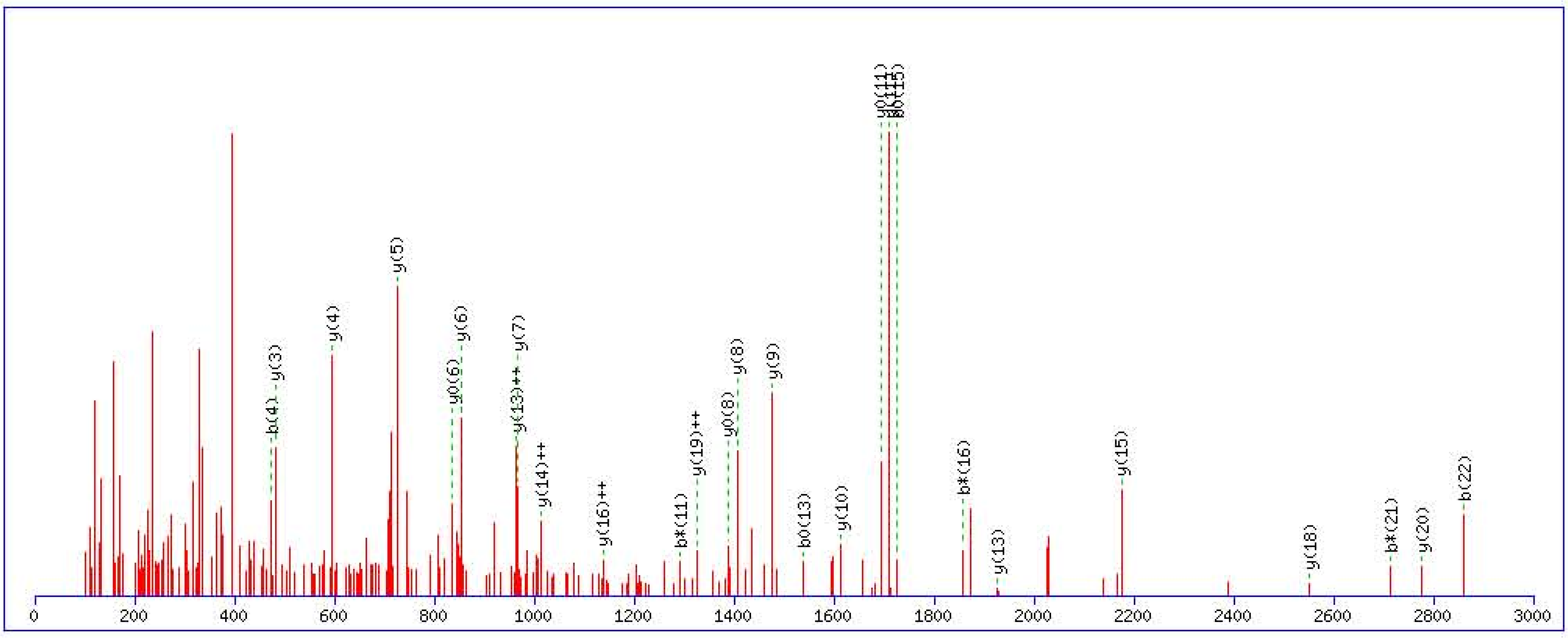
# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **WSAETPHKPQFTFTSEPHAQLEENFCR**
Found in **HGFL_HUMAN**, Hepatocyte growth factor-like protein OS=Homo sapiens GN=MST1 PE=1 SV=2

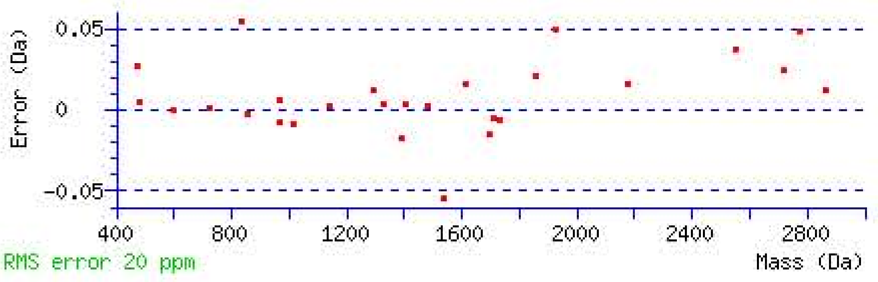
Match to Query 67845: 3584.663820 from(717.940040,5+) rtinseconds(2036) index(69024)
Title: Locus:1.1.1.1646.10 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

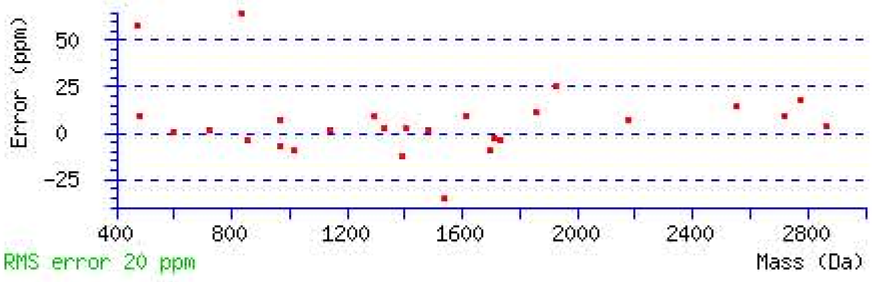
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3584.660538
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q20     : Biotin:Thermo-21345 (Q)
Ions Score: 67  Expect: 3.1e-006
Matches : 27/288 fragment ions using 47 most intense peaks   (help)
```

| # | b | b<sup>++</sup> | b* | b*<sup>++</sup> | b<sup>0</sup> | b<sup>0++</sup> | Seq. | y | y<sup>++</sup> | y* | y*<sup>++</sup> | y<sup>0</sup> | y<sup>0++</sup> | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 187.086589 | 94.046932 | | | | | W | | | | | | | 27 |
| 2 | 274.118617 | 137.562947 | | | 256.108052 | 128.557664 | S | 3399.588510 | 1700.297893 | 3382.561961 | 1691.784618 | 3381.577945 | 1691.292610 | 26 |
| 3 | 345.155731 | 173.081504 | | | 327.145166 | 164.076221 | A | 3312.556482 | 1656.781879 | 3295.529933 | 1648.268605 | 3294.545917 | 1647.776597 | 25 |
| 4 | **474.198324** | 237.602800 | | | 456.187759 | 228.597518 | E | 3241.519368 | 1621.263322 | 3224.492819 | 1612.750047 | 3223.508803 | 1612.258040 | 24 |
| 5 | 575.246003 | 288.126640 | | | 557.235438 | 279.121357 | T | 3112.476775 | 1556.742026 | 3095.450226 | 1548.228751 | 3094.466210 | 1547.736743 | 23 |
| 6 | 672.298767 | 336.653022 | | | 654.288202 | 327.647739 | P | 3011.429096 | 1506.218186 | 2994.402547 | 1497.704912 | 2993.418531 | 1497.212904 | 22 |
| 7 | 809.357679 | 405.182478 | | | 791.347114 | 396.177195 | H | 2914.376332 | 1457.691804 | 2897.349783 | 1449.178530 | 2896.365767 | 1448.686522 | 21 |
| 8 | 937.452642 | 469.229959 | 920.426093 | 460.716685 | 919.442077 | 460.224677 | K | ***2777.317420*** | 1389.162348 | 2760.290871 | 1380.649074 | 2759.306855 | 1380.157066 | 20 |
| 9 | 1034.505406 | 517.756341 | 1017.478857 | 509.243067 | 1016.494841 | 508.751059 | P | 2649.222457 | 1325.114867 | 2632.195908 | 1316.601592 | 2631.211892 | 1316.109584 | 19 |
| 10 | 1162.563984 | 581.785630 | 1145.537435 | 573.272356 | 1144.553419 | 572.780348 | Q | ***2552.169693*** | 1276.588485 | 2535.143144 | 1268.075210 | 2534.159128 | 1267.583202 | 18 |
| 11 | 1309.632398 | 655.319837 | 1292.605849 | 646.806563 | 1291.621833 | 646.314555 | F | 2424.111115 | 1212.559196 | 2407.084566 | 1204.045921 | 2406.100550 | 1203.553913 | 17 |
| 12 | 1410.680077 | 705.843677 | 1393.653528 | 697.330402 | 1392.669512 | 696.838394 | T | 2277.042701 | 1139.024988 | 2260.016152 | 1130.511714 | 2259.032136 | 1130.019706 | 16 |
| 13 | 1557.748491 | 779.377884 | 1540.721942 | 770.864609 | 1539.737926 | 770.372601 | F | ***2175.995022*** | 1088.501149 | 2158.968473 | 1079.987874 | 2157.984457 | 1079.495866 | 15 |
| 14 | 1658.796170 | 829.901723 | 1641.769621 | 821.388449 | 1640.785605 | 820.896441 | T | 2028.926608 | 1014.966942 | 2011.900059 | 1006.453668 | 2010.916043 | 1005.961660 | 14 |
| 15 | 1745.828198 | 873.417737 | 1728.801649 | 864.904463 | 1727.817633 | 864.412455 | S | ***1927.878929*** | 964.443103 | 1910.852380 | 955.929828 | 1909.868364 | 955.437820 | 13 |
| 16 | 1874.870791 | 937.939034 | 1857.844242 | 929.425759 | 1856.860226 | 928.933751 | E | 1840.846901 | 920.927089 | 1823.820352 | 912.413814 | 1822.836336 | 911.921806 | 12 |
| 17 | 1971.923555 | 986.465416 | 1954.897006 | 977.952141 | 1953.912990 | 977.460133 | P | ***1711.804308*** | 856.405792 | 1694.777759 | 847.892518 | 1693.793743 | 847.400510 | 11 |
| 18 | 2108.982467 | 1054.994872 | 2091.955918 | 1046.481597 | 2090.971902 | 1045.989589 | H | ***1614.751544*** | 807.879410 | 1597.724995 | 799.366136 | 1596.740979 | 798.874128 | 10 |
| 19 | 2180.019581 | 1090.513429 | 2162.993032 | 1082.000154 | 2162.009016 | 1081.508146 | A | ***1477.692632*** | 739.349954 | 1460.666083 | 730.836680 | 1459.682067 | 730.344672 | 9 |
| 20 | 2619.244907 | 1310.126092 | 2602.218358 | 1301.612817 | 2601.234342 | 1301.120809 | Q | ***1406.655518*** | 703.831397 | 1389.628969 | 695.318123 | 1388.644953 | 694.826115 | 8 |
| 21 | 2732.328971 | 1366.668124 | 2715.302422 | 1358.154849 | 2714.318406 | 1357.662841 | L | ***967.430192*** | 484.218734 | 950.403643 | 475.705460 | 949.419627 | 475.213452 | 7 |
| 22 | **2861.371564** | 1431.189420 | 2844.345015 | 1422.676146 | 2843.360999 | 1422.184138 | E | ***854.346128*** | 427.676702 | 837.319579 | 419.163427 | 836.335563 | 418.671419 | 6 |
| 23 | 2990.414157 | 1495.710717 | 2973.387608 | 1487.197442 | 2972.403592 | 1486.705434 | E | ***725.303535*** | 363.155405 | 708.276986 | 354.642131 | 707.292970 | 354.150123 | 5 |
| 24 | 3104.457084 | 1552.732180 | 3087.430535 | 1544.218906 | 3086.446519 | 1543.726898 | N | ***596.260942*** | 298.634109 | 579.234393 | 290.120834 | | | 4 |
| 25 | 3251.525498 | 1626.266387 | 3234.498949 | 1617.753113 | 3233.514933 | 1617.261105 | F | ***482.218015*** | 241.612645 | 465.191466 | 233.099371 | | | 3 |
| 26 | 3411.556147 | 1706.281712 | 3394.529598 | 1697.768437 | 3393.545582 | 1697.276429 | C | 335.149601 | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 27 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of WSAETPHKPQFTFTSEPHAQLEENFCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.8 | 3584.660538 | 0.003282 | WSAETPHKPQFTFTSEPHAQLEENFCR |
| 9.9 | 3584.660538 | 0.003282 | WSAETPHKPQFTFTSEPHAQLEENFCR |

**Mascot:** http://www.matrixscience.com/

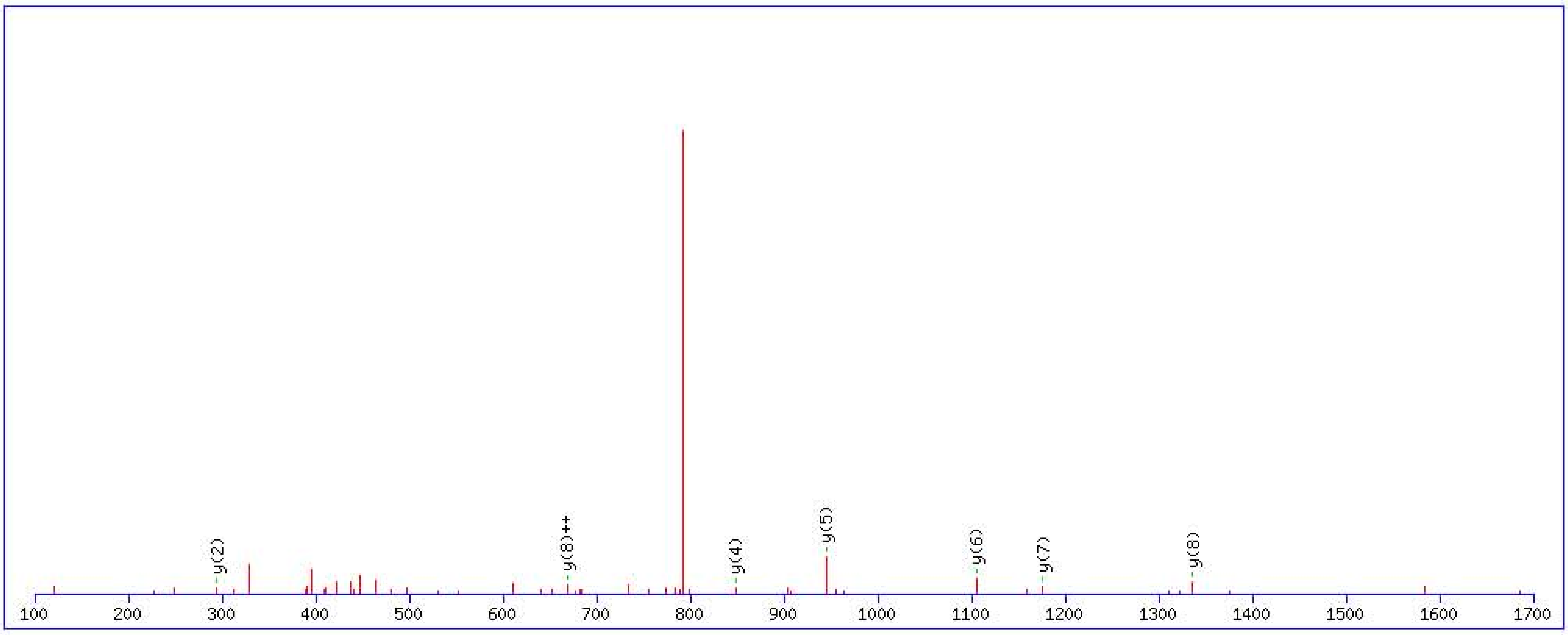
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **FTCACPDQFK**
Found in **HABP2_HUMAN**, Hyaluronan-binding protein 2 OS=Homo sapiens GN=HABP2 PE=1 SV=1

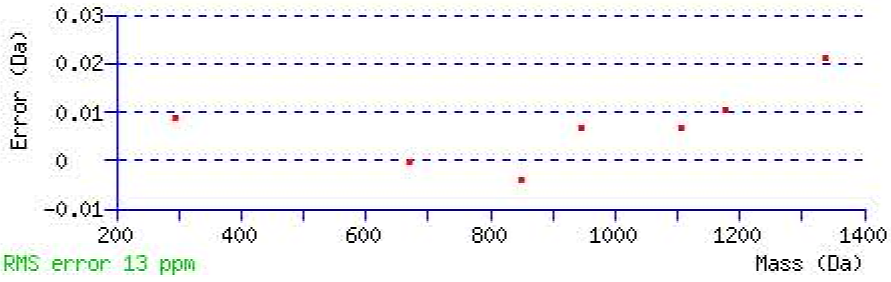
Match to Query 36415: 1583.703568 from(792.859060,2+) rtinseconds(1921) index(52226)
Title: Locus:1.1.1.1284.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

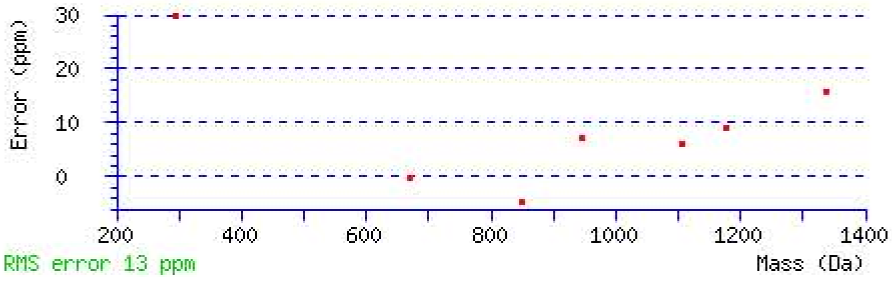
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1583.693497
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.0086
Matches : 7/86 fragment ions using 13 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 10 |
| 2 | 249.123369 | 125.065322 | | | 231.112804 | 116.060040 | T | 1437.632342 | 719.319809 | 1420.605793 | 710.806535 | 1419.621777 | 710.314527 | 9 |
| 3 | 409.154018 | 205.080647 | | | 391.143453 | 196.075365 | C | ***1336.584663*** | 668.795970 | 1319.558114 | 660.282695 | 1318.574098 | 659.790687 | 8 |
| 4 | 480.191132 | 240.599204 | | | 462.180567 | 231.593921 | A | ***1176.554014*** | 588.780645 | 1159.527465 | 580.267371 | 1158.543449 | 579.775363 | 7 |
| 5 | 640.221781 | 320.614529 | | | 622.211216 | 311.609246 | C | ***1105.516900*** | 553.262088 | 1088.490351 | 544.748814 | 1087.506335 | 544.256806 | 6 |
| 6 | 737.274545 | 369.140911 | | | 719.263980 | 360.135628 | P | ***945.486251*** | 473.246764 | 928.459702 | 464.733489 | 927.475686 | 464.241481 | 5 |
| 7 | 852.301488 | 426.654382 | | | 834.290923 | 417.649100 | D | ***848.433487*** | 424.720382 | 831.406938 | 416.207107 | 830.422922 | 415.715099 | 4 |
| 8 | 1291.526814 | 646.267045 | 1274.500265 | 637.753771 | 1273.516249 | 637.261763 | Q | 733.406544 | 367.206910 | 716.379995 | 358.693636 | | | 3 |
| 9 | 1438.595228 | 719.801252 | 1421.568679 | 711.287978 | 1420.584663 | 710.795970 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 10 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of FTCACPDQFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.5 | 1583.693497 | 0.010071 | FTCACPDQFK |

**Mascot:** http://www.matrixscience.com/

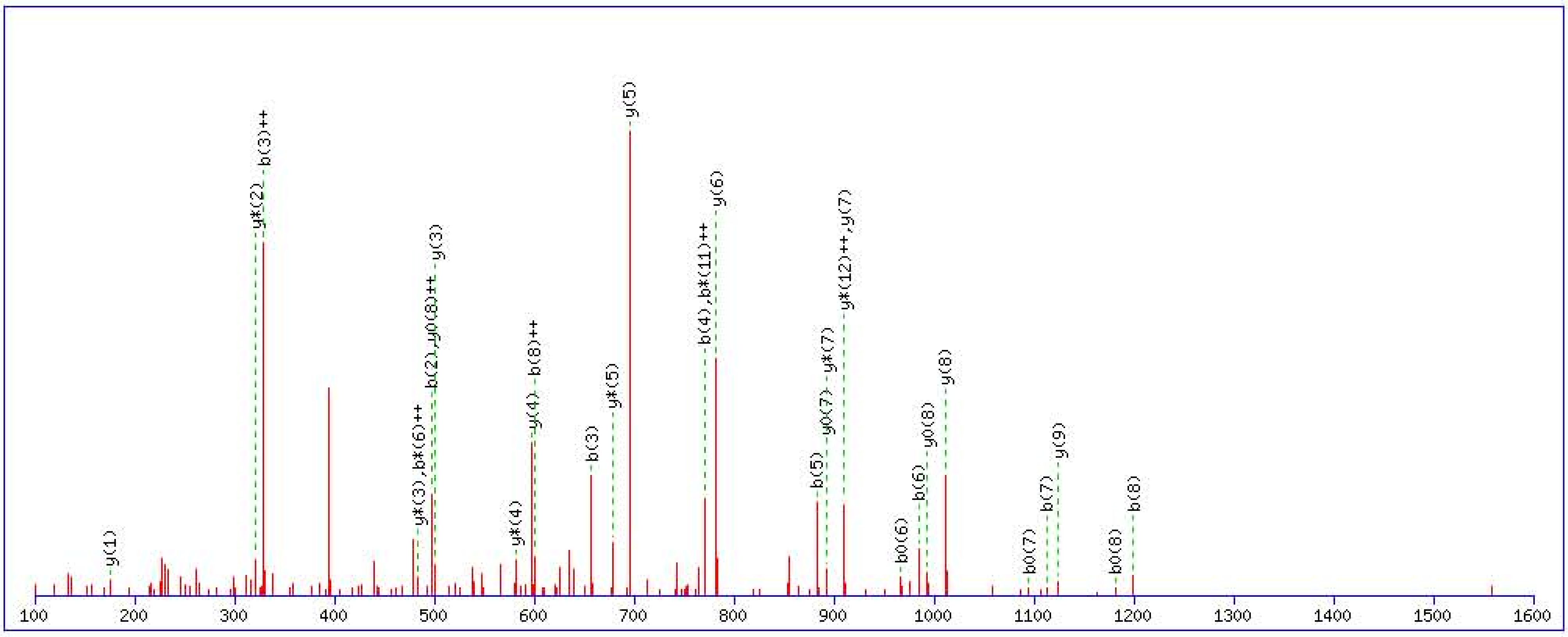
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GQCLITQSPPYYR**
Found in **HABP2_HUMAN**, Hyaluronan-binding protein 2 OS=Homo sapiens GN=HABP2 PE=1 SV=1

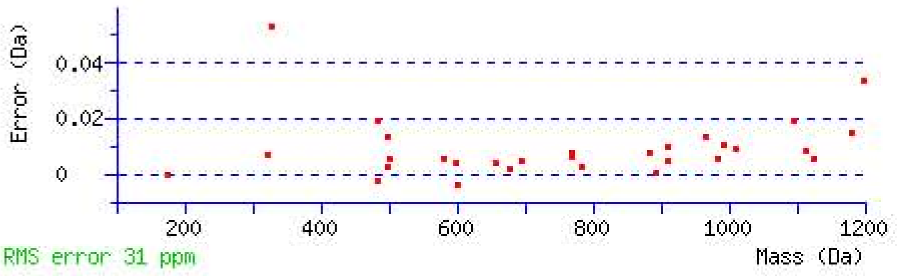
Match to Query 44417: 1892.934372 from(631.985400,3+) rtinseconds(2154) index(53925)
Title: Locus:1.1.1.1365.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

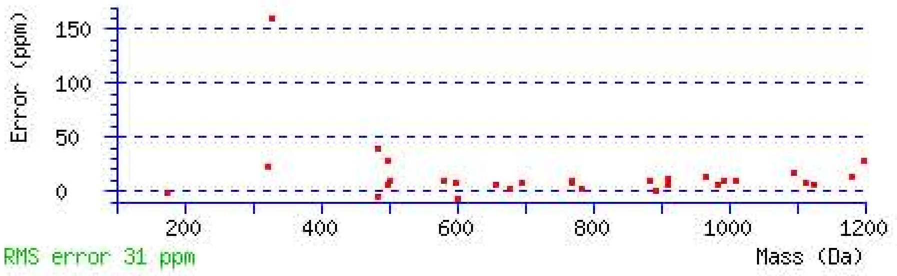
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1892.927704
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 6.5e-005
Matches : 31/122 fragment ions using 45 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 13 |
| 2 | ***497.254066*** | 249.130671 | 480.227517 | 240.617397 | | | Q | 1836.913526 | 918.960401 | 1819.886977 | 910.447127 | 1818.902961 | 909.955119 | 12 |
| 3 | ***657.284715*** | **329.145996** | 640.258166 | 320.632721 | | | C | 1397.688200 | 699.347738 | 1380.661651 | 690.834464 | 1379.677635 | 690.342456 | 11 |
| 4 | ***770.368779*** | 385.688028 | 753.342230 | 377.174753 | | | L | 1237.657551 | 619.332414 | 1220.631002 | 610.819139 | 1219.646986 | 610.327131 | 10 |
| 5 | ***883.452843*** | 442.230060 | 866.426294 | 433.716785 | | | I | ***1124.573487*** | 562.790382 | 1107.546938 | 554.277107 | 1106.562922 | 553.785099 | 9 |
| 6 | ***984.500522*** | 492.753899 | 967.473973 | 484.240625 | 966.489957 | 483.748617 | T | ***1011.489423*** | 506.248350 | 994.462874 | 497.735075 | 993.478858 | 497.243067 | 8 |
| 7 | ***1112.559100*** | 556.783188 | 1095.532551 | 548.269914 | 1094.548535 | 547.777906 | Q | ***910.441744*** | 455.724510 | 893.415195 | 447.211236 | 892.431179 | 446.719228 | 7 |
| 8 | ***1199.591128*** | **600.299202** | 1182.564579 | 591.785928 | 1181.580563 | 591.293920 | S | ***782.383166*** | 391.695221 | 765.356617 | 383.181947 | 764.372601 | 382.689939 | 6 |
| 9 | 1296.643892 | 648.825584 | 1279.617343 | 640.312310 | 1278.633327 | 639.820302 | P | ***695.351138*** | 348.179207 | 678.324589 | 339.665933 | | | 5 |
| 10 | 1393.696656 | 697.351966 | 1376.670107 | 688.838692 | 1375.686091 | 688.346684 | P | ***598.298374*** | 299.652825 | 581.271825 | 291.139551 | | | 4 |
| 11 | 1556.759985 | 778.883631 | 1539.733436 | 770.370356 | 1538.749420 | 769.878348 | Y | ***501.245610*** | 251.126443 | 484.219061 | 242.613169 | | | 3 |
| 12 | 1719.823314 | 860.415295 | 1702.796765 | 851.902021 | 1701.812749 | 851.410013 | Y | 338.182281 | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 13 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GQCLITQSPPYYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.4 | 1892.927704 | 0.006668 | GQCLITQSPPYYR |
| 14.4 | 1892.927704 | 0.006668 | GQCLITQSPPYYR |
| 2.8 | 1892.912445 | 0.021927 | MAFAPPKNTDGPKMQTK |

**Mascot:** http://www.matrixscience.com/

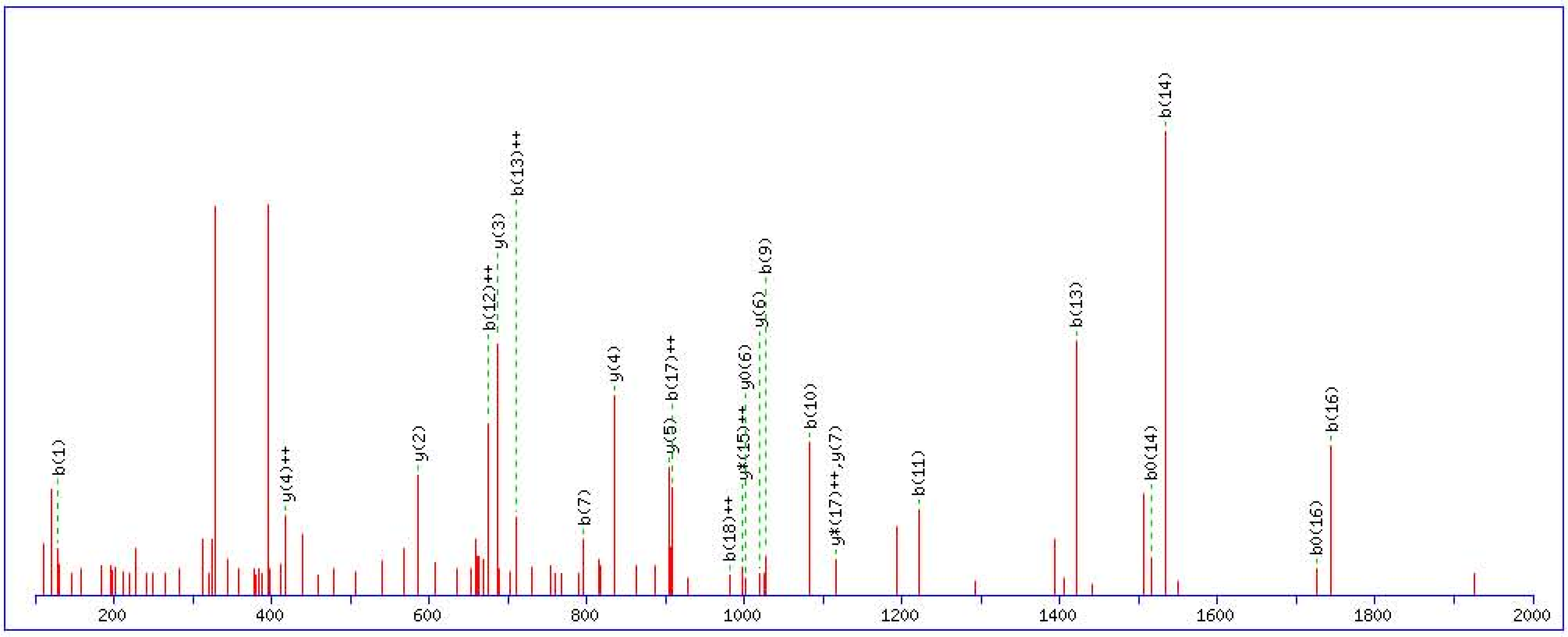
# {MATRIX} {SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KGDTFSCMVGHEALPLAFTQK**
Found in **IGHA1_HUMAN**, Ig alpha-1 chain C region OS=Homo sapiens GN=IGHA1 PE=1 SV=2

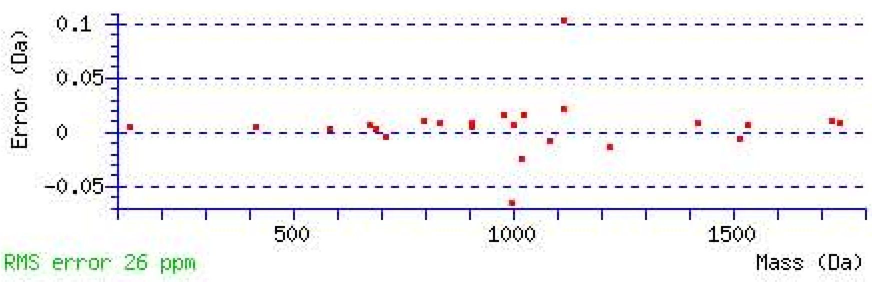
Match to Query 57961: 2647.304176 from(662.833320,4+) rtinseconds(2354) index(70792)
Title: Locus:1.1.1.1757.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

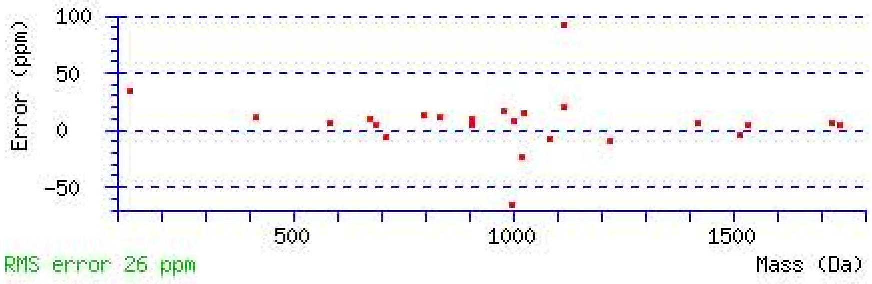
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2647.296082
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q20     : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.0047
Matches : 24/232 fragment ions using 46 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 21 |
| 2 | 186.123703 | 93.565489 | 169.097154 | 85.052215 | | | G | 2520.208388 | 1260.607832 | 2503.181839 | 1252.094557 | 2502.197823 | 1251.602549 | 20 |
| 3 | 301.150646 | 151.078961 | 284.124097 | 142.565687 | 283.140081 | 142.073679 | D | 2463.186924 | 1232.097100 | 2446.160375 | 1223.583825 | 2445.176359 | 1223.091817 | 19 |
| 4 | 402.198325 | 201.602801 | 385.171776 | 193.089526 | 384.187760 | 192.597518 | T | 2348.159981 | 1174.583628 | 2331.133432 | 1166.070354 | 2330.149416 | 1165.578346 | 18 |
| 5 | 549.266739 | 275.137008 | 532.240190 | 266.623733 | 531.256174 | 266.131725 | F | 2247.112302 | 1124.059789 | 2230.085753 | 1115.546514 | 2229.101737 | 1115.054506 | 17 |
| 6 | 636.298767 | 318.653022 | 619.272218 | 310.139747 | 618.288202 | 309.647739 | S | 2100.043888 | 1050.525582 | 2083.017339 | 1042.012307 | 2082.033323 | 1041.520299 | 16 |
| 7 | ***796.329416*** | 398.668346 | 779.302867 | 390.155072 | 778.318851 | 389.663064 | C | 2013.011860 | 1007.009568 | 1995.985311 | 998.496294 | 1995.001295 | 998.004286 | 15 |
| 8 | 927.369901 | 464.188589 | 910.343352 | 455.675314 | 909.359336 | 455.183306 | M | 1852.981211 | 926.994244 | 1835.954662 | 918.480969 | 1834.970646 | 917.988961 | 14 |
| 9 | ***1026.438315*** | 513.722796 | 1009.411766 | 505.209521 | 1008.427750 | 504.717513 | V | 1721.940726 | 861.474001 | 1704.914177 | 852.960727 | 1703.930161 | 852.468719 | 13 |
| 10 | ***1083.459779*** | 542.233528 | 1066.433230 | 533.720253 | 1065.449214 | 533.228245 | G | 1622.872312 | 811.939794 | 1605.845763 | 803.426520 | 1604.861747 | 802.934512 | 12 |
| 11 | ***1220.518691*** | 610.762984 | 1203.492142 | 602.249709 | 1202.508126 | 601.757701 | H | 1565.850848 | 783.429062 | 1548.824299 | 774.915788 | 1547.840283 | 774.423780 | 11 |
| 12 | 1349.561284 | **675.284280** | 1332.534735 | 666.771006 | 1331.550719 | 666.278998 | E | 1428.791936 | 714.899606 | 1411.765387 | 706.386332 | 1410.781371 | 705.894324 | 10 |
| 13 | ***1420.598398*** | **710.802837** | 1403.571849 | 702.289563 | 1402.587833 | 701.797555 | A | 1299.749343 | 650.378310 | 1282.722794 | 641.865035 | 1281.738778 | 641.373027 | 9 |
| 14 | ***1533.682462*** | 767.344869 | 1516.655913 | 758.831595 | 1515.671897 | 758.339587 | L | 1228.712229 | 614.859753 | 1211.685680 | 606.346478 | 1210.701664 | 605.854470 | 8 |
| 15 | 1630.735226 | 815.871251 | 1613.708677 | 807.357977 | 1612.724661 | 806.865969 | P | ***1115.628165*** | 558.317721 | 1098.601616 | 549.804446 | 1097.617600 | 549.312438 | 7 |
| 16 | ***1743.819290*** | 872.413283 | 1726.792741 | 863.900009 | 1725.808725 | 863.408000 | L | ***1018.575401*** | 509.791339 | 1001.548852 | 501.278064 | 1000.564836 | 500.786056 | 6 |
| 17 | 1814.856404 | **907.931840** | 1797.829855 | 899.418566 | 1796.845839 | 898.926557 | A | ***905.491337*** | 453.249307 | 888.464788 | 444.736032 | 887.480772 | 444.244024 | 5 |
| 18 | 1961.924818 | **981.466047** | 1944.898269 | 972.952773 | 1943.914253 | 972.460764 | F | ***834.454223*** | 417.730750 | 817.427674 | 409.217475 | 816.443658 | 408.725467 | 4 |
| 19 | 2062.972497 | 1031.989886 | 2045.945948 | 1023.476612 | 2044.961932 | 1022.984604 | T | ***687.385809*** | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 20 | 2502.197823 | 1251.602549 | 2485.171274 | 1243.089275 | 2484.187258 | 1242.597267 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 21 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of KGDTFSCMVGHEALPLAFTQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.9 | 2647.296082 | 0.008094 | KGDTFSCMVGHEALPLAFTQK |

**Mascot:** http://www.matrixscience.com/

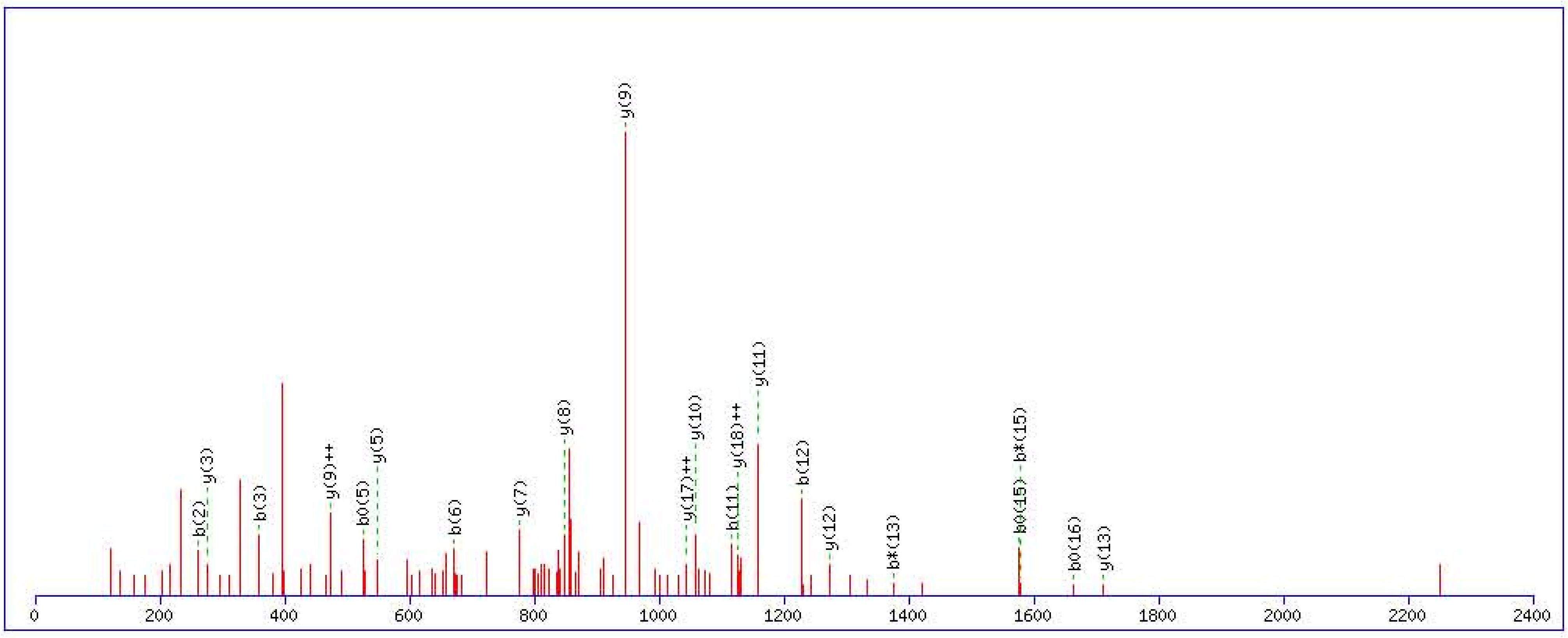
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NFPPSQDASGDLYTTSSQLTLPATQCLAGK**
Found in **IGHA1_HUMAN**, Ig alpha-1 chain C region OS=Homo sapiens GN=IGHA1 PE=1 SV=2

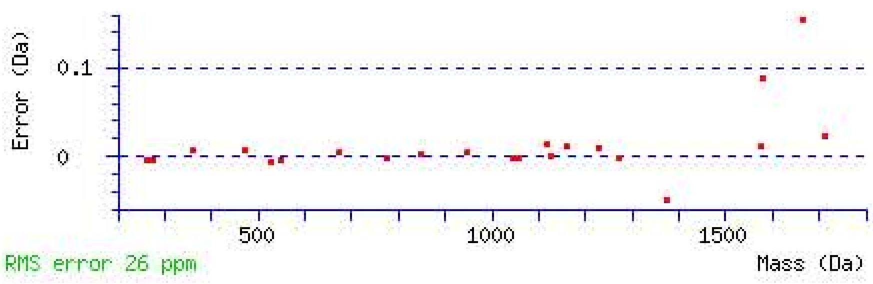
Match to Query 66792: 3478.695096 from(870.681050,4+) rtinseconds(2591) index(40067)
Title: Locus:1.1.1.3321.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

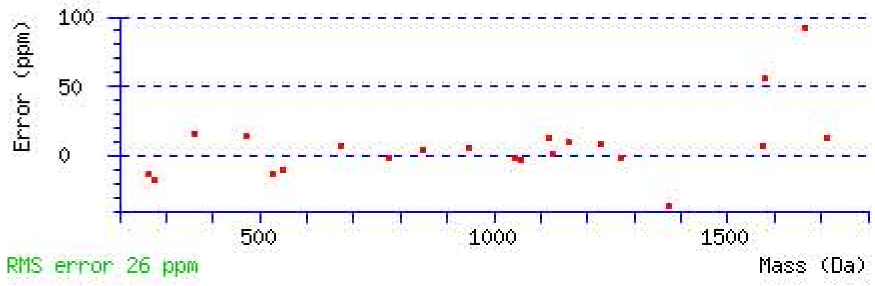
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3478.674866
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q18 : Biotin:Thermo-21345 (Q)
**Ions Score:** 40 **Expect:** 0.0025
**Matches** : 22/328 fragment ions using 44 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 30 |
| 2 | ***262.118617*** | 131.562946 | 245.092068 | 123.049672 | | | F | 3365.639210 | 1683.323243 | 3348.612661 | 1674.809968 | 3347.628645 | 1674.317960 | 29 |
| 3 | ***359.171381*** | 180.089328 | 342.144832 | 171.576054 | | | P | 3218.570796 | 1609.789036 | 3201.544247 | 1601.275761 | 3200.560231 | 1600.783753 | 28 |
| 4 | 456.224145 | 228.615710 | 439.197596 | 220.102436 | | | P | 3121.518032 | 1561.262654 | 3104.491483 | 1552.749379 | 3103.507467 | 1552.257371 | 27 |
| 5 | 543.256173 | 272.131725 | 526.229624 | 263.618450 | 525.245608 | 263.126442 | S | 3024.465268 | 1512.736272 | 3007.438719 | 1504.222997 | 3006.454703 | 1503.730989 | 26 |
| 6 | ***671.314751*** | 336.161014 | 654.288202 | 327.647739 | 653.304186 | 327.155731 | Q | 2937.433240 | 1469.220258 | 2920.406691 | 1460.706983 | 2919.422675 | 1460.214975 | 25 |
| 7 | 786.341694 | 393.674485 | 769.315145 | 385.161210 | 768.331129 | 384.669202 | D | 2809.374662 | 1405.190969 | 2792.348113 | 1396.677694 | 2791.364097 | 1396.185686 | 24 |
| 8 | 857.378808 | 429.193042 | 840.352259 | 420.679767 | 839.368243 | 420.187759 | A | 2694.347719 | 1347.677497 | 2677.321170 | 1339.164223 | 2676.337154 | 1338.672215 | 23 |
| 9 | 944.410836 | 472.709056 | 927.384287 | 464.195781 | 926.400271 | 463.703773 | S | 2623.310605 | 1312.158941 | 2606.284056 | 1303.645666 | 2605.300040 | 1303.153658 | 22 |
| 10 | 1001.432300 | 501.219788 | 984.405751 | 492.706513 | 983.421735 | 492.214505 | G | 2536.278577 | 1268.642926 | 2519.252028 | 1260.129652 | 2518.268012 | 1259.637644 | 21 |
| 11 | ***1116.459243*** | 558.733260 | 1099.432694 | 550.219985 | 1098.448678 | 549.727977 | D | 2479.257113 | 1240.132195 | 2462.230564 | 1231.618920 | 2461.246548 | 1231.126912 | 20 |
| 12 | ***1229.543307*** | 615.275291 | 1212.516758 | 606.762017 | 1211.532742 | 606.270009 | L | 2364.230170 | 1182.618723 | 2347.203621 | 1174.105448 | 2346.219605 | 1173.613440 | 19 |
| 13 | 1392.606636 | 696.806956 | 1375.580087 | 688.293682 | 1374.596071 | 687.801673 | Y | 2251.146106 | 1126.076691 | 2234.119557 | 1117.563416 | 2233.135541 | 1117.071408 | 18 |
| 14 | 1493.654315 | 747.330796 | 1476.627766 | 738.817521 | 1475.643750 | 738.325513 | T | 2088.082777 | 1044.545026 | 2071.056228 | 1036.031752 | 2070.072212 | 1035.539744 | 17 |
| 15 | 1594.701994 | 797.854635 | 1577.675445 | 789.341361 | 1576.691429 | 788.849353 | T | 1987.035098 | 994.021187 | 1970.008549 | 985.507913 | 1969.024533 | 985.015905 | 16 |
| 16 | 1681.734022 | 841.370649 | 1664.707473 | 832.857375 | 1663.723457 | 832.365367 | S | 1885.987419 | 943.497348 | 1868.960870 | 934.984073 | 1867.976854 | 934.492065 | 15 |
| 17 | 1768.766050 | 884.886663 | 1751.739501 | 876.373389 | 1750.755485 | 875.881381 | S | 1798.955391 | 899.981334 | 1781.928842 | 891.468059 | 1780.944826 | 890.976051 | 14 |
| 18 | 2207.991376 | 1104.499326 | 2190.964827 | 1095.986051 | 2189.980811 | 1095.494043 | Q | ***1711.923363*** | 856.465320 | 1694.896814 | 847.952045 | 1693.912798 | 847.460037 | 13 |
| 19 | 2321.075440 | 1161.041358 | 2304.048891 | 1152.528083 | 2303.064875 | 1152.036075 | L | ***1272.698037*** | 636.852657 | 1255.671488 | 628.339382 | 1254.687472 | 627.847374 | 12 |
| 20 | 2422.123119 | 1211.565197 | 2405.096570 | 1203.051923 | 2404.112554 | 1202.559915 | T | ***1159.613973*** | 580.310625 | 1142.587424 | 571.797350 | 1141.603408 | 571.305342 | 11 |
| 21 | 2535.207183 | 1268.107229 | 2518.180634 | 1259.593955 | 2517.196618 | 1259.101947 | L | ***1058.566294*** | 529.786785 | 1041.539745 | 521.273511 | 1040.555729 | 520.781503 | 10 |
| 22 | 2632.259947 | 1316.633611 | 2615.233398 | 1308.120337 | 2614.249382 | 1307.628329 | P | ***945.482230*** | 473.244753 | 928.455681 | 464.731479 | 927.471665 | 464.239471 | 9 |
| 23 | 2703.297061 | 1352.152169 | 2686.270512 | 1343.638894 | 2685.286496 | 1343.146886 | A | ***848.429466*** | 424.718371 | 831.402917 | 416.205097 | 830.418901 | 415.713089 | 8 |
| 24 | 2804.344740 | 1402.676008 | 2787.318191 | 1394.162733 | 2786.334175 | 1393.670725 | T | ***777.392352*** | 389.199814 | 760.365803 | 380.686540 | 759.381787 | 380.194532 | 7 |
| 25 | 2932.403318 | 1466.705297 | 2915.376769 | 1458.192022 | 2914.392753 | 1457.700015 | Q | 676.344673 | 338.675975 | 659.318124 | 330.162700 | | | 6 |
| 26 | 3092.433967 | 1546.720621 | 3075.407418 | 1538.207347 | 3074.423402 | 1537.715339 | C | ***548.286095*** | 274.646686 | 531.259546 | 266.133411 | | | 5 |
| 27 | 3205.518031 | 1603.262653 | 3188.491482 | 1594.749379 | 3187.507466 | 1594.257371 | L | 388.255446 | 194.631361 | 371.228897 | 186.118087 | | | 4 |
| 28 | 3276.555145 | 1638.781211 | 3259.528596 | 1630.267936 | 3258.544580 | 1629.775928 | A | ***275.171382*** | 138.089329 | 258.144833 | 129.576055 | | | 3 |
| 29 | 3333.576609 | 1667.291943 | 3316.550060 | 1658.778668 | 3315.566044 | 1658.286660 | G | 204.134268 | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 30 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |

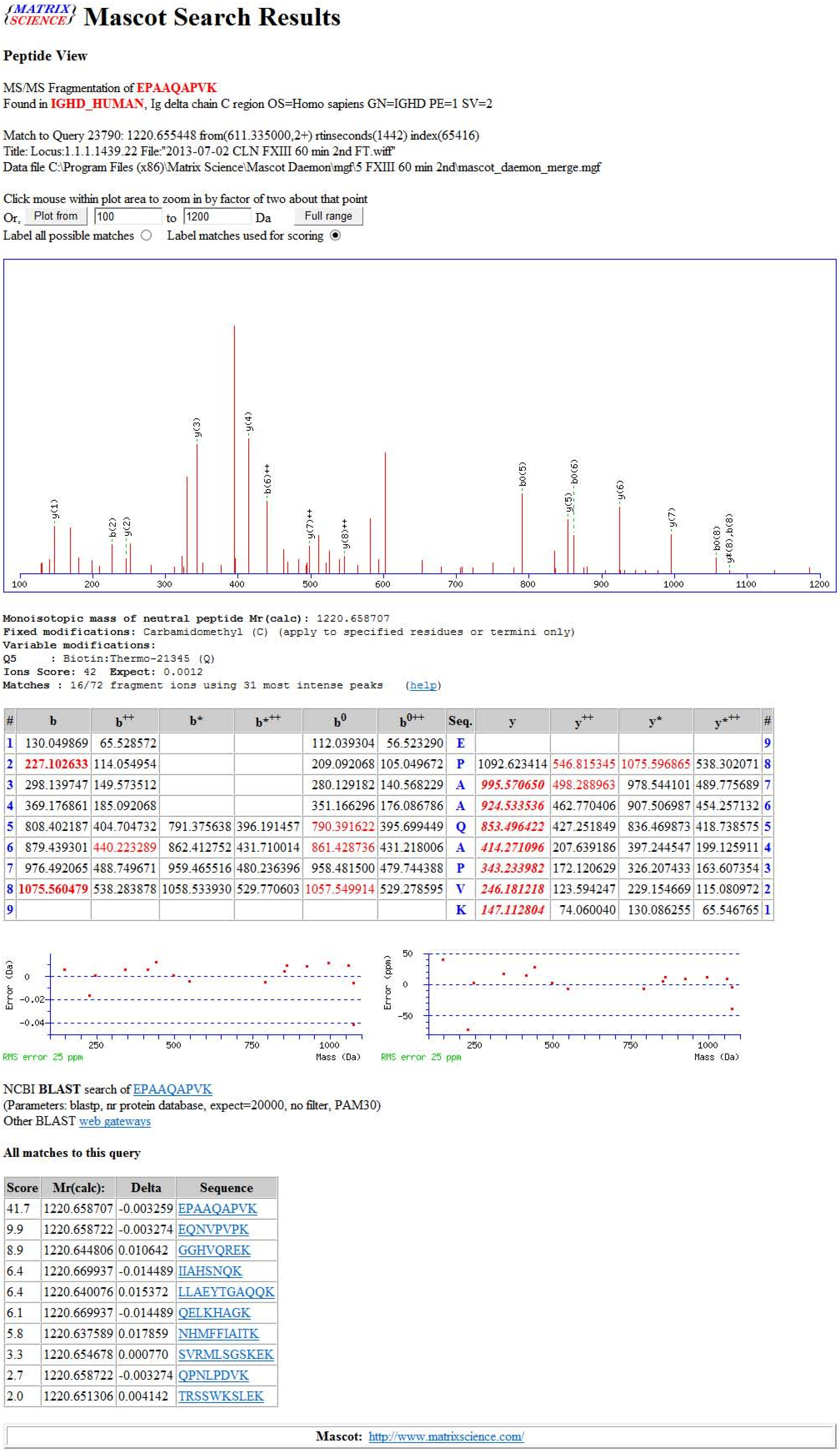




NCBI **BLAST** search of NFPPSQDASGDLYTTSSQLTLPATQCLAGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.7 | 3478.674866 | 0.020230 | NFPPSQDASGDLYTTSSQLTLPATQCLAGK |
| 16.1 | 3478.674866 | 0.020230 | NFPPSQDASGDLYTTSSQLTLPATQCLAGK |
| 9.3 | 3478.674866 | 0.020230 | NFPPSQDASGDLYTTSSQLTLPATQCLAGK |



# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EPAAQAPVK**
Found in **IGHD_HUMAN**, Ig delta chain C region OS=Homo sapiens GN=IGHD PE=1 SV=2

Match to Query 23790: 1220.655448 from(611.335000,2+) rtinseconds(1442) index(65416)
Title: Locus:1.1.1.1439.22 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 1220.658707
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 42  Expect: 0.0012
Matches : 16/72 fragment ions using 31 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | 9 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 1092.623414 | 546.815345 | 1075.596865 | 538.302071 | 8 |
| 3 | 298.139747 | 149.573512 | | | 280.129182 | 140.568229 | A | ***995.570650*** | 498.288963 | 978.544101 | 489.775689 | 7 |
| 4 | 369.176861 | 185.092068 | | | 351.166296 | 176.086786 | A | ***924.533536*** | 462.770406 | 907.506987 | 454.257132 | 6 |
| 5 | 808.402187 | 404.704732 | 791.375638 | 396.191457 | 790.391622 | 395.699449 | Q | ***853.496422*** | 427.251849 | 836.469873 | 418.738575 | 5 |
| 6 | 879.439301 | 440.223289 | 862.412752 | 431.710014 | 861.428736 | 431.218006 | A | ***414.271096*** | 207.639186 | 397.244547 | 199.125911 | 4 |
| 7 | 976.492065 | 488.749671 | 959.465516 | 480.236396 | 958.481500 | 479.744388 | P | ***343.233982*** | 172.120629 | 326.207433 | 163.607354 | 3 |
| 8 | **1075.560479** | 538.283878 | 1058.533930 | 529.770603 | 1057.549914 | 529.278595 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080972 | 2 |
| 9 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | 1 |

NCBI **BLAST** search of EPAAQAPVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 41.7 | 1220.658707 | -0.003259 | EPAAQAPVK |
| 9.9 | 1220.658722 | -0.003274 | EQNVPVPK |
| 8.9 | 1220.644806 | 0.010642 | GGHVQREK |
| 6.4 | 1220.669937 | -0.014489 | IIAHSNQK |
| 6.4 | 1220.640076 | 0.015372 | LLAEYTGAQQK |
| 6.1 | 1220.669937 | -0.014489 | QELKHAGK |
| 5.8 | 1220.637589 | 0.017859 | NHMFFIAITK |
| 3.3 | 1220.654678 | 0.000770 | SVRMLSGSKEK |
| 2.7 | 1220.658722 | -0.003274 | QPNLPDVK |
| 2.0 | 1220.651306 | 0.004142 | TRSSWKSLEK |

**Mascot:** http://www.matrixscience.com/

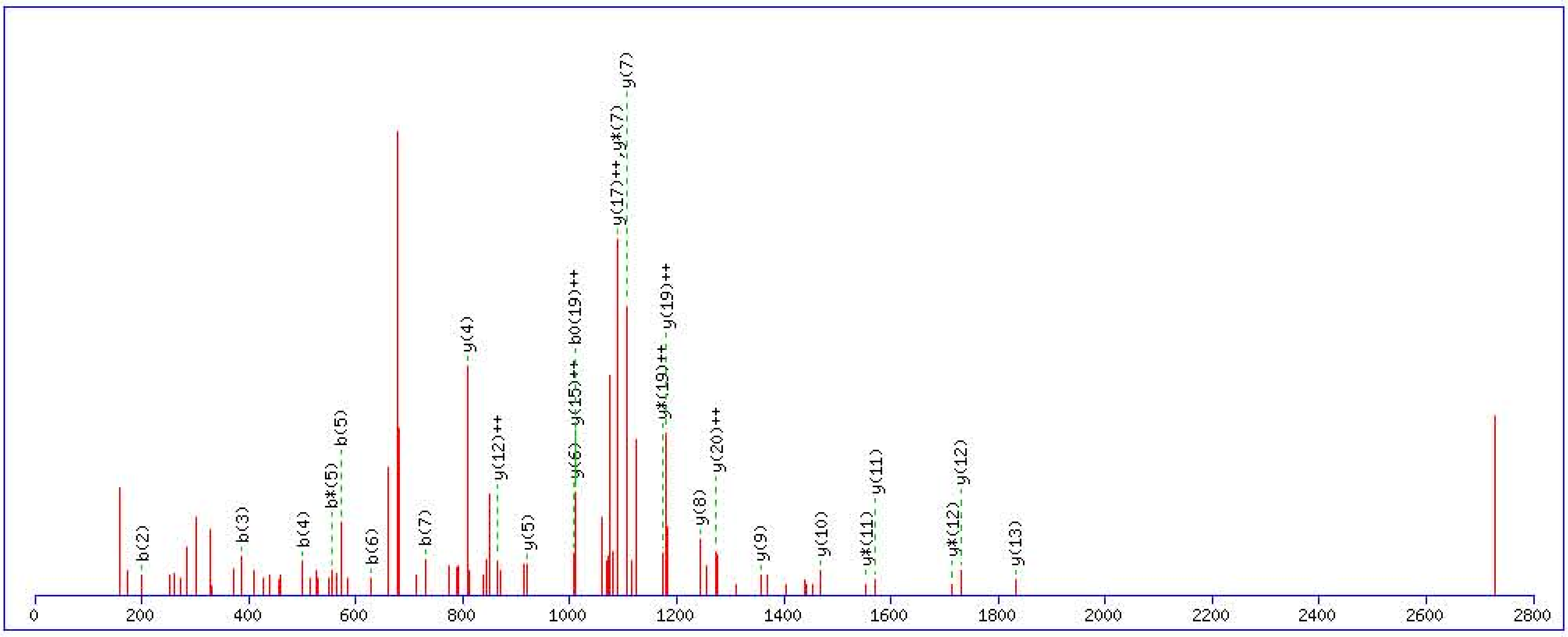
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SLWNAGTSVTCTLNHPSLPPQR**
Found in **IGHD_HUMAN**, Ig delta chain C region OS=Homo sapiens GN=IGHD PE=1 SV=2

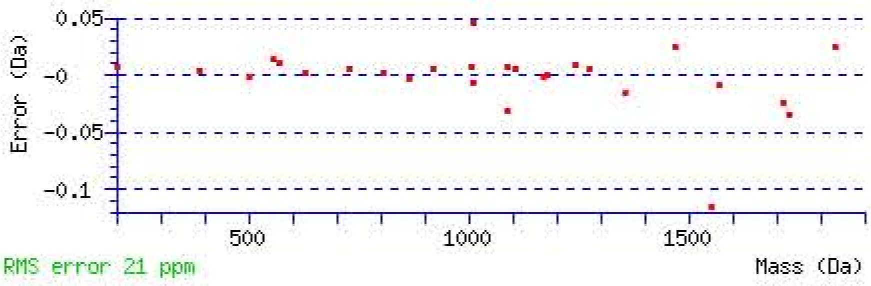
Match to Query 58820: 2746.371642 from(916.464490,3+) rtinseconds(2252) index(70287)
Title: Locus:1.1.1.1721.26 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

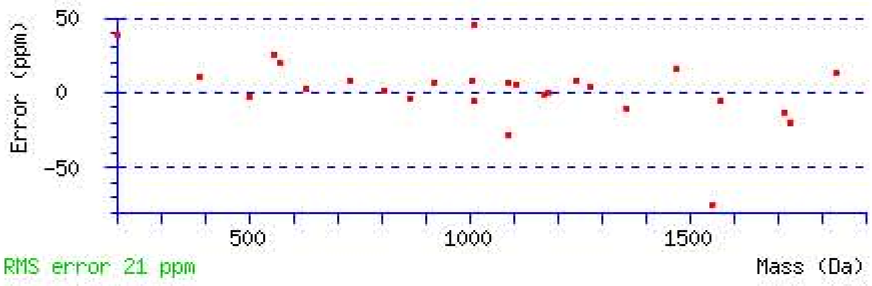
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2746.368332
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q21     : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 2e-005
Matches : 27/236 fragment ions using 58 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 22 |
| 2 | ***201.123368*** | 101.065322 | | | 183.112803 | 92.060039 | L | 2660.343575 | 1330.675425 | 2643.317026 | 1322.162151 | 2642.333010 | 1321.670143 | 21 |
| 3 | ***387.202681*** | 194.104978 | | | 369.192116 | 185.099696 | W | 2547.259511 | 1274.133393 | 2530.232962 | 1265.620119 | 2529.248946 | 1265.128111 | 20 |
| 4 | ***501.245608*** | 251.126442 | 484.219059 | 242.613168 | 483.235043 | 242.121160 | N | 2361.180198 | 1181.093737 | 2344.153649 | 1172.580462 | 2343.169633 | 1172.088454 | 19 |
| 5 | ***572.282722*** | 286.644999 | 555.256173 | 278.131725 | 554.272157 | 277.639717 | A | 2247.137271 | 1124.072273 | 2230.110722 | 1115.558999 | 2229.126706 | 1115.066991 | 18 |
| 6 | ***629.304186*** | 315.155731 | 612.277637 | 306.642457 | 611.293621 | 306.150449 | G | 2176.100157 | 1088.553716 | 2159.073608 | 1080.040442 | 2158.089592 | 1079.548434 | 17 |
| 7 | ***730.351865*** | 365.679571 | 713.325316 | 357.166296 | 712.341300 | 356.674288 | T | 2119.078693 | 1060.042984 | 2102.052144 | 1051.529710 | 2101.068128 | 1051.037702 | 16 |
| 8 | 817.383893 | 409.195585 | 800.357344 | 400.682310 | 799.373328 | 400.190302 | S | 2018.031014 | 1009.519145 | 2001.004465 | 1001.005871 | 2000.020449 | 1000.513863 | 15 |
| 9 | 916.452307 | 458.729792 | 899.425758 | 450.216517 | 898.441742 | 449.724509 | V | 1930.998986 | 966.003131 | 1913.972437 | 957.489857 | 1912.988421 | 956.997849 | 14 |
| 10 | 1017.499986 | 509.253631 | 1000.473437 | 500.740357 | 999.489421 | 500.248349 | T | ***1831.930572*** | 916.468924 | 1814.904023 | 907.955650 | 1813.920007 | 907.463642 | 13 |
| 11 | 1177.530635 | 589.268956 | 1160.504086 | 580.755681 | 1159.520070 | 580.263673 | C | ***1730.882893*** | 865.945085 | 1713.856344 | 857.431810 | 1712.872328 | 856.939802 | 12 |
| 12 | 1278.578314 | 639.792795 | 1261.551765 | 631.279521 | 1260.567749 | 630.787513 | T | ***1570.852244*** | 785.929760 | 1553.825695 | 777.416486 | 1552.841679 | 776.924478 | 11 |
| 13 | 1391.662378 | 696.334827 | 1374.635829 | 687.821553 | 1373.651813 | 687.329545 | L | ***1469.804565*** | 735.405921 | 1452.778016 | 726.892646 | 1451.794000 | 726.400638 | 10 |
| 14 | 1505.705305 | 753.356291 | 1488.678756 | 744.843016 | 1487.694740 | 744.351008 | N | ***1356.720501*** | 678.863889 | 1339.693952 | 670.350614 | 1338.709936 | 669.858606 | 9 |
| 15 | 1642.764217 | 821.885746 | 1625.737668 | 813.372472 | 1624.753652 | 812.880464 | H | ***1242.677574*** | 621.842425 | 1225.651025 | 613.329151 | 1224.667009 | 612.837143 | 8 |
| 16 | 1739.816981 | 870.412128 | 1722.790432 | 861.898854 | 1721.806416 | 861.406846 | P | ***1105.618662*** | 553.312969 | 1088.592113 | 544.799695 | 1087.608097 | 544.307687 | 7 |
| 17 | 1826.849009 | 913.928143 | 1809.822460 | 905.414868 | 1808.838444 | 904.922860 | S | ***1008.565898*** | 504.786587 | 991.539349 | 496.273313 | 990.555333 | 495.781305 | 6 |
| 18 | 1939.933073 | 970.470174 | 1922.906524 | 961.956900 | 1921.922508 | 961.464892 | L | ***921.533870*** | 461.270573 | 904.507321 | 452.757299 | | | 5 |
| 19 | 2036.985837 | 1018.996557 | 2019.959288 | 1010.483282 | 2018.975272 | 1009.991274 | P | ***808.449806*** | 404.728541 | 791.423257 | 396.215267 | | | 4 |
| 20 | 2134.038601 | 1067.522938 | 2117.012052 | 1059.009664 | 2116.028036 | 1058.517656 | P | 711.397042 | 356.202159 | 694.370493 | 347.688885 | | | 3 |
| 21 | 2573.263927 | 1287.135601 | 2556.237378 | 1278.622327 | 2555.253362 | 1278.130319 | Q | 614.344278 | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 22 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SLWNAGTSVTCTLNHPSLPPQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.5 | 2746.368332 | 0.003310 | SLWNAGTSVTCTLNHPSLPPQR |
| 0.3 | 2746.402496 | -0.030854 | ESLKRVTFALPDDAETEDTGVLNVK |

**Mascot:** http://www.matrixscience.com/

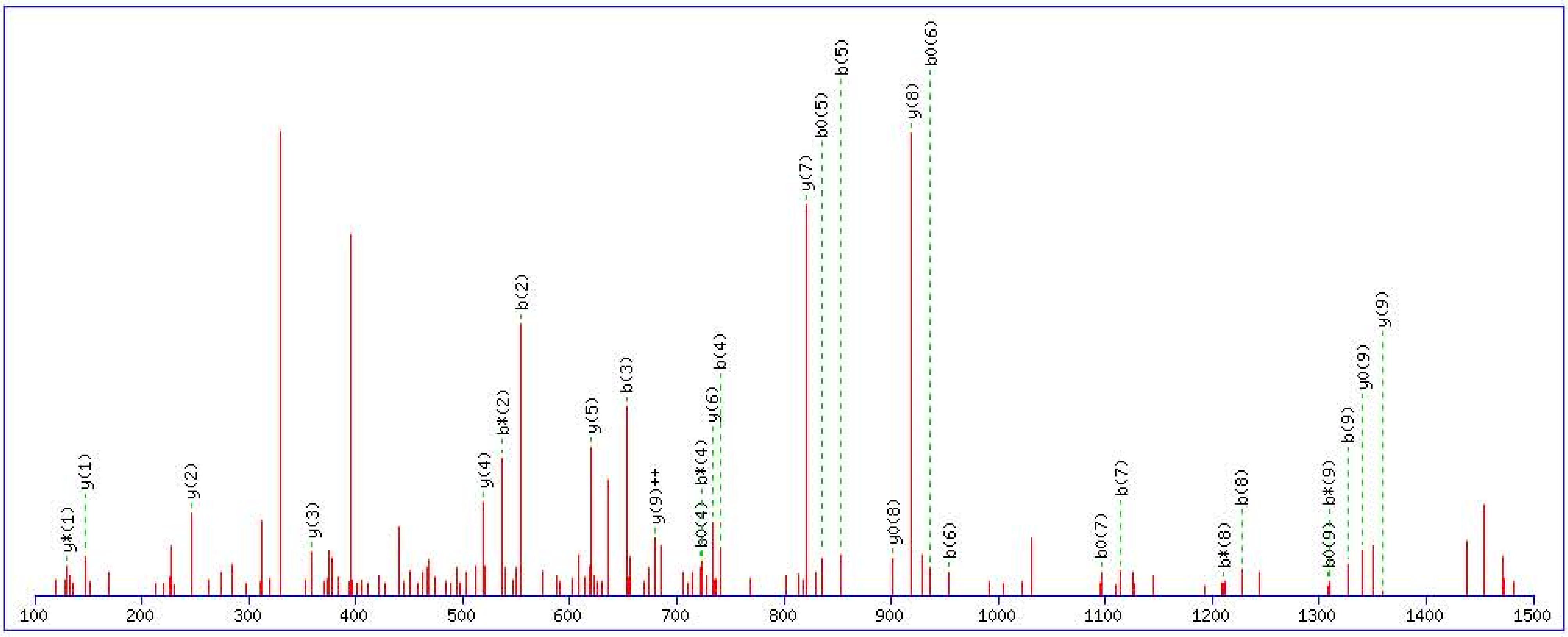
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NQVSLTCLVK**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

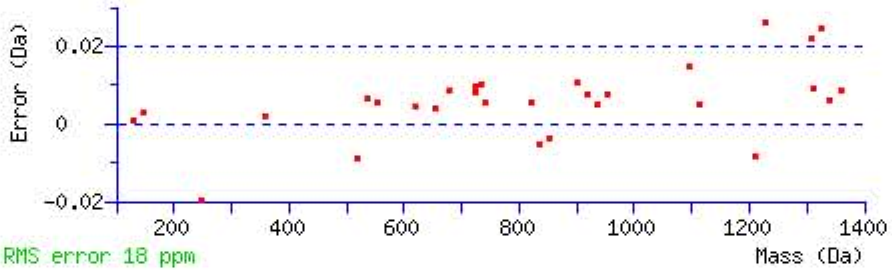
Match to Query 33089: 1471.788588 from(736.901570,2+) rtinseconds(2245) index(70233)
Title: Locus:1.1.1.1719.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

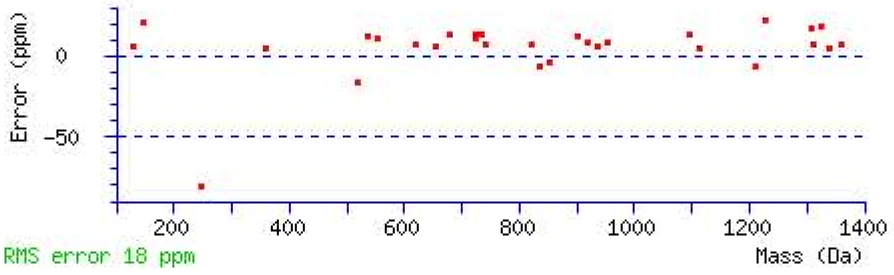
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1471.789093
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.00031
Matches : 30/94 fragment ions using 66 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 10 |
| 2 | **554.275529** | 277.641403 | 537.248980 | 269.128128 | | | Q | ***1358.753442*** | 679.880359 | 1341.726893 | 671.367085 | 1340.742877 | 670.875076 | 9 |
| 3 | **653.343943** | 327.175610 | 636.317394 | 318.662335 | | | V | ***919.528116*** | 460.267696 | 902.501567 | 451.754421 | 901.517551 | 451.262413 | 8 |
| 4 | **740.375971** | 370.691623 | 723.349422 | 362.178349 | 722.365406 | 361.686341 | S | ***820.459702*** | 410.733489 | 803.433153 | 402.220215 | 802.449137 | 401.728207 | 7 |
| 5 | **853.460035** | 427.233656 | 836.433486 | 418.720381 | 835.449470 | 418.228373 | L | ***733.427674*** | 367.217475 | 716.401125 | 358.704201 | 715.417109 | 358.212193 | 6 |
| 6 | **954.507714** | 477.757495 | 937.481165 | 469.244220 | 936.497149 | 468.752212 | T | ***620.343610*** | 310.675443 | 603.317061 | 302.162169 | 602.333045 | 301.670161 | 5 |
| 7 | **1114.538363** | 557.772819 | 1097.511814 | 549.259545 | 1096.527798 | 548.767537 | C | ***519.295931*** | 260.151604 | 502.269382 | 251.638329 | | | 4 |
| 8 | **1227.622427** | 614.314851 | 1210.595878 | 605.801577 | 1209.611862 | 605.309569 | L | ***359.265282*** | 180.136279 | 342.238733 | 171.623004 | | | 3 |
| 9 | **1326.690841** | 663.849058 | 1309.664292 | 655.335784 | 1308.680276 | 654.843776 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of NQVSLTCLVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.5 | 1471.789093 | -0.000505 | NQVSLTCLVK |
| 5.8 | 1471.806793 | -0.018205 | AAALLAKQAEMEVK |
| 4.4 | 1471.797592 | -0.009004 | KYFWDRAFLVK |
| 4.0 | 1471.803467 | -0.014879 | EKQGPLLDLFGQK |
| 2.4 | 1471.799438 | -0.010850 | EVELDRLRDTVK |
| 1.9 | 1471.792908 | -0.004320 | NITINCVKGINAR |
| 1.9 | 1471.777847 | 0.010741 | QLDMELVSVK |
| 1.3 | 1471.792221 | -0.003633 | NESIIPLSPFEVK |

**Mascot:** http://www.matrixscience.com/

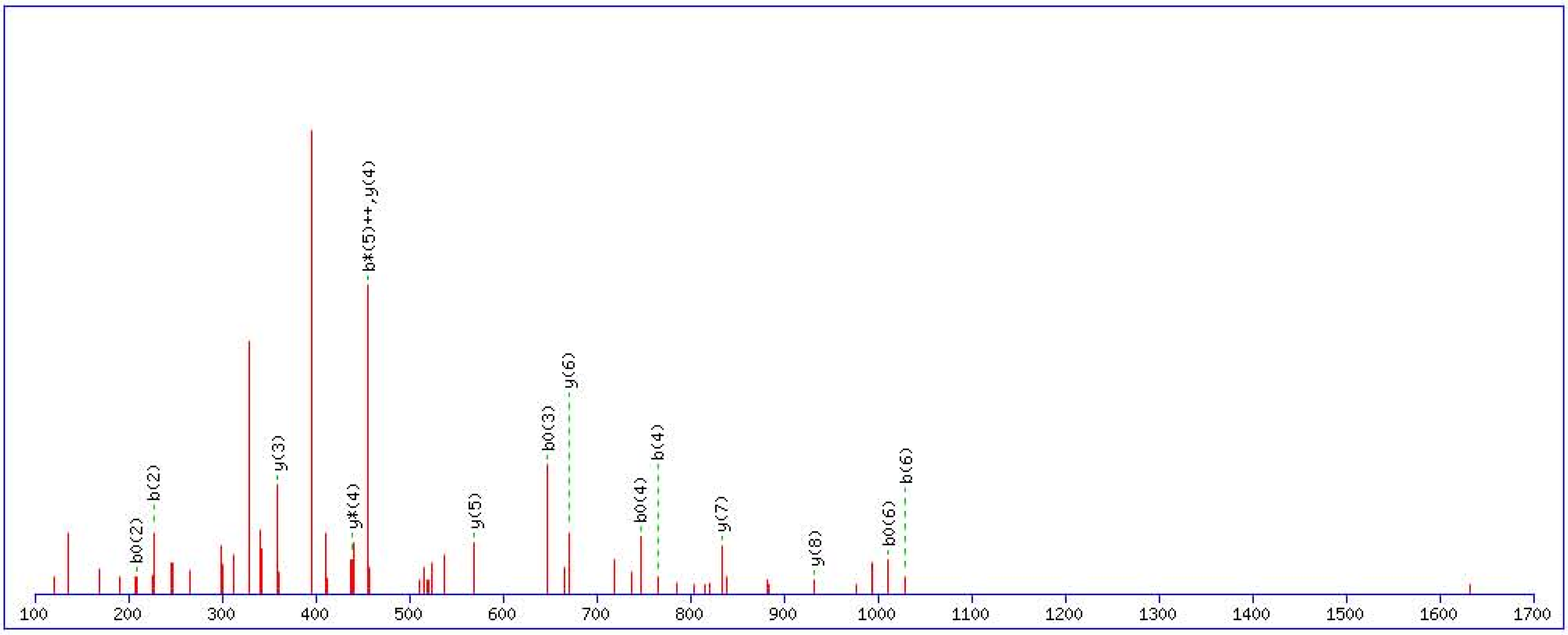
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EPQVYTLPPSR**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

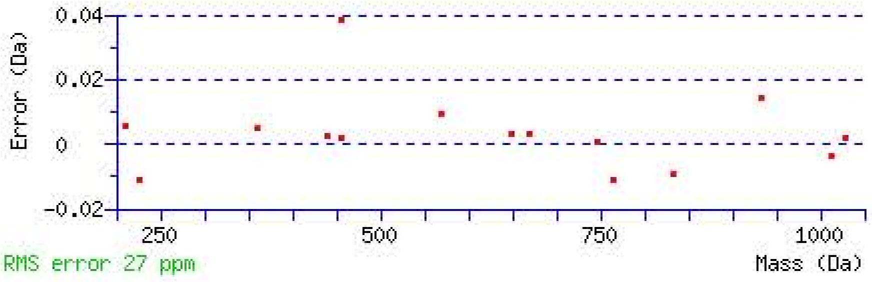
Match to Query 37103: 1596.828222 from(533.283350,3+) rtinseconds(1978) index(68636)
Title: Locus:1.1.1.1626.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

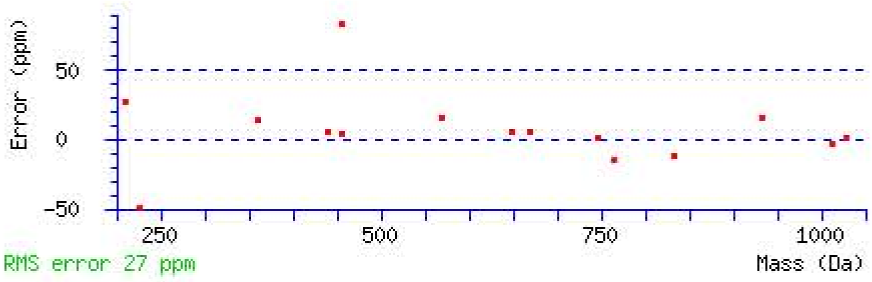
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1596.833389
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.058
Matches : 15/114 fragment ions using 28 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 11 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 1468.798084 | 734.902680 | 1451.771535 | 726.389406 | 1450.787519 | 725.897398 | 10 |
| 3 | 666.327959 | 333.667618 | 649.301410 | 325.154343 | 648.317394 | 324.662335 | Q | 1371.745320 | 686.376298 | 1354.718771 | 677.863024 | 1353.734755 | 677.371016 | 9 |
| 4 | **765.396373** | 383.201825 | 748.369824 | 374.688550 | 747.385808 | 374.196542 | V | ***932.519994*** | 466.763635 | 915.493445 | 458.250361 | 914.509429 | 457.758353 | 8 |
| 5 | 928.459702 | 464.733489 | 911.433153 | 456.220215 | 910.449137 | 455.728207 | Y | ***833.451580*** | 417.229428 | 816.425031 | 408.716154 | 815.441015 | 408.224146 | 7 |
| 6 | **1029.507381** | 515.257329 | 1012.480832 | 506.744054 | 1011.496816 | 506.252046 | T | ***670.388251*** | 335.697764 | 653.361702 | 327.184489 | 652.377686 | 326.692481 | 6 |
| 7 | 1142.591445 | 571.799361 | 1125.564896 | 563.286086 | 1124.580880 | 562.794078 | L | ***569.340572*** | 285.173924 | 552.314023 | 276.660650 | 551.330007 | 276.168642 | 5 |
| 8 | 1239.644209 | 620.325743 | 1222.617660 | 611.812468 | 1221.633644 | 611.320460 | P | ***456.256508*** | 228.631892 | 439.229959 | 220.118618 | 438.245943 | 219.626610 | 4 |
| 9 | 1336.696973 | 668.852125 | 1319.670424 | 660.338850 | 1318.686408 | 659.846842 | P | ***359.203744*** | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 10 | 1423.729001 | 712.368139 | 1406.702452 | 703.854864 | 1405.718436 | 703.362856 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EPQVYTLPPSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.7 | 1596.833389 | -0.005167 | EPQVYTLPPSR |

**Mascot:** http://www.matrixscience.com/

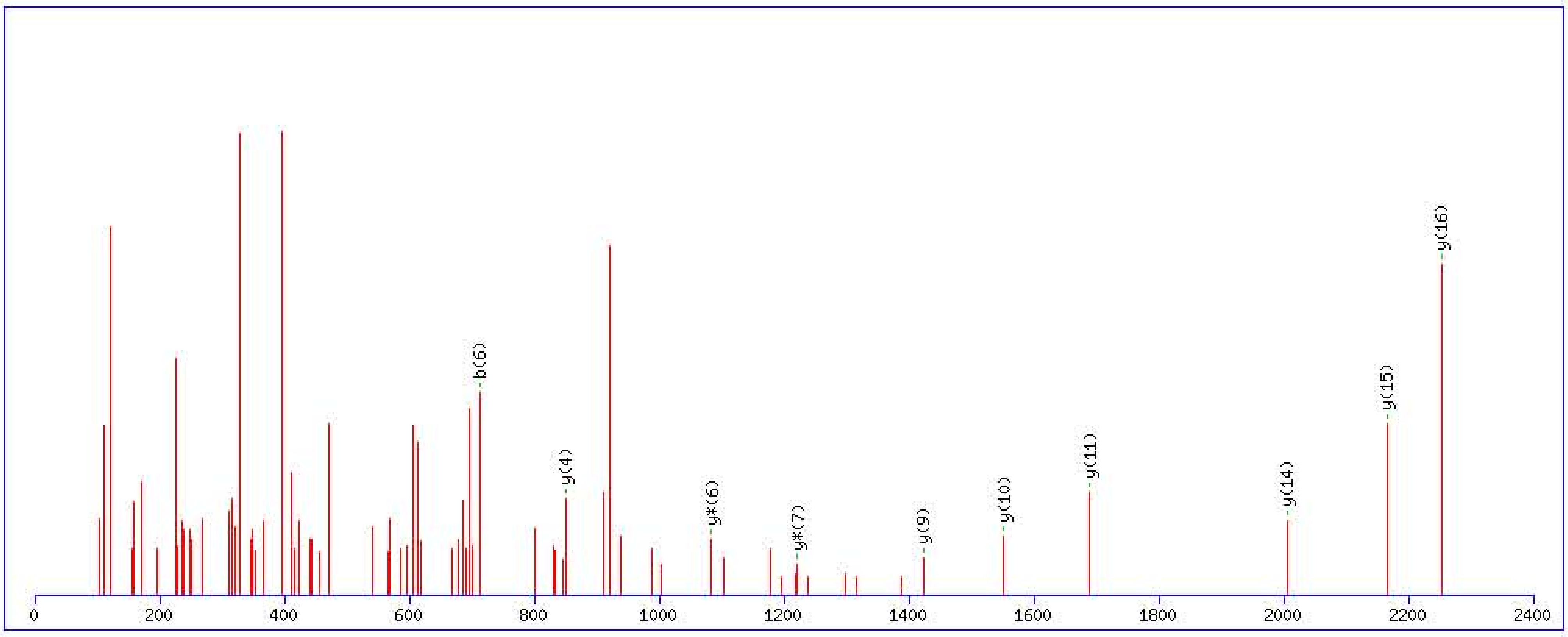
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **WQQGNVFSCSVMHEALHNHYTQK**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

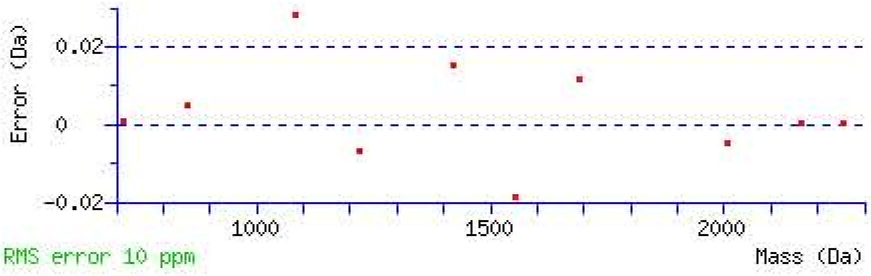
Match to Query 62423: 3111.433920 from(623.294060,5+) rtinseconds(2036) index(6027)
Title: Locus:1.1.1.1518.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

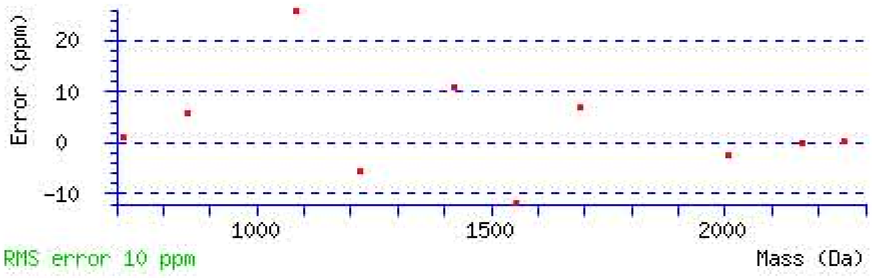
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [0] to [2400] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3111.426590
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q22     : Biotin:Thermo-21345 (Q)
Ions Score: 26  Expect: 0.038
Matches : 10/244 fragment ions using 19 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 187.086589 | 94.046932 | | | | | W | | | | | | | 23 |
| 2 | 315.145167 | 158.076222 | 298.118618 | 149.562947 | | | Q | 2926.354551 | 1463.680913 | 2909.328002 | 1455.167639 | 2908.343986 | 1454.675631 | 22 |
| 3 | 443.203745 | 222.105511 | 426.177196 | 213.592236 | | | Q | 2798.295973 | 1399.651624 | 2781.269424 | 1391.138350 | 2780.285408 | 1390.646342 | 21 |
| 4 | 500.225209 | 250.616243 | 483.198660 | 242.102968 | | | G | 2670.237395 | 1335.622335 | 2653.210846 | 1327.109061 | 2652.226830 | 1326.617053 | 20 |
| 5 | 614.268136 | 307.637706 | 597.241587 | 299.124432 | | | N | 2613.215931 | 1307.111603 | 2596.189382 | 1298.598329 | 2595.205366 | 1298.106321 | 19 |
| 6 | 713.336550 | 357.171913 | 696.310001 | 348.658639 | | | V | 2499.173004 | 1250.090140 | 2482.146455 | 1241.576865 | 2481.162439 | 1241.084857 | 18 |
| 7 | 860.404964 | 430.706120 | 843.378415 | 422.192845 | | | F | 2400.104590 | 1200.555933 | 2383.078041 | 1192.042658 | 2382.094025 | 1191.550650 | 17 |
| 8 | 947.436992 | 474.222134 | 930.410443 | 465.708859 | 929.426427 | 465.216851 | S | ***2253.036176*** | 1127.021726 | 2236.009627 | 1118.508451 | 2235.025611 | 1118.016443 | 16 |
| 9 | 1107.467641 | 554.237459 | 1090.441092 | 545.724184 | 1089.457076 | 545.232176 | C | ***2166.004148*** | 1083.505712 | 2148.977599 | 1074.992437 | 2147.993583 | 1074.500429 | 15 |
| 10 | 1194.499669 | 597.753473 | 1177.473120 | 589.240198 | 1176.489104 | 588.748190 | S | ***2005.973499*** | 1003.490388 | 1988.946950 | 994.977113 | 1987.962934 | 994.485105 | 14 |
| 11 | 1293.568083 | 647.287680 | 1276.541534 | 638.774405 | 1275.557518 | 638.282397 | V | 1918.941471 | 959.974373 | 1901.914922 | 951.461099 | 1900.930906 | 950.969091 | 13 |
| 12 | 1424.608568 | 712.807922 | 1407.582019 | 704.294648 | 1406.598003 | 703.802640 | M | 1819.873057 | 910.440166 | 1802.846508 | 901.926892 | 1801.862492 | 901.434884 | 12 |
| 13 | 1561.667480 | 781.337378 | 1544.640931 | 772.824104 | 1543.656915 | 772.332096 | H | ***1688.832572*** | 844.919924 | 1671.806023 | 836.406649 | 1670.822007 | 835.914641 | 11 |
| 14 | 1690.710073 | 845.858675 | 1673.683524 | 837.345400 | 1672.699508 | 836.853392 | E | ***1551.773660*** | 776.390468 | 1534.747111 | 767.877193 | 1533.763095 | 767.385185 | 10 |
| 15 | 1761.747187 | 881.377231 | 1744.720638 | 872.863957 | 1743.736622 | 872.371949 | A | ***1422.731067*** | 711.869171 | 1405.704518 | 703.355897 | 1404.720502 | 702.863889 | 9 |
| 16 | 1874.831251 | 937.919263 | 1857.804702 | 929.405989 | 1856.820686 | 928.913981 | L | 1351.693953 | 676.350615 | 1334.667404 | 667.837340 | 1333.683388 | 667.345332 | 8 |
| 17 | 2011.890163 | 1006.448719 | 1994.863614 | 997.935445 | 1993.879598 | 997.443437 | H | 1238.609889 | 619.808583 | 1221.583340 | 611.295308 | 1220.599324 | 610.803300 | 7 |
| 18 | 2125.933090 | 1063.470183 | 2108.906541 | 1054.956908 | 2107.922525 | 1054.464900 | N | 1101.550977 | 551.279127 | 1084.524428 | 542.765852 | 1083.540412 | 542.273844 | 6 |
| 19 | 2262.992002 | 1131.999639 | 2245.965453 | 1123.486364 | 2244.981437 | 1122.994356 | H | 987.508050 | 494.257663 | 970.481501 | 485.744389 | 969.497485 | 485.252381 | 5 |
| 20 | 2426.055331 | 1213.531303 | 2409.028782 | 1205.018029 | 2408.044766 | 1204.526021 | Y | ***850.449138*** | 425.728207 | 833.422589 | 417.214933 | 832.438573 | 416.722925 | 4 |
| 21 | 2527.103010 | 1264.055143 | 2510.076461 | 1255.541868 | 2509.092445 | 1255.049860 | T | 687.385809 | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 22 | 2966.328336 | 1483.667806 | 2949.301787 | 1475.154531 | 2948.317771 | 1474.662523 | Q | 586.338130 | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 23 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of WQQGNVFSCSVMHEALHNHYTQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.7 | 3111.426590 | 0.007330 | WQQGNVFSCSVMHEALHNHYTQK |

**Mascot:** http://www.matrixscience.com/

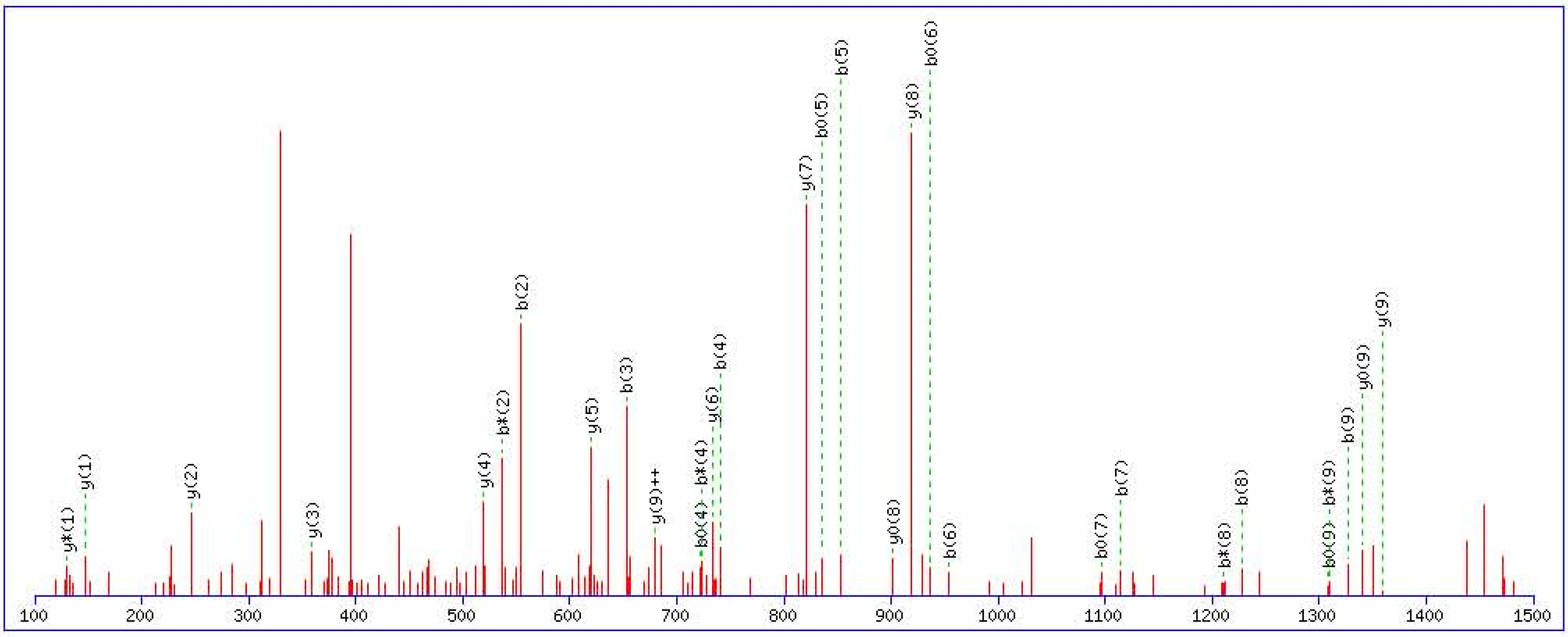
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NQVSLTCLVK**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

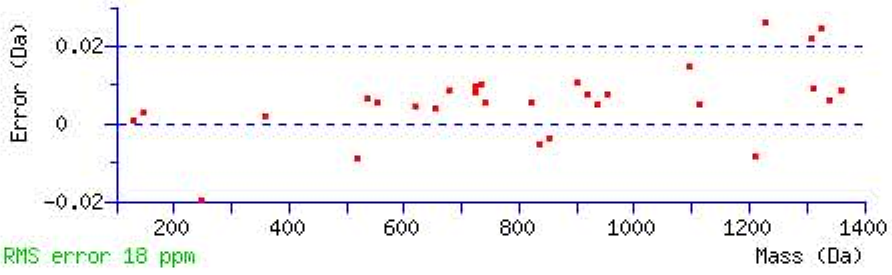
Match to Query 33089: 1471.788588 from(736.901570,2+) rtinseconds(2245) index(70233)
Title: Locus:1.1.1.1719.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

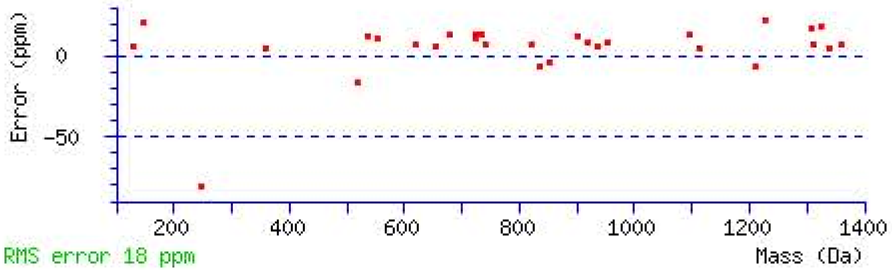
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1471.789093
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.00031
Matches : 30/94 fragment ions using 66 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 10 |
| 2 | **554.275529** | 277.641403 | 537.248980 | 269.128128 | | | Q | ***1358.753442*** | 679.880359 | 1341.726893 | 671.367085 | 1340.742877 | 670.875076 | 9 |
| 3 | **653.343943** | 327.175610 | 636.317394 | 318.662335 | | | V | ***919.528116*** | 460.267696 | 902.501567 | 451.754421 | 901.517551 | 451.262413 | 8 |
| 4 | **740.375971** | 370.691623 | 723.349422 | 362.178349 | 722.365406 | 361.686341 | S | ***820.459702*** | 410.733489 | 803.433153 | 402.220215 | 802.449137 | 401.728207 | 7 |
| 5 | **853.460035** | 427.233656 | 836.433486 | 418.720381 | 835.449470 | 418.228373 | L | ***733.427674*** | 367.217475 | 716.401125 | 358.704201 | 715.417109 | 358.212193 | 6 |
| 6 | **954.507714** | 477.757495 | 937.481165 | 469.244220 | 936.497149 | 468.752212 | T | ***620.343610*** | 310.675443 | 603.317061 | 302.162169 | 602.333045 | 301.670161 | 5 |
| 7 | **1114.538363** | 557.772819 | 1097.511814 | 549.259545 | 1096.527798 | 548.767537 | C | ***519.295931*** | 260.151604 | 502.269382 | 251.638329 | | | 4 |
| 8 | **1227.622427** | 614.314851 | 1210.595878 | 605.801577 | 1209.611862 | 605.309569 | L | ***359.265282*** | 180.136279 | 342.238733 | 171.623004 | | | 3 |
| 9 | **1326.690841** | 663.849058 | 1309.664292 | 655.335784 | 1308.680276 | 654.843776 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of NQVSLTCLVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.5 | 1471.789093 | -0.000505 | NQVSLTCLVK |
| 5.8 | 1471.806793 | -0.018205 | AAALLAKQAEMEVK |
| 4.4 | 1471.797592 | -0.009004 | KYFWDRAFLVK |
| 4.0 | 1471.803467 | -0.014879 | EKQGPLLDLFGQK |
| 2.4 | 1471.799438 | -0.010850 | EVELDRLRDTVK |
| 1.9 | 1471.792908 | -0.004320 | NITINCVKGINAR |
| 1.9 | 1471.777847 | 0.010741 | QLDMELVSVK |
| 1.3 | 1471.792221 | -0.003633 | NESIIPLSPFEVK |

**Mascot:** http://www.matrixscience.com/

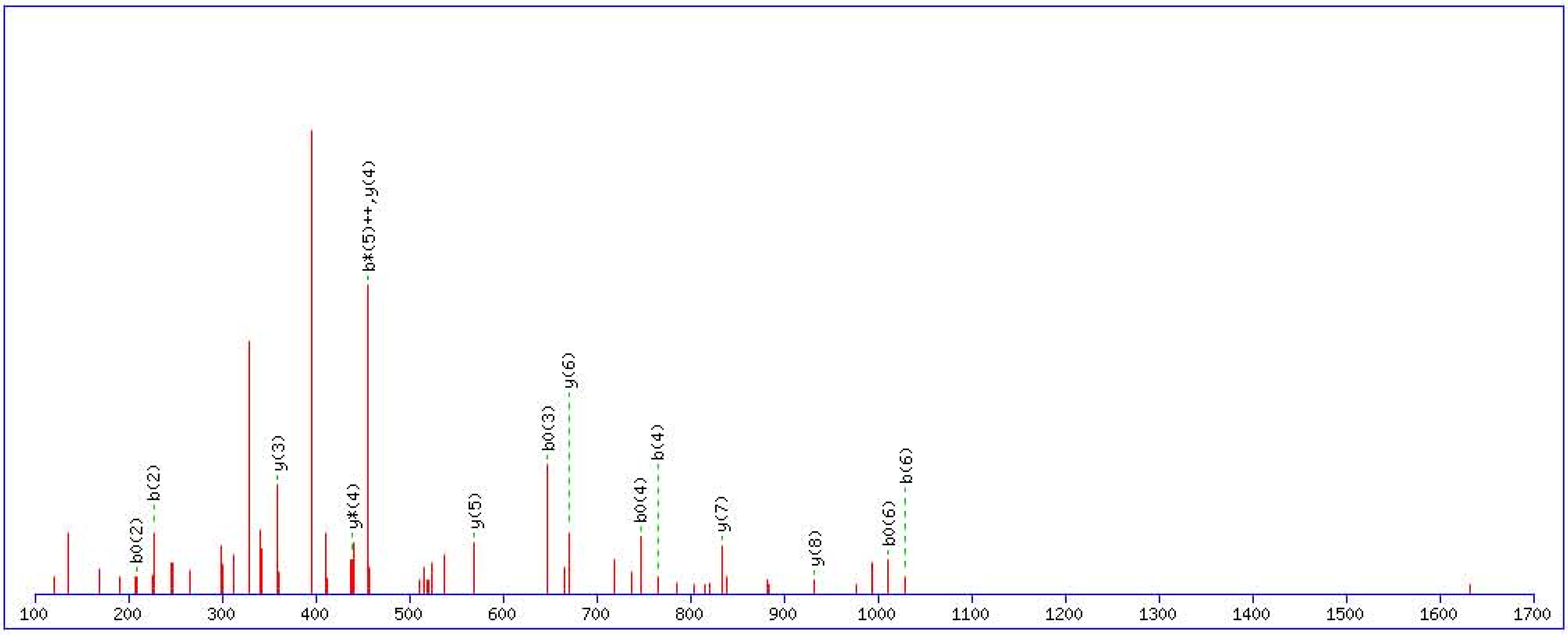
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EPQVYTLPPSR**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

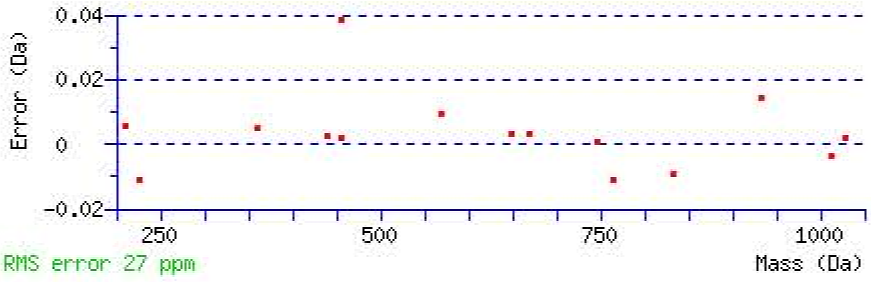
Match to Query 37103: 1596.828222 from(533.283350,3+) rtinseconds(1978) index(68636)
Title: Locus:1.1.1.1626.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

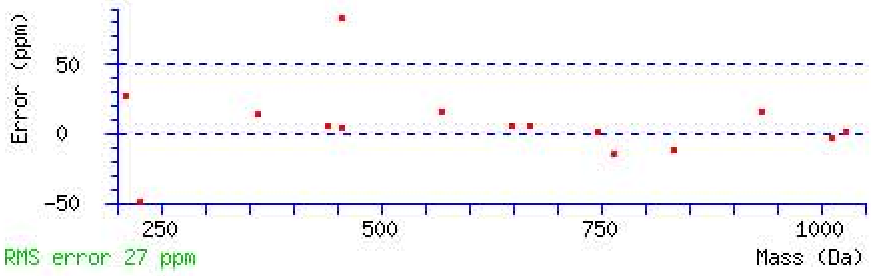
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1596.833389
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.058
**Matches :** 15/114 fragment ions using 28 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 11 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 1468.798084 | 734.902680 | 1451.771535 | 726.389406 | 1450.787519 | 725.897398 | 10 |
| 3 | 666.327959 | 333.667618 | 649.301410 | 325.154343 | 648.317394 | 324.662335 | Q | 1371.745320 | 686.376298 | 1354.718771 | 677.863024 | 1353.734755 | 677.371016 | 9 |
| 4 | **765.396373** | 383.201825 | 748.369824 | 374.688550 | 747.385808 | 374.196542 | V | ***932.519994*** | 466.763635 | 915.493445 | 458.250361 | 914.509429 | 457.758353 | 8 |
| 5 | 928.459702 | 464.733489 | 911.433153 | 456.220215 | 910.449137 | 455.728207 | Y | ***833.451580*** | 417.229428 | 816.425031 | 408.716154 | 815.441015 | 408.224146 | 7 |
| 6 | **1029.507381** | 515.257329 | 1012.480832 | 506.744054 | 1011.496816 | 506.252046 | T | ***670.388251*** | 335.697764 | 653.361702 | 327.184489 | 652.377686 | 326.692481 | 6 |
| 7 | 1142.591445 | 571.799361 | 1125.564896 | 563.286086 | 1124.580880 | 562.794078 | L | ***569.340572*** | 285.173924 | 552.314023 | 276.660650 | 551.330007 | 276.168642 | 5 |
| 8 | 1239.644209 | 620.325743 | 1222.617660 | 611.812468 | 1221.633644 | 611.320460 | P | ***456.256508*** | 228.631892 | 439.229959 | 220.118618 | 438.245943 | 219.626610 | 4 |
| 9 | 1336.696973 | 668.852125 | 1319.670424 | 660.338850 | 1318.686408 | 659.846842 | P | ***359.203744*** | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 10 | 1423.729001 | 712.368139 | 1406.702452 | 703.854864 | 1405.718436 | 703.362856 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |



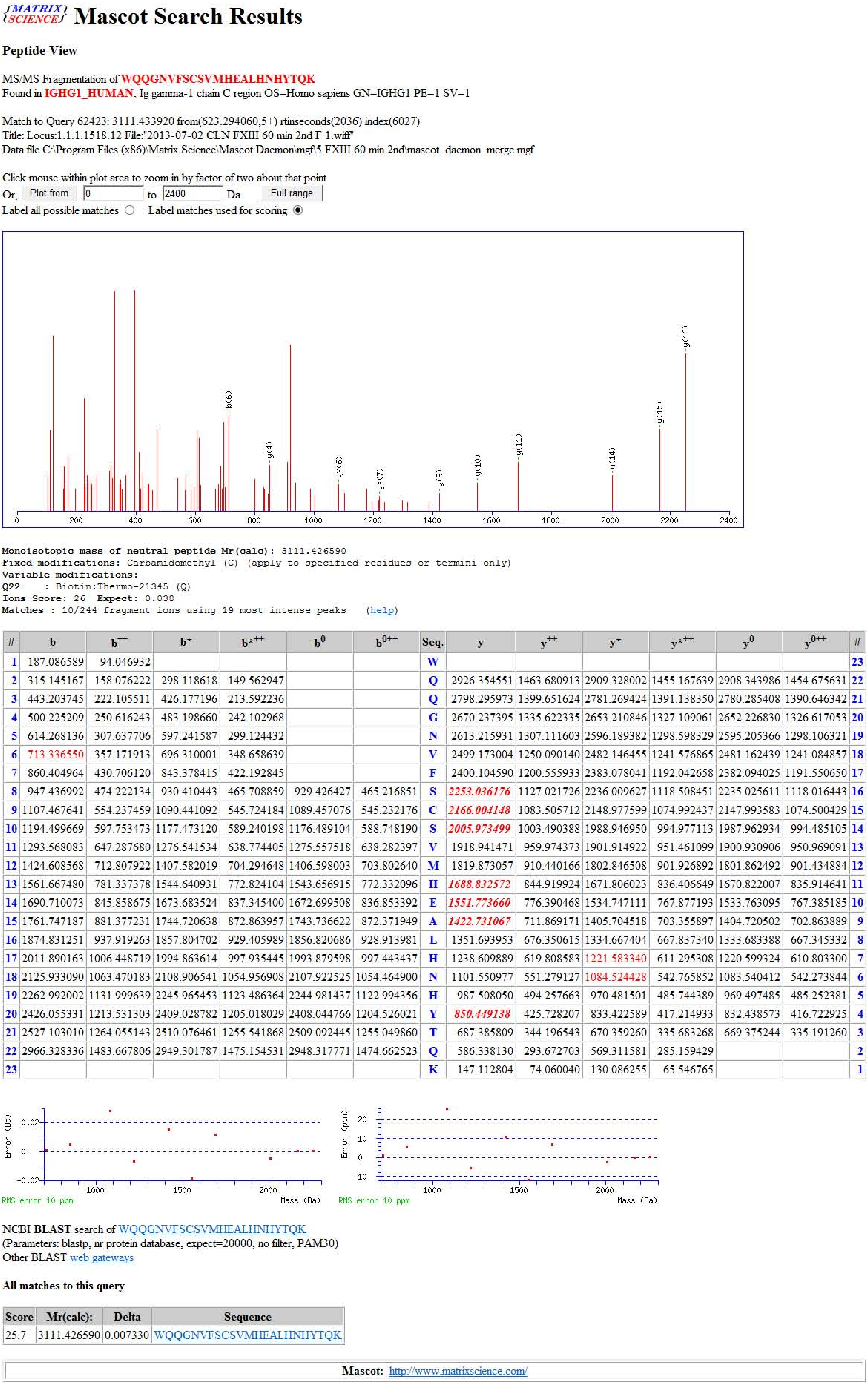


NCBI **BLAST** search of EPQVYTLPPSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.7 | 1596.833389 | -0.005167 | EPQVYTLPPSR |

**Mascot:** http://www.matrixscience.com/



# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **WQQGNVFSCSVMHEALHNHYTQK**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

Match to Query 62423: 3111.433920 from(623.294060,5+) rtinseconds(2036) index(6027)
Title: Locus:1.1.1.1518.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 3111.426590
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q22     : Biotin:Thermo-21345 (Q)
Ions Score: 26  Expect: 0.038
Matches : 10/244 fragment ions using 19 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 187.086589 | 94.046932 | | | | | W | | | | | | | 23 |
| 2 | 315.145167 | 158.076222 | 298.118618 | 149.562947 | | | Q | 2926.354551 | 1463.680913 | 2909.328002 | 1455.167639 | 2908.343986 | 1454.675631 | 22 |
| 3 | 443.203745 | 222.105511 | 426.177196 | 213.592236 | | | Q | 2798.295973 | 1399.651624 | 2781.269424 | 1391.138350 | 2780.285408 | 1390.646342 | 21 |
| 4 | 500.225209 | 250.616243 | 483.198660 | 242.102968 | | | G | 2670.237395 | 1335.622335 | 2653.210846 | 1327.109061 | 2652.226830 | 1326.617053 | 20 |
| 5 | 614.268136 | 307.637706 | 597.241587 | 299.124432 | | | N | 2613.215931 | 1307.111603 | 2596.189382 | 1298.598329 | 2595.205366 | 1298.106321 | 19 |
| 6 | 713.336550 | 357.171913 | 696.310001 | 348.658639 | | | V | 2499.173004 | 1250.090140 | 2482.146455 | 1241.576865 | 2481.162439 | 1241.084857 | 18 |
| 7 | 860.404964 | 430.706120 | 843.378415 | 422.192845 | | | F | 2400.104590 | 1200.555933 | 2383.078041 | 1192.042658 | 2382.094025 | 1191.550650 | 17 |
| 8 | 947.436992 | 474.222134 | 930.410443 | 465.708859 | 929.426427 | 465.216851 | S | ***2253.036176*** | 1127.021726 | 2236.009627 | 1118.508451 | 2235.025611 | 1118.016443 | 16 |
| 9 | 1107.467641 | 554.237459 | 1090.441092 | 545.724184 | 1089.457076 | 545.232176 | C | ***2166.004148*** | 1083.505712 | 2148.977599 | 1074.992437 | 2147.993583 | 1074.500429 | 15 |
| 10 | 1194.499669 | 597.753473 | 1177.473120 | 589.240198 | 1176.489104 | 588.748190 | S | ***2005.973499*** | 1003.490388 | 1988.946950 | 994.977113 | 1987.962934 | 994.485105 | 14 |
| 11 | 1293.568083 | 647.287680 | 1276.541534 | 638.774405 | 1275.557518 | 638.282397 | V | 1918.941471 | 959.974373 | 1901.914922 | 951.461099 | 1900.930906 | 950.969091 | 13 |
| 12 | 1424.608568 | 712.807922 | 1407.582019 | 704.294648 | 1406.598003 | 703.802640 | M | 1819.873057 | 910.440166 | 1802.846508 | 901.926892 | 1801.862492 | 901.434884 | 12 |
| 13 | 1561.667480 | 781.337378 | 1544.640931 | 772.824104 | 1543.656915 | 772.332096 | H | ***1688.832572*** | 844.919924 | 1671.806023 | 836.406649 | 1670.822007 | 835.914641 | 11 |
| 14 | 1690.710073 | 845.858675 | 1673.683524 | 837.345400 | 1672.699508 | 836.853392 | E | ***1551.773660*** | 776.390468 | 1534.747111 | 767.877193 | 1533.763095 | 767.385185 | 10 |
| 15 | 1761.747187 | 881.377231 | 1744.720638 | 872.863957 | 1743.736622 | 872.371949 | A | ***1422.731067*** | 711.869171 | 1405.704518 | 703.355897 | 1404.720502 | 702.863889 | 9 |
| 16 | 1874.831251 | 937.919263 | 1857.804702 | 929.405989 | 1856.820686 | 928.913981 | L | 1351.693953 | 676.350615 | 1334.667404 | 667.837340 | 1333.683388 | 667.345332 | 8 |
| 17 | 2011.890163 | 1006.448719 | 1994.863614 | 997.935445 | 1993.879598 | 997.443437 | H | 1238.609889 | 619.808583 | 1221.583340 | 611.295308 | 1220.599324 | 610.803300 | 7 |
| 18 | 2125.933090 | 1063.470183 | 2108.906541 | 1054.956908 | 2107.922525 | 1054.464900 | N | 1101.550977 | 551.279127 | 1084.524428 | 542.765852 | 1083.540412 | 542.273844 | 6 |
| 19 | 2262.992002 | 1131.999639 | 2245.965453 | 1123.486364 | 2244.981437 | 1122.994356 | H | 987.508050 | 494.257663 | 970.481501 | 485.744389 | 969.497485 | 485.252381 | 5 |
| 20 | 2426.055331 | 1213.531303 | 2409.028782 | 1205.018029 | 2408.044766 | 1204.526021 | Y | ***850.449138*** | 425.728207 | 833.422589 | 417.214933 | 832.438573 | 416.722925 | 4 |
| 21 | 2527.103010 | 1264.055143 | 2510.076461 | 1255.541868 | 2509.092445 | 1255.049860 | T | 687.385809 | 344.196543 | 670.359260 | 335.683268 | 669.375244 | 335.191260 | 3 |
| 22 | 2966.328336 | 1483.667806 | 2949.301787 | 1475.154531 | 2948.317771 | 1474.662523 | Q | 586.338130 | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 23 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |

NCBI **BLAST** search of WQQGNVFSCSVMHEALHNHYTQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.7 | 3111.426590 | 0.007330 | WQQGNVFSCSVMHEALHNHYTQK |

**Mascot:** http://www.matrixscience.com/

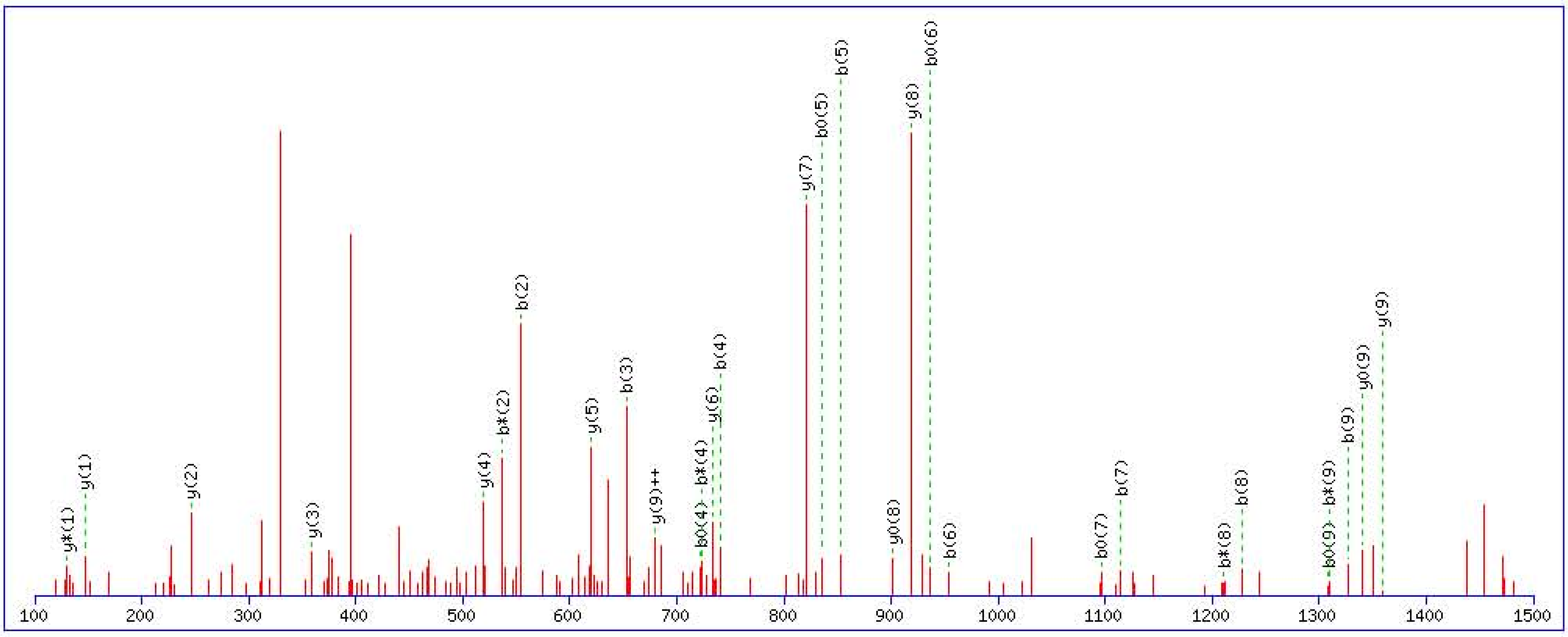
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NQVSLTCLVK**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

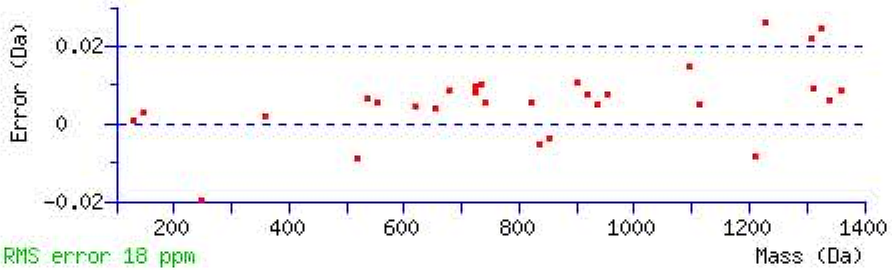
Match to Query 33089: 1471.788588 from(736.901570,2+) rtinseconds(2245) index(70233)
Title: Locus:1.1.1.1719.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●

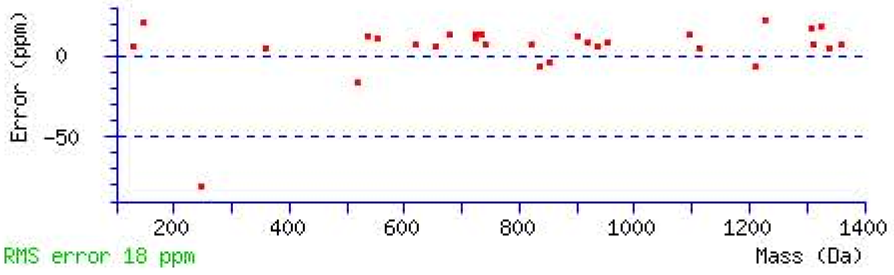


```
Monoisotopic mass of neutral peptide Mr(calc): 1471.789093
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.00031
Matches : 30/94 fragment ions using 66 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 10 |
| 2 | **554.275529** | 277.641403 | 537.248980 | 269.128128 | | | Q | ***1358.753442*** | 679.880359 | 1341.726893 | 671.367085 | 1340.742877 | 670.875076 | 9 |
| 3 | **653.343943** | 327.175610 | 636.317394 | 318.662335 | | | V | ***919.528116*** | 460.267696 | 902.501567 | 451.754421 | 901.517551 | 451.262413 | 8 |
| 4 | **740.375971** | 370.691623 | 723.349422 | 362.178349 | 722.365406 | 361.686341 | S | ***820.459702*** | 410.733489 | 803.433153 | 402.220215 | 802.449137 | 401.728207 | 7 |
| 5 | **853.460035** | 427.233656 | 836.433486 | 418.720381 | 835.449470 | 418.228373 | L | ***733.427674*** | 367.217475 | 716.401125 | 358.704201 | 715.417109 | 358.212193 | 6 |
| 6 | **954.507714** | 477.757495 | 937.481165 | 469.244220 | 936.497149 | 468.752212 | T | ***620.343610*** | 310.675443 | 603.317061 | 302.162169 | 602.333045 | 301.670161 | 5 |
| 7 | **1114.538363** | 557.772819 | 1097.511814 | 549.259545 | 1096.527798 | 548.767537 | C | ***519.295931*** | 260.151604 | 502.269382 | 251.638329 | | | 4 |
| 8 | **1227.622427** | 614.314851 | 1210.595878 | 605.801577 | 1209.611862 | 605.309569 | L | ***359.265282*** | 180.136279 | 342.238733 | 171.623004 | | | 3 |
| 9 | **1326.690841** | 663.849058 | 1309.664292 | 655.335784 | 1308.680276 | 654.843776 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 18 ppm



RMS error 18 ppm

NCBI **BLAST** search of NQVSLTCLVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.5 | 1471.789093 | -0.000505 | NQVSLTCLVK |
| 5.8 | 1471.806793 | -0.018205 | AAALLAKQAEMEVK |
| 4.4 | 1471.797592 | -0.009004 | KYFWDRAFLVK |
| 4.0 | 1471.803467 | -0.014879 | EKQGPLLDLFGQK |
| 2.4 | 1471.799438 | -0.010850 | EVELDRLRDTVK |
| 1.9 | 1471.792908 | -0.004320 | NITINCVKGINAR |
| 1.9 | 1471.777847 | 0.010741 | QLDMELVSVK |
| 1.3 | 1471.792221 | -0.003633 | NESIIPLSPFEVK |

**Mascot:** http://www.matrixscience.com/

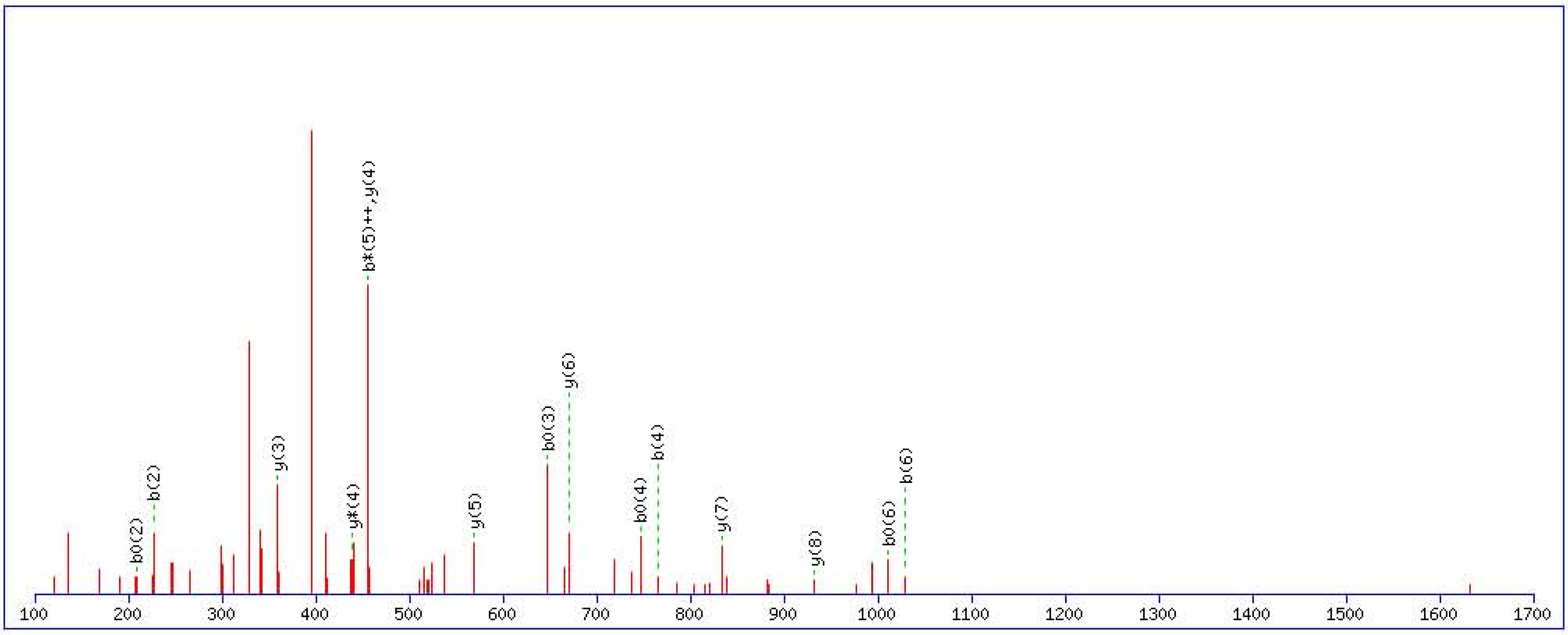
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EPQVYTLPPSR**
Found in **IGHG1_HUMAN**, Ig gamma-1 chain C region OS=Homo sapiens GN=IGHG1 PE=1 SV=1

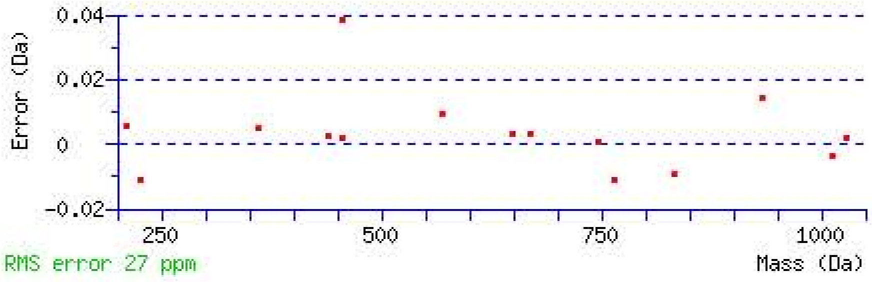
Match to Query 37103: 1596.828222 from(533.283350,3+) rtinseconds(1978) index(68636)
Title: Locus:1.1.1.1626.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

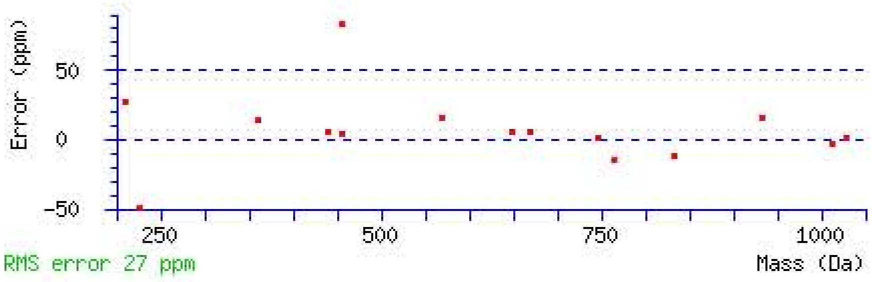
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1596.833389
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.058
Matches : 15/114 fragment ions using 28 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 11 |
| 2 | **227.102633** | 114.054954 | | | 209.092068 | 105.049672 | P | 1468.798084 | 734.902680 | 1451.771535 | 726.389406 | 1450.787519 | 725.897398 | 10 |
| 3 | 666.327959 | 333.667618 | 649.301410 | 325.154343 | 648.317394 | 324.662335 | Q | 1371.745320 | 686.376298 | 1354.718771 | 677.863024 | 1353.734755 | 677.371016 | 9 |
| 4 | **765.396373** | 383.201825 | 748.369824 | 374.688550 | 747.385808 | 374.196542 | V | ***932.519994*** | 466.763635 | 915.493445 | 458.250361 | 914.509429 | 457.758353 | 8 |
| 5 | 928.459702 | 464.733489 | 911.433153 | 456.220215 | 910.449137 | 455.728207 | Y | ***833.451580*** | 417.229428 | 816.425031 | 408.716154 | 815.441015 | 408.224146 | 7 |
| 6 | **1029.507381** | 515.257329 | 1012.480832 | 506.744054 | 1011.496816 | 506.252046 | T | ***670.388251*** | 335.697764 | 653.361702 | 327.184489 | 652.377686 | 326.692481 | 6 |
| 7 | 1142.591445 | 571.799361 | 1125.564896 | 563.286086 | 1124.580880 | 562.794078 | L | ***569.340572*** | 285.173924 | 552.314023 | 276.660650 | 551.330007 | 276.168642 | 5 |
| 8 | 1239.644209 | 620.325743 | 1222.617660 | 611.812468 | 1221.633644 | 611.320460 | P | ***456.256508*** | 228.631892 | 439.229959 | 220.118618 | 438.245943 | 219.626610 | 4 |
| 9 | 1336.696973 | 668.852125 | 1319.670424 | 660.338850 | 1318.686408 | 659.846842 | P | ***359.203744*** | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 10 | 1423.729001 | 712.368139 | 1406.702452 | 703.854864 | 1405.718436 | 703.362856 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EPQVYTLPPSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.7 | 1596.833389 | -0.005167 | EPQVYTLPPSR |

**Mascot:** http://www.matrixscience.com/

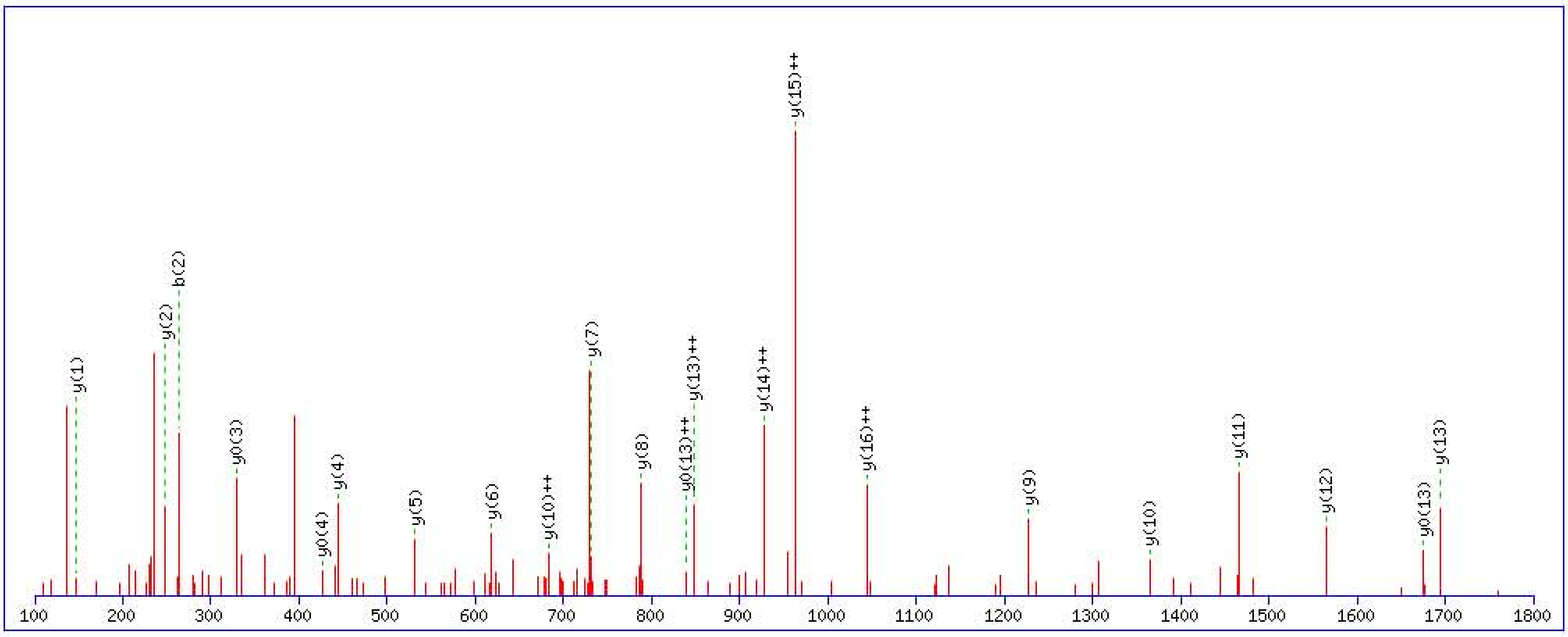
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VYACEVTHQGLSSPVTK**
Found in **IGKC_HUMAN**, Ig kappa chain C region OS=Homo sapiens GN=IGKC PE=1 SV=1

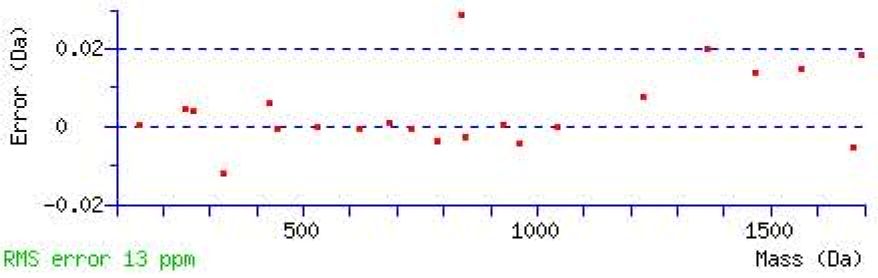
Match to Query 50831: 2186.084112 from(729.701980,3+) rtinseconds(1774) index(67349)
Title: Locus:1.1.1.1555.12 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

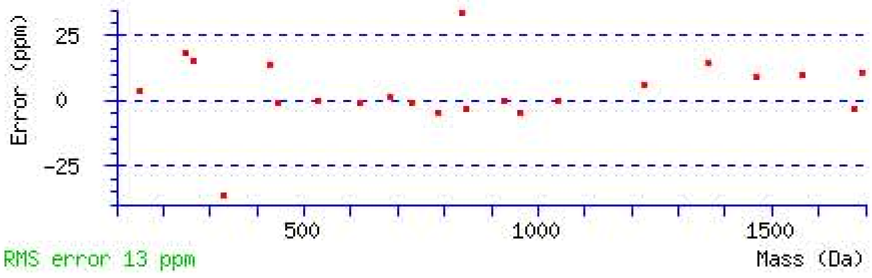
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2186.086411
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q9** : Biotin:Thermo-21345 (Q)
**Ions Score:** 65 **Expect:** 8.3e-006
**Matches :** 22/166 fragment ions using 46 most intense peaks (help)

| # | b | b$^{++}$ | b$^{*}$ | b$^{*++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y$^{*}$ | y$^{*++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 17 |
| 2 | 263.139019 | 132.073148 | | | | | Y | 2088.025261 | 1044.516268 | 2070.998712 | 1036.002994 | 2070.014696 | 1035.510986 | 16 |
| 3 | 334.176133 | 167.591704 | | | | | A | 1924.961932 | 962.984604 | 1907.935383 | 954.471330 | 1906.951367 | 953.979322 | 15 |
| 4 | 494.206782 | 247.607029 | | | | | C | 1853.924818 | 927.466047 | 1836.898269 | 918.952773 | 1835.914253 | 918.460765 | 14 |
| 5 | 623.249375 | 312.128326 | | | 605.238810 | 303.123043 | E | ***1693.894169*** | 847.450723 | 1676.867620 | 838.937448 | 1675.883604 | 838.445440 | 13 |
| 6 | 722.317789 | 361.662533 | | | 704.307224 | 352.657250 | V | ***1564.851576*** | 782.929426 | 1547.825027 | 774.416152 | 1546.841011 | 773.924144 | 12 |
| 7 | 823.365468 | 412.186372 | | | 805.354903 | 403.181090 | T | ***1465.783162*** | 733.395219 | 1448.756613 | 724.881945 | 1447.772597 | 724.389937 | 11 |
| 8 | 960.424380 | 480.715828 | | | 942.413815 | 471.710546 | H | ***1364.735483*** | 682.871380 | 1347.708934 | 674.358105 | 1346.724918 | 673.866097 | 10 |
| 9 | 1399.649706 | 700.328491 | 1382.623157 | 691.815217 | 1381.639141 | 691.323208 | Q | ***1227.676571*** | 614.341924 | 1210.650022 | 605.828649 | 1209.666006 | 605.336641 | 9 |
| 10 | 1456.671170 | 728.839223 | 1439.644621 | 720.325948 | 1438.660605 | 719.833940 | G | ***788.451245*** | 394.729261 | 771.424696 | 386.215986 | 770.440680 | 385.723978 | 8 |
| 11 | 1569.755234 | 785.381255 | 1552.728685 | 776.867980 | 1551.744669 | 776.375972 | L | ***731.429781*** | 366.218529 | 714.403232 | 357.705254 | 713.419216 | 357.213246 | 7 |
| 12 | 1656.787262 | 828.897269 | 1639.760713 | 820.383994 | 1638.776697 | 819.891986 | S | ***618.345717*** | 309.676497 | 601.319168 | 301.163222 | 600.335152 | 300.671214 | 6 |
| 13 | 1743.819290 | 872.413283 | 1726.792741 | 863.900009 | 1725.808725 | 863.408000 | S | ***531.313689*** | 266.160483 | 514.287140 | 257.647208 | 513.303124 | 257.155200 | 5 |
| 14 | 1840.872054 | 920.939665 | 1823.845505 | 912.426391 | 1822.861489 | 911.934382 | P | ***444.281661*** | 222.644469 | 427.255112 | 214.131194 | 426.271096 | 213.639186 | 4 |
| 15 | 1939.940468 | 970.473872 | 1922.913919 | 961.960598 | 1921.929903 | 961.468590 | V | 347.228897 | 174.118087 | 330.202348 | 165.604812 | 329.218332 | 165.112804 | 3 |
| 16 | 2040.988147 | 1020.997712 | 2023.961598 | 1012.484437 | 2022.977582 | 1011.992429 | T | ***248.160483*** | 124.583880 | 231.133934 | 116.070605 | 230.149918 | 115.578597 | 2 |
| 17 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546766 | | | 1 |





NCBI **BLAST** search of VYACEVTHQGLSSPVTK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.2 | 2186.086411 | -0.002299 | VYACEVTHQGLSSPVTK |

**Mascot:** http://www.matrixscience.com/

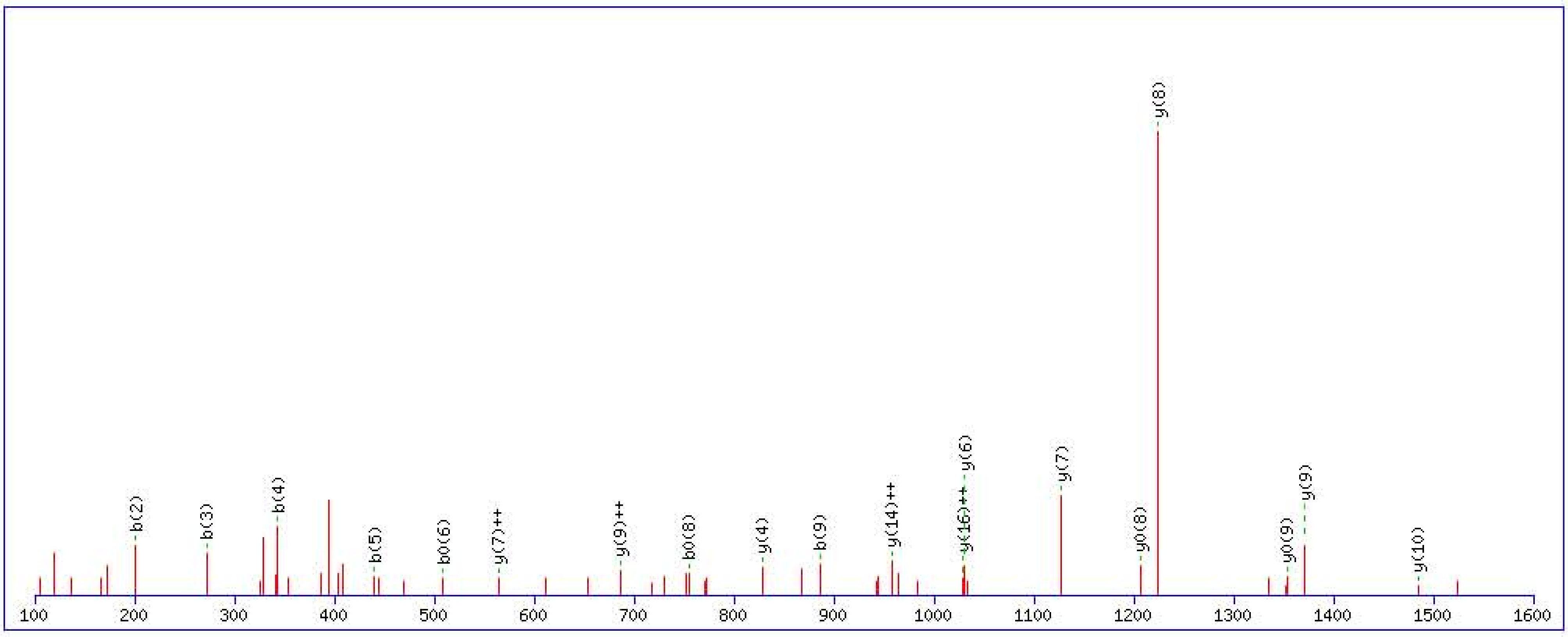
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TVAAPSVFIFPPSDEQLK**
Found in **IGKC_HUMAN**, Ig kappa chain C region OS=Homo sapiens GN=IGKC PE=1 SV=1

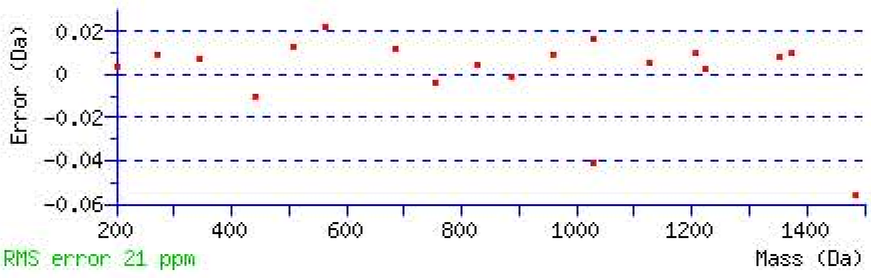
Match to Query 52106: 2256.193482 from(753.071770,3+) rtinseconds(2679) index(72593)
Title: Locus:1.1.1.1870.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

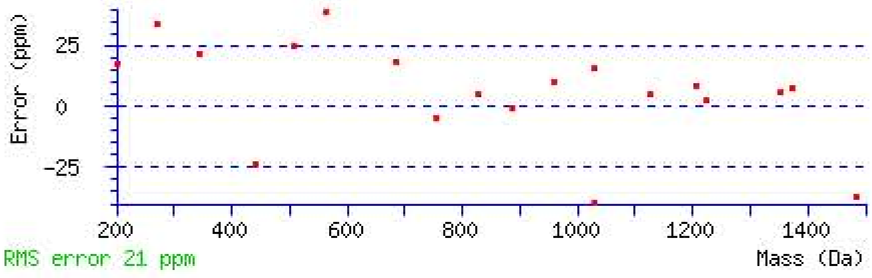
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1600] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2256.186432
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 7.5e-005
Matches : 19/168 fragment ions using 26 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 18 |
| 2 | ***201.123369*** | 101.065322 | | | 183.112804 | 92.060040 | V | 2156.146026 | 1078.576651 | 2139.119477 | 1070.063377 | 2138.135461 | 1069.571369 | 17 |
| 3 | ***272.160483*** | 136.583879 | | | 254.149918 | 127.578597 | A | 2057.077612 | 1029.042444 | 2040.051063 | 1020.529170 | 2039.067047 | 1020.037162 | 16 |
| 4 | ***343.197597*** | 172.102437 | | | 325.187032 | 163.097154 | A | 1986.040498 | 993.523887 | 1969.013949 | 985.010613 | 1968.029933 | 984.518605 | 15 |
| 5 | ***440.250361*** | 220.628819 | | | 422.239796 | 211.623536 | P | 1915.003384 | 958.005330 | 1897.976835 | 949.492056 | 1896.992819 | 949.000048 | 14 |
| 6 | 527.282389 | 264.144833 | | | 509.271824 | 255.139550 | S | 1817.950620 | 909.478948 | 1800.924071 | 900.965674 | 1799.940055 | 900.473666 | 13 |
| 7 | 626.350803 | 313.679040 | | | 608.340238 | 304.673757 | V | 1730.918592 | 865.962934 | 1713.892043 | 857.449660 | 1712.908027 | 856.957652 | 12 |
| 8 | 773.419217 | 387.213247 | | | 755.408652 | 378.207964 | F | 1631.850178 | 816.428727 | 1614.823629 | 807.915453 | 1613.839613 | 807.423445 | 11 |
| 9 | ***886.503281*** | 443.755279 | | | 868.492716 | 434.749996 | I | ***1484.781764*** | 742.894520 | 1467.755215 | 734.381246 | 1466.771199 | 733.889238 | 10 |
| 10 | 1033.571695 | 517.289486 | | | 1015.561130 | 508.284203 | F | ***1371.697700*** | 686.352488 | 1354.671151 | 677.839214 | 1353.687135 | 677.347206 | 9 |
| 11 | 1130.624459 | 565.815868 | | | 1112.613894 | 556.810585 | P | ***1224.629286*** | 612.818281 | 1207.602737 | 604.305007 | 1206.618721 | 603.812999 | 8 |
| 12 | 1227.677223 | 614.342250 | | | 1209.666658 | 605.336967 | P | ***1127.576522*** | 564.291899 | 1110.549973 | 555.778625 | 1109.565957 | 555.286617 | 7 |
| 13 | 1314.709251 | 657.858264 | | | 1296.698686 | 648.852981 | S | ***1030.523758*** | 515.765517 | 1013.497209 | 507.252243 | 1012.513193 | 506.760235 | 6 |
| 14 | 1429.736194 | 715.371735 | | | 1411.725629 | 706.366453 | D | 943.491730 | 472.249503 | 926.465181 | 463.736229 | 925.481165 | 463.244221 | 5 |
| 15 | 1558.778787 | 779.893032 | | | 1540.768222 | 770.887749 | E | ***828.464787*** | 414.736032 | 811.438238 | 406.222757 | 810.454222 | 405.730749 | 4 |
| 16 | 1998.004113 | 999.505695 | 1980.977564 | 990.992420 | 1979.993548 | 990.500412 | Q | 699.422194 | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 17 | 2111.088177 | 1056.047727 | 2094.061628 | 1047.534452 | 2093.077612 | 1047.042444 | L | 260.196868 | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 18 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TVAAPSVFIFPPSDEQLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.4 | 2256.186432 | 0.007050 | TVAAPSVFIFPPSDEQLK |
| 3.5 | 2256.171860 | 0.021622 | QVVCDLGNPMKAGTQLLAGLR |

**Mascot:** http://www.matrixscience.com/

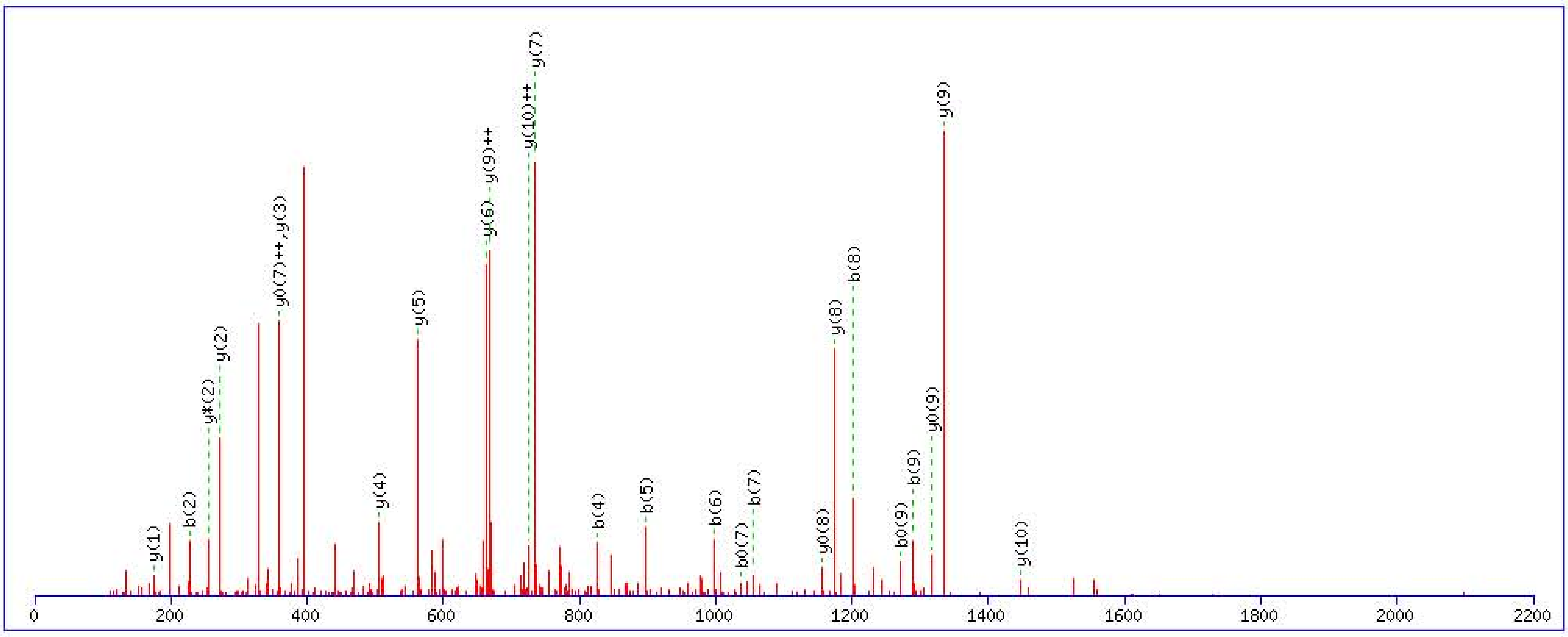
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LICQATGFSPR**
Found in **IGHM_HUMAN**, Ig mu chain C region OS=Homo sapiens GN=IGHM PE=1 SV=3

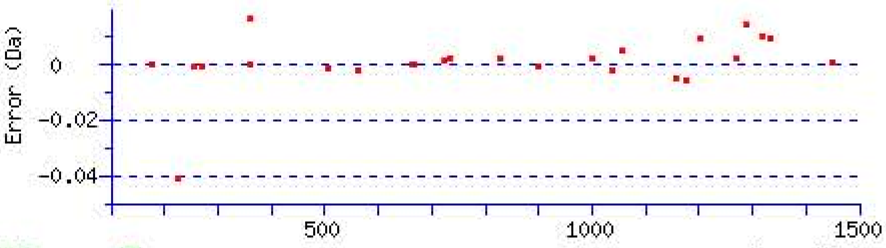
Match to Query 35292: 1559.799568 from(780.907060,2+) rtinseconds(1978) index(36286)
Title: Locus:1.1.1.3108.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●

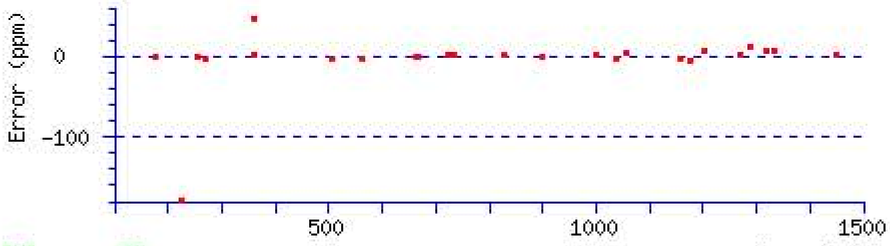


```
Monoisotopic mass of neutral peptide Mr(calc): 1559.795242
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 6.5e-006
Matches : 25/100 fragment ions using 44 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 11 |
| 2 | **227.175404** | 114.091340 | | | | | I | ***1447.718454*** | 724.362865 | 1430.691905 | 715.849591 | 1429.707889 | 715.357583 | 10 |
| 3 | 387.206053 | 194.106664 | | | | | C | ***1334.634390*** | 667.820833 | 1317.607841 | 659.307559 | 1316.623825 | 658.815551 | 9 |
| 4 | **826.431379** | 413.719328 | 809.404830 | 405.206053 | | | Q | ***1174.603741*** | 587.805509 | 1157.577192 | 579.292234 | 1156.593176 | 578.800226 | 8 |
| 5 | **897.468493** | 449.237885 | 880.441944 | 440.724610 | | | A | ***735.378415*** | 368.192846 | 718.351866 | 359.679571 | 717.367850 | 359.187563 | 7 |
| 6 | **998.516172** | 499.761724 | 981.489623 | 491.248449 | 980.505607 | 490.756441 | T | ***664.341301*** | 332.674289 | 647.314752 | 324.161014 | 646.330736 | 323.669006 | 6 |
| 7 | **1055.537636** | 528.272456 | 1038.511087 | 519.759182 | 1037.527071 | 519.267174 | G | ***563.293622*** | 282.150449 | 546.267073 | 273.637175 | 545.283057 | 273.145167 | 5 |
| 8 | **1202.606050** | 601.806663 | 1185.579501 | 593.293389 | 1184.595485 | 592.801381 | F | ***506.272158*** | 253.639717 | 489.245609 | 245.126443 | 488.261593 | 244.634435 | 4 |
| 9 | **1289.638078** | 645.322677 | 1272.611529 | 636.809403 | 1271.627513 | 636.317395 | S | ***359.203744*** | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 10 | 1386.690842 | 693.849059 | 1369.664293 | 685.335785 | 1368.680277 | 684.843777 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 37 ppm



RMS error 37 ppm

NCBI **BLAST** search of LICQATGFSPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.3 | 1559.795242 | 0.004326 | LICQATGFSPR |
| 13.0 | 1559.808960 | -0.009392 | LDRLSGLADQMVAR |
| 8.8 | 1559.820190 | -0.020622 | MTRSATQAAKQVPR |
| 4.7 | 1559.808975 | -0.009407 | LLDRDACDTVRVK |
| 1.6 | 1559.787827 | 0.011741 | SLHPAMLPAADGAGPR |

**Mascot:** http://www.matrixscience.com/

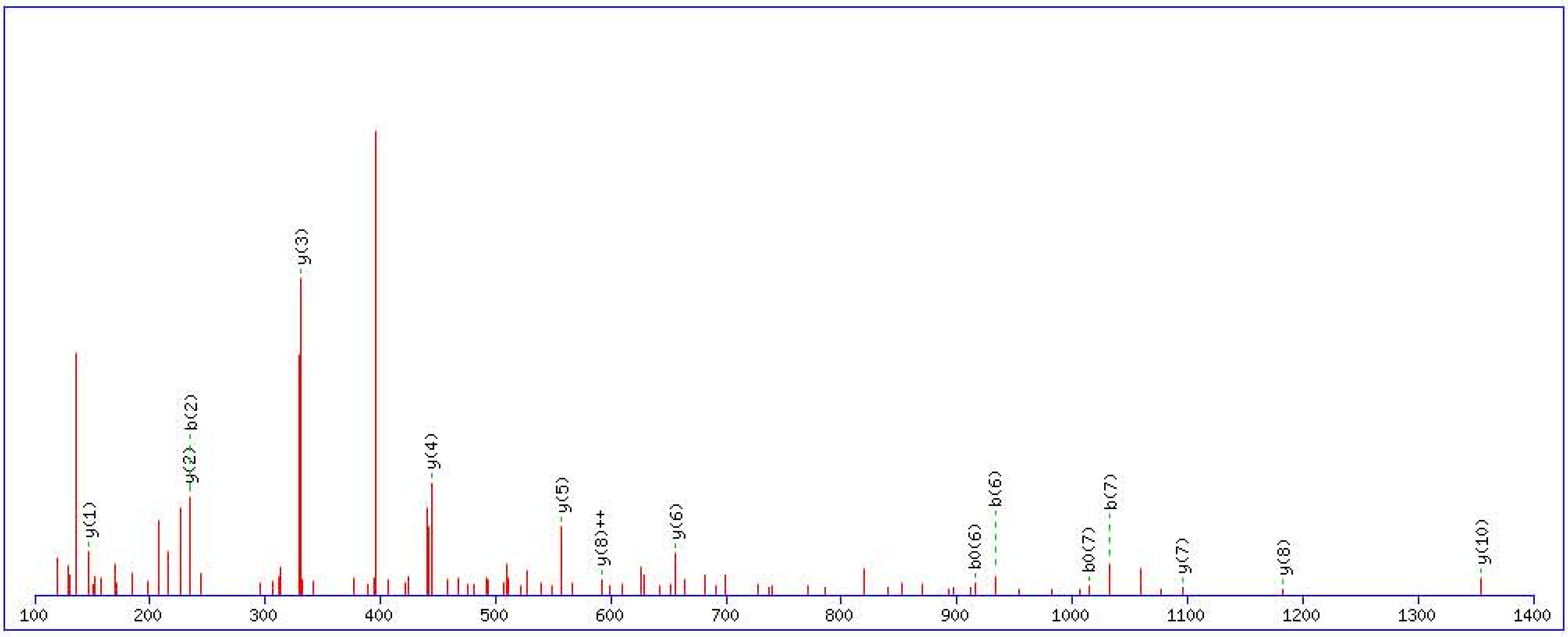
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YAATSQVLLPSK**
Found in **IGHM_HUMAN**, Ig mu chain C region OS=Homo sapiens GN=IGHM PE=1 SV=3

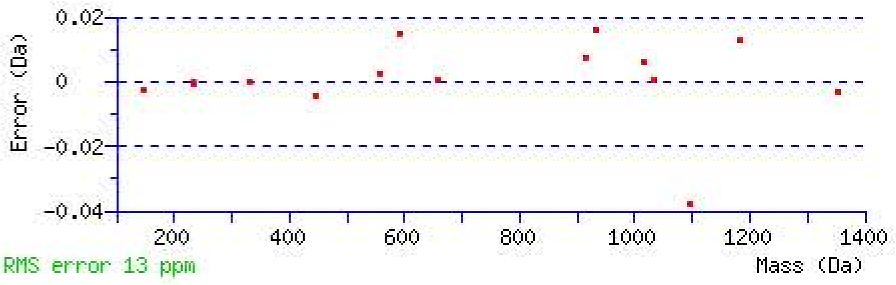
Match to Query 36571: 1587.868092 from(530.296640,3+) rtinseconds(2041) index(36644)
Title: Locus:1.1.1.3130.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

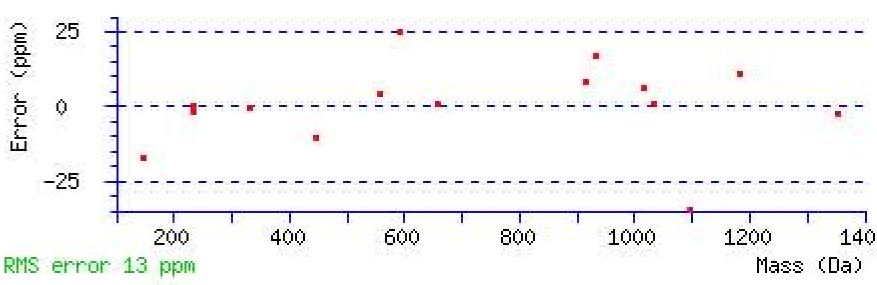
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1587.869431
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 0.00011
Matches : 15/114 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 12 |
| 2 | **235.107719** | 118.057498 | | | | | A | 1425.813399 | 713.410337 | 1408.786850 | 704.897063 | 1407.802834 | 704.405055 | 11 |
| 3 | 306.144833 | 153.576055 | | | | | A | ***1354.776285*** | 677.891780 | 1337.749736 | 669.378506 | 1336.765720 | 668.886498 | 10 |
| 4 | 407.192512 | 204.099894 | | | 389.181947 | 195.094612 | T | 1283.739171 | 642.373223 | 1266.712622 | 633.859949 | 1265.728606 | 633.367941 | 9 |
| 5 | 494.224540 | 247.615908 | | | 476.213975 | 238.610626 | S | ***1182.691492*** | 591.849384 | 1165.664943 | 583.336110 | 1164.680927 | 582.844101 | 8 |
| 6 | **933.449866** | 467.228571 | 916.423317 | 458.715297 | 915.439301 | 458.223289 | Q | ***1095.659464*** | 548.333370 | 1078.632915 | 539.820096 | 1077.648899 | 539.328088 | 7 |
| 7 | **1032.518280** | 516.762778 | 1015.491731 | 508.249504 | 1014.507715 | 507.757496 | V | ***656.434138*** | 328.720707 | 639.407589 | 320.207432 | 638.423573 | 319.715424 | 6 |
| 8 | 1145.602344 | 573.304810 | 1128.575795 | 564.791536 | 1127.591779 | 564.299527 | L | ***557.365724*** | 279.186500 | 540.339175 | 270.673226 | 539.355159 | 270.181218 | 5 |
| 9 | 1258.686408 | 629.846842 | 1241.659859 | 621.333567 | 1240.675843 | 620.841559 | L | ***444.281660*** | 222.644468 | 427.255111 | 214.131193 | 426.271095 | 213.639186 | 4 |
| 10 | 1355.739172 | 678.373224 | 1338.712623 | 669.859949 | 1337.728607 | 669.367941 | P | ***331.197596*** | 166.102436 | 314.171047 | 157.589162 | 313.187031 | 157.097154 | 3 |
| 11 | 1442.771200 | 721.889238 | 1425.744651 | 713.375964 | 1424.760635 | 712.883955 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of YAATSQVLLPSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.1 | 1587.869431 | -0.001339 | YAATSQVLLPSK |
| 4.4 | 1587.890533 | -0.022441 | EPTTKAEMLKIISK |
| 4.4 | 1587.862045 | 0.006047 | VTGQNQEQFLLLAK |
| 4.1 | 1587.865402 | 0.002690 | ENGLRDILAVLTMK |
| 3.2 | 1587.891220 | -0.023128 | TIQTIVFLYSLYK |
| 2.0 | 1587.854187 | 0.013905 | VSPLQKSEVVEMVK |
| 1.4 | 1587.862045 | 0.006047 | DGASLSPATLFIQIR |
| 0.4 | 1587.858002 | 0.010090 | LSQEQTLQALRSSK |

**Mascot:** http://www.matrixscience.com/

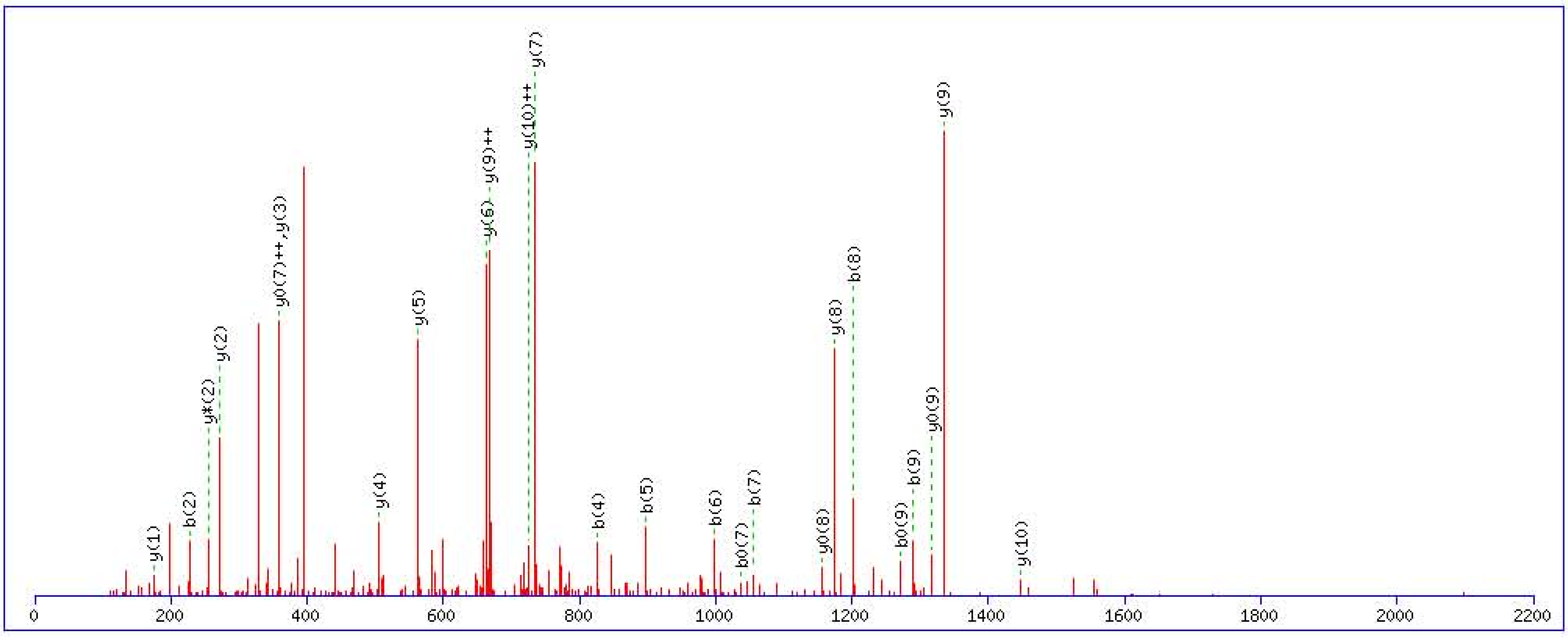
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LICQATGFSPR**
Found in **IGHM_HUMAN**, Ig mu chain C region OS=Homo sapiens GN=IGHM PE=1 SV=3

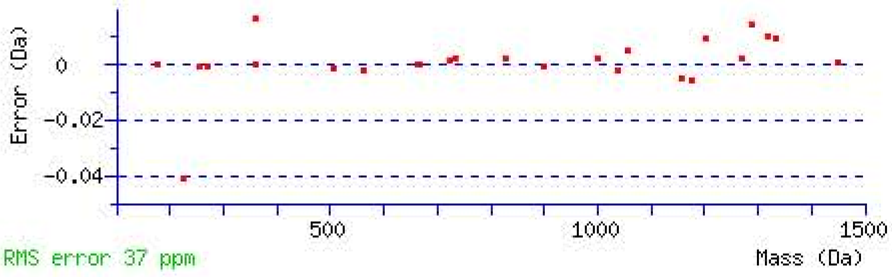
Match to Query 35292: 1559.799568 from(780.907060,2+) rtinseconds(1978) index(36286)
Title: Locus:1.1.1.3108.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

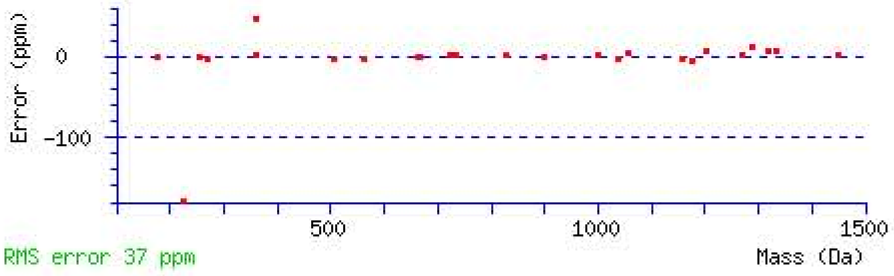
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1559.795242
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 6.5e-006
Matches : 25/100 fragment ions using 44 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 11 |
| 2 | 227.175404 | 114.091340 | | | | | I | 1447.718454 | 724.362865 | 1430.691905 | 715.849591 | 1429.707889 | 715.357583 | 10 |
| 3 | 387.206053 | 194.106664 | | | | | C | 1334.634390 | 667.820833 | 1317.607841 | 659.307559 | 1316.623825 | 658.815551 | 9 |
| 4 | 826.431379 | 413.719328 | 809.404830 | 405.206053 | | | Q | 1174.603741 | 587.805509 | 1157.577192 | 579.292234 | 1156.593176 | 578.800226 | 8 |
| 5 | 897.468493 | 449.237885 | 880.441944 | 440.724610 | | | A | 735.378415 | 368.192846 | 718.351866 | 359.679571 | 717.367850 | 359.187563 | 7 |
| 6 | 998.516172 | 499.761724 | 981.489623 | 491.248449 | 980.505607 | 490.756441 | T | 664.341301 | 332.674289 | 647.314752 | 324.161014 | 646.330736 | 323.669006 | 6 |
| 7 | 1055.537636 | 528.272456 | 1038.511087 | 519.759182 | 1037.527071 | 519.267174 | G | 563.293622 | 282.150449 | 546.267073 | 273.637175 | 545.283057 | 273.145167 | 5 |
| 8 | 1202.606050 | 601.806663 | 1185.579501 | 593.293389 | 1184.595485 | 592.801381 | F | 506.272158 | 253.639717 | 489.245609 | 245.126443 | 488.261593 | 244.634435 | 4 |
| 9 | 1289.638078 | 645.322677 | 1272.611529 | 636.809403 | 1271.627513 | 636.317395 | S | 359.203744 | 180.105510 | 342.177195 | 171.592236 | 341.193179 | 171.100228 | 3 |
| 10 | 1386.690842 | 693.849059 | 1369.664293 | 685.335785 | 1368.680277 | 684.843777 | P | 272.171716 | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LICQATGFSPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.3 | 1559.795242 | 0.004326 | LICQATGFSPR |
| 13.0 | 1559.808960 | -0.009392 | LDRLSGLADQMVAR |
| 8.8 | 1559.820190 | -0.020622 | MTRSATQAAKQVPR |
| 4.7 | 1559.808975 | -0.009407 | LLDRDACDTVRVK |
| 1.6 | 1559.787827 | 0.011741 | SLHPAMLPAADGAGPR |

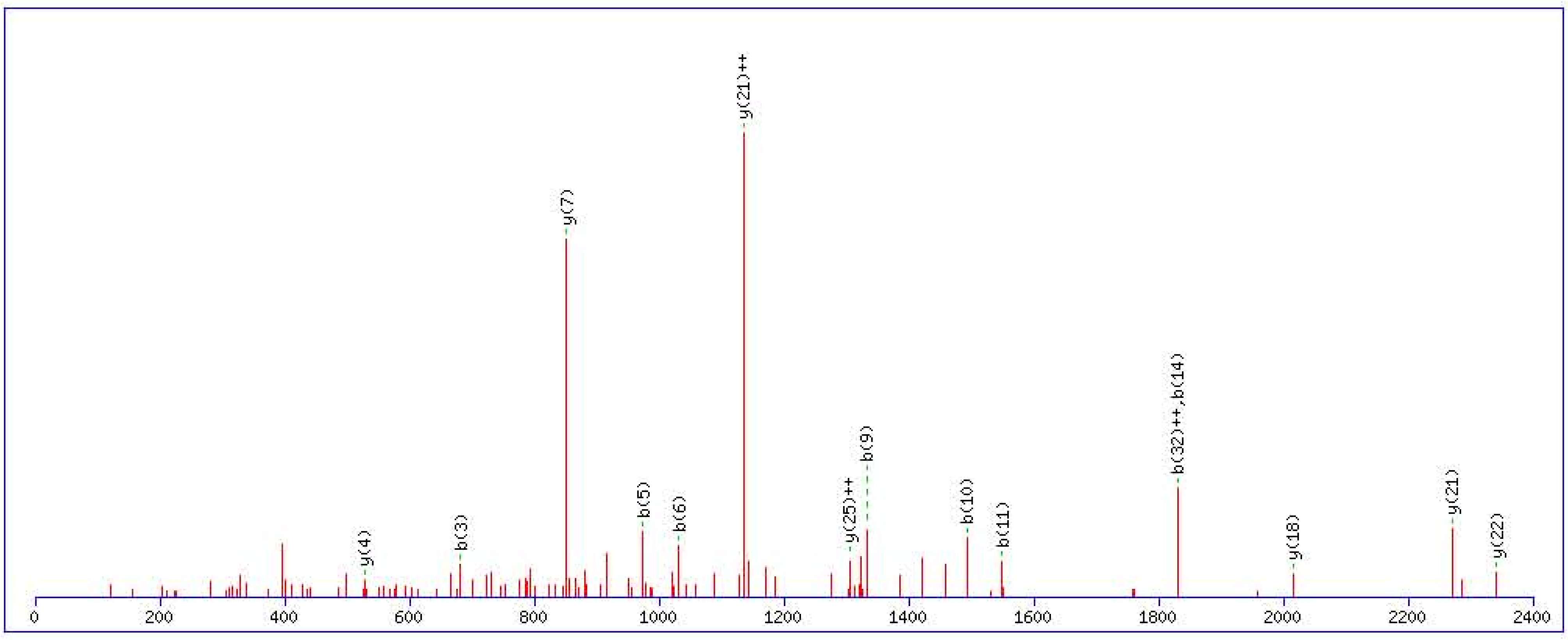
# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **LEQYEGPGFCGPLAPGTGGPFTTCHAHVPPESFFK**
Found in **FCGBP_HUMAN**, IgGFc-binding protein OS=Homo sapiens GN=FCGBP PE=1 SV=3

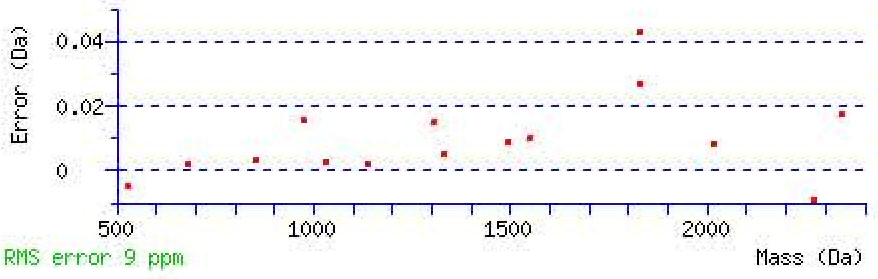
Match to Query 71377: 4099.942456 from(1025.992890,4+) rtinseconds(2485) index(39361)
Title: Locus:1.1.1.3284.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

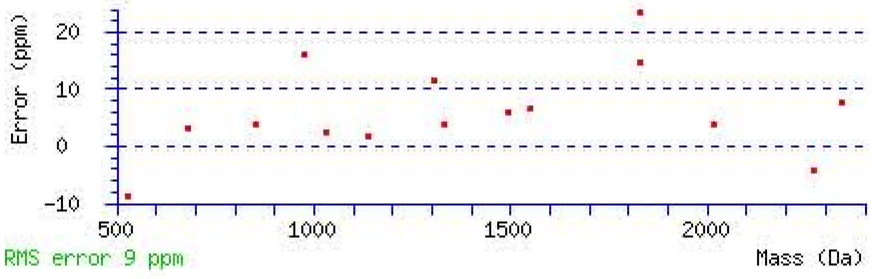
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from [0] to [2400] Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 4099.905991
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 0.00063
Matches : 15/396 fragment ions using 20 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 35 |
| 2 | 243.133933 | 122.070605 | | | 225.123368 | 113.065322 | E | 3987.829155 | 1994.418215 | 3970.802606 | 1985.904941 | 3969.818590 | 1985.412933 | 34 |
| 3 | ***682.359259*** | 341.683268 | 665.332710 | 333.169993 | 664.348694 | 332.677985 | Q | 3858.786562 | 1929.896919 | 3841.760013 | 1921.383644 | 3840.775997 | 1920.891636 | 33 |
| 4 | 845.422588 | 423.214932 | 828.396039 | 414.701658 | 827.412023 | 414.209650 | Y | 3419.561236 | 1710.284256 | 3402.534687 | 1701.770981 | 3401.550671 | 1701.278973 | 32 |
| 5 | ***974.465181*** | 487.736229 | 957.438632 | 479.222954 | 956.454616 | 478.730946 | E | 3256.497907 | 1628.752591 | 3239.471358 | 1620.239317 | 3238.487342 | 1619.747309 | 31 |
| 6 | ***1031.486645*** | 516.246961 | 1014.460096 | 507.733686 | 1013.476080 | 507.241678 | G | 3127.455314 | 1564.231295 | 3110.428765 | 1555.718020 | 3109.444749 | 1555.226012 | 30 |
| 7 | 1128.539409 | 564.773343 | 1111.512860 | 556.260068 | 1110.528844 | 555.768060 | P | 3070.433850 | 1535.720563 | 3053.407301 | 1527.207288 | 3052.423285 | 1526.715280 | 29 |
| 8 | 1185.560873 | 593.284075 | 1168.534324 | 584.770800 | 1167.550308 | 584.278792 | G | 2973.381086 | 1487.194181 | 2956.354537 | 1478.680906 | 2955.370521 | 1478.188898 | 28 |
| 9 | ***1332.629287*** | 666.818282 | 1315.602738 | 658.305007 | 1314.618722 | 657.812999 | F | 2916.359622 | 1458.683449 | 2899.333073 | 1450.170174 | 2898.349057 | 1449.678166 | 27 |
| 10 | ***1492.659936*** | 746.833606 | 1475.633387 | 738.320332 | 1474.649371 | 737.828324 | C | 2769.291208 | 1385.149242 | 2752.264659 | 1376.635967 | 2751.280643 | 1376.143959 | 26 |
| 11 | ***1549.681400*** | 775.344338 | 1532.654851 | 766.831064 | 1531.670835 | 766.339056 | G | 2609.260559 | 1305.133917 | 2592.234010 | 1296.620643 | 2591.249994 | 1296.128635 | 25 |
| 12 | 1646.734164 | 823.870720 | 1629.707615 | 815.357446 | 1628.723599 | 814.865438 | P | 2552.239095 | 1276.623185 | 2535.212546 | 1268.109911 | 2534.228530 | 1267.617903 | 24 |
| 13 | 1759.818228 | 880.412752 | 1742.791679 | 871.899478 | 1741.807663 | 871.407470 | L | 2455.186331 | 1228.096803 | 2438.159782 | 1219.583529 | 2437.175766 | 1219.091521 | 23 |
| 14 | ***1830.855342*** | 915.931309 | 1813.828793 | 907.418035 | 1812.844777 | 906.926027 | A | ***2342.102267*** | 1171.554771 | 2325.075718 | 1163.041497 | 2324.091702 | 1162.549489 | 22 |
| 15 | 1927.908106 | 964.457691 | 1910.881557 | 955.944417 | 1909.897541 | 955.452409 | P | ***2271.065153*** | 1136.036214 | 2254.038604 | 1127.522940 | 2253.054588 | 1127.030932 | 21 |
| 16 | 1984.929570 | 992.968423 | 1967.903021 | 984.455149 | 1966.919005 | 983.963141 | G | 2174.012389 | 1087.509832 | 2156.985840 | 1078.996558 | 2156.001824 | 1078.504550 | 20 |
| 17 | 2085.977249 | 1043.492262 | 2068.950700 | 1034.978988 | 2067.966684 | 1034.486980 | T | 2116.990925 | 1058.999100 | 2099.964376 | 1050.485826 | 2098.980360 | 1049.993818 | 19 |
| 18 | 2142.998713 | 1072.002994 | 2125.972164 | 1063.489720 | 2124.988148 | 1062.997712 | G | ***2015.943246*** | 1008.475261 | 1998.916697 | 999.961986 | 1997.932681 | 999.469978 | 18 |
| 19 | 2200.020177 | 1100.513726 | 2182.993628 | 1092.000452 | 2182.009612 | 1091.508444 | G | 1958.921782 | 979.964529 | 1941.895233 | 971.451254 | 1940.911217 | 970.959246 | 17 |
| 20 | 2297.072941 | 1149.040108 | 2280.046392 | 1140.526834 | 2279.062376 | 1140.034826 | P | 1901.900318 | 951.453797 | 1884.873769 | 942.940522 | 1883.889753 | 942.448514 | 16 |
| 21 | 2444.141355 | 1222.574315 | 2427.114806 | 1214.061041 | 2426.130790 | 1213.569033 | F | 1804.847554 | 902.927415 | 1787.821005 | 894.414140 | 1786.836989 | 893.922132 | 15 |
| 22 | 2545.189034 | 1273.098155 | 2528.162485 | 1264.584880 | 2527.178469 | 1264.092872 | T | 1657.779140 | 829.393208 | 1640.752591 | 820.879933 | 1639.768575 | 820.387925 | 14 |
| 23 | 2646.236713 | 1323.621994 | 2629.210164 | 1315.108720 | 2628.226148 | 1314.616712 | T | 1556.731461 | 778.869368 | 1539.704912 | 770.356094 | 1538.720896 | 769.864086 | 13 |
| 24 | 2806.267362 | 1403.637319 | 2789.240813 | 1395.124044 | 2788.256797 | 1394.632036 | C | 1455.683782 | 728.345529 | 1438.657233 | 719.832254 | 1437.673217 | 719.340246 | 12 |
| 25 | 2943.326274 | 1472.166775 | 2926.299725 | 1463.653500 | 2925.315709 | 1463.161492 | H | 1295.653133 | 648.330205 | 1278.626584 | 639.816930 | 1277.642568 | 639.324922 | 11 |
| 26 | 3014.363388 | 1507.685332 | 2997.336839 | 1499.172057 | 2996.352823 | 1498.680049 | A | 1158.594221 | 579.800749 | 1141.567672 | 571.287474 | 1140.583656 | 570.795466 | 10 |
| 27 | 3151.422300 | 1576.214788 | 3134.395751 | 1567.701513 | 3133.411735 | 1567.209505 | H | 1087.557107 | 544.282191 | 1070.530558 | 535.768917 | 1069.546542 | 535.276909 | 9 |
| 28 | 3250.490714 | 1625.748995 | 3233.464165 | 1617.235720 | 3232.480149 | 1616.743712 | V | 950.498195 | 475.752735 | 933.471646 | 467.239461 | 932.487630 | 466.747453 | 8 |
| 29 | 3347.543478 | 1674.275377 | 3330.516929 | 1665.762102 | 3329.532913 | 1665.270094 | P | ***851.429781*** | 426.218529 | 834.403232 | 417.705254 | 833.419216 | 417.213246 | 7 |
| 30 | 3444.596242 | 1722.801759 | 3427.569693 | 1714.288484 | 3426.585677 | 1713.796476 | P | 754.377017 | 377.692147 | 737.350468 | 369.178872 | 736.366452 | 368.686864 | 6 |
| 31 | 3573.638835 | 1787.323055 | 3556.612286 | 1778.809781 | 3555.628270 | 1778.317773 | E | 657.324253 | 329.165765 | 640.297704 | 320.652490 | 639.313688 | 320.160482 | 5 |
| 32 | 3660.670863 | 1830.839069 | 3643.644314 | 1822.325795 | 3642.660298 | 1821.833787 | S | ***528.281660*** | 264.644468 | 511.255111 | 256.131193 | 510.271095 | 255.639185 | 4 |
| 33 | 3807.739277 | 1904.373276 | 3790.712728 | 1895.860002 | 3789.728712 | 1895.367994 | F | 441.249632 | 221.128454 | 424.223083 | 212.615179 | | | 3 |
| 34 | 3954.807691 | 1977.907483 | 3937.781142 | 1969.394209 | 3936.797126 | 1968.902201 | F | 294.181218 | 147.594247 | 277.154669 | 139.080972 | | | 2 |
| 35 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LEQYEGPGFCGPLAPGTGGPFTTCHAHVPPESFFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.7 | 4099.905991 | 0.036465 | LEQYEGPGFCGPLAPGTGGPFTTCHAHVPPESFFK |

**Mascot:** http://www.matrixscience.com/

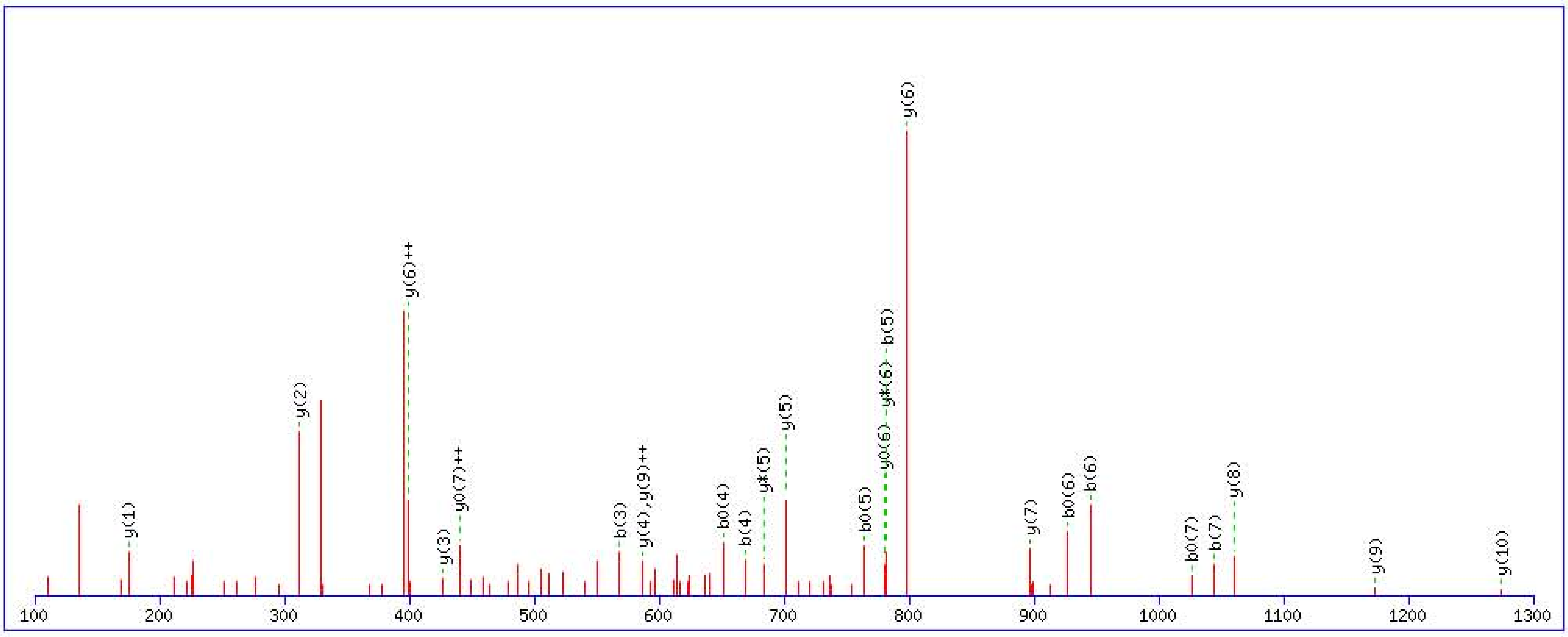
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GAQTLYVPNCDHR**
Found in **IBP6_HUMAN**, Insulin-like growth factor-binding protein 6 OS=Homo sapiens GN=IGFBP6 PE=1 SV=1

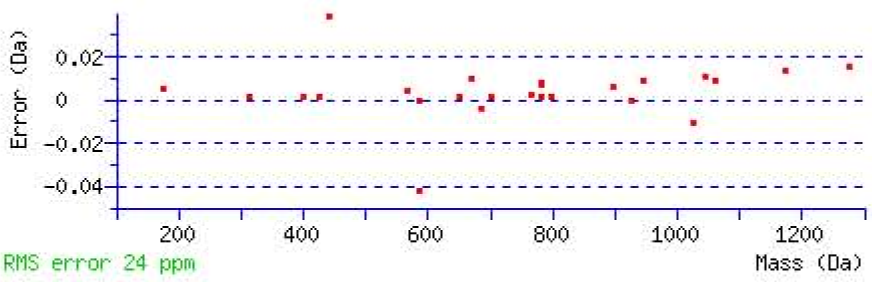
Match to Query 43499: 1840.872012 from(614.631280,3+) rtinseconds(1751) index(67201)
Title: Locus:1.1.1.1547.18 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

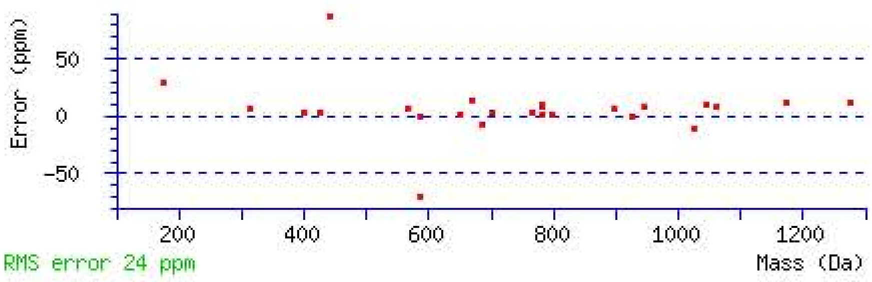
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1840.871262
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 58  Expect: 2.5e-005
Matches : 25/130 fragment ions using 45 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 13 |
| 2 | 129.065854 | 65.036565 | | | | | A | 1784.857073 | 892.932175 | 1767.830524 | 884.418900 | 1766.846508 | 883.926892 | 12 |
| 3 | **568.291180** | 284.649228 | 551.264631 | 276.135954 | | | Q | 1713.819959 | 857.413618 | 1696.793410 | 848.900343 | 1695.809394 | 848.408335 | 11 |
| 4 | **669.338859** | 335.173068 | 652.312310 | 326.659793 | 651.328294 | 326.167785 | T | ***1274.594633*** | 637.800955 | 1257.568084 | 629.287680 | 1256.584068 | 628.795672 | 10 |
| 5 | **782.422923** | 391.715100 | 765.396374 | 383.201825 | 764.412358 | 382.709817 | L | ***1173.546954*** | 587.277115 | 1156.520405 | 578.763841 | 1155.536389 | 578.271833 | 9 |
| 6 | **945.486252** | 473.246764 | 928.459703 | 464.733490 | 927.475687 | 464.241482 | Y | ***1060.462890*** | 530.735083 | 1043.436341 | 522.221809 | 1042.452325 | 521.729801 | 8 |
| 7 | **1044.554666** | 522.780971 | 1027.528117 | 514.267697 | 1026.544101 | 513.775689 | V | ***897.399561*** | 449.203419 | 880.373012 | 440.690144 | 879.388996 | 440.198136 | 7 |
| 8 | 1141.607430 | 571.307353 | 1124.580881 | 562.794079 | 1123.596865 | 562.302071 | P | ***798.331147*** | 399.669212 | 781.304598 | 391.155937 | 780.320582 | 390.663929 | 6 |
| 9 | 1255.650357 | 628.328817 | 1238.623808 | 619.815542 | 1237.639792 | 619.323534 | N | ***701.278383*** | 351.142830 | 684.251834 | 342.629555 | 683.267818 | 342.137547 | 5 |
| 10 | 1415.681006 | 708.344141 | 1398.654457 | 699.830867 | 1397.670441 | 699.338859 | C | ***587.235456*** | 294.121366 | 570.208907 | 285.608092 | 569.224891 | 285.116084 | 4 |
| 11 | 1530.707949 | 765.857613 | 1513.681400 | 757.344338 | 1512.697384 | 756.852330 | D | ***427.204807*** | 214.106041 | 410.178258 | 205.592767 | 409.194242 | 205.100759 | 3 |
| 12 | 1667.766861 | 834.387069 | 1650.740312 | 825.873794 | 1649.756296 | 825.381786 | H | ***312.177864*** | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 13 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GAQTLYVPNCDHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.9 | 1840.871262 | 0.000750 | GAQTLYVPNCDHR |
| 8.9 | 1840.887650 | -0.015638 | AALSASEGEEVPQDK |

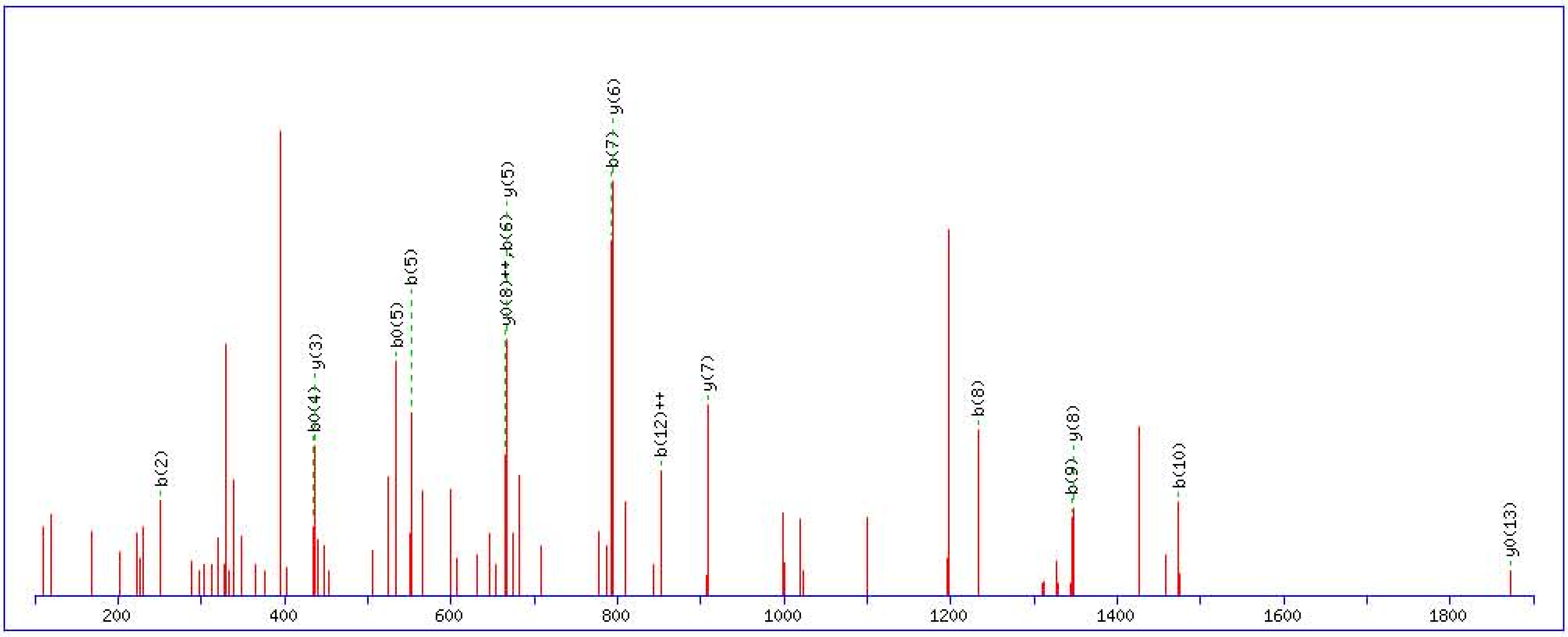
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HLDSVLQQLQTEVYR**
Found in **IBP6_HUMAN**, Insulin-like growth factor-binding protein 6 OS=Homo sapiens GN=IGFBP6 PE=1 SV=1

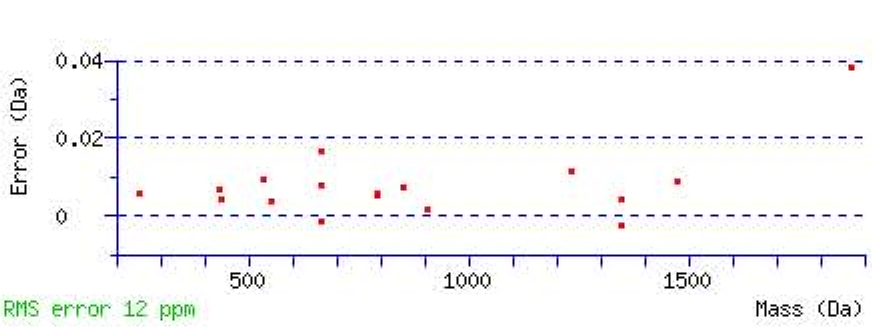
Match to Query 49817: 2139.118542 from(714.046790,3+) rtinseconds(2577) index(71950)
Title: Locus:1.1.1.1835.5 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

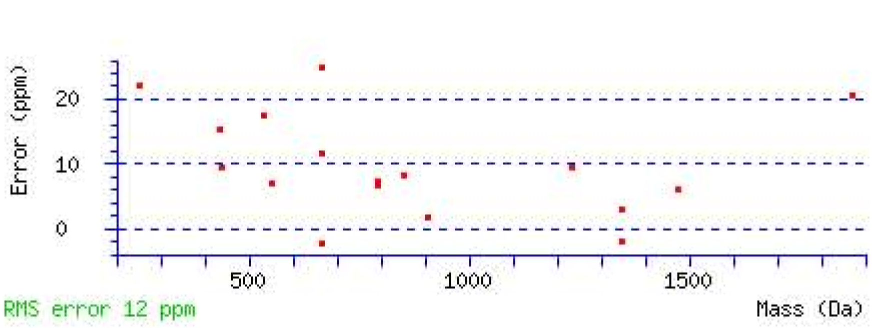
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2139.114655
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q8 : Biotin:Thermo-21345 (Q)
**Ions Score:** 33 **Expect:** 0.00091
**Matches :** 17/146 fragment ions using 28 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 15 |
| 2 | ***251.150252*** | 126.078764 | | | | | L | 2003.063026 | 1002.035151 | 1986.036477 | 993.521877 | 1985.052461 | 993.029869 | 14 |
| 3 | 366.177195 | 183.592235 | | | 348.166630 | 174.586953 | D | 1889.978962 | 945.493119 | 1872.952413 | 936.979845 | 1871.968397 | 936.487836 | 13 |
| 4 | 453.209223 | 227.108250 | | | 435.198658 | 218.102967 | S | 1774.952019 | 887.979648 | 1757.925470 | 879.466373 | 1756.941454 | 878.974365 | 12 |
| 5 | ***552.277637*** | 276.642457 | | | 534.267072 | 267.637174 | V | 1687.919991 | 844.463634 | 1670.893442 | 835.950359 | 1669.909426 | 835.458351 | 11 |
| 6 | ***665.361701*** | 333.184489 | | | 647.351136 | 324.179206 | L | 1588.851577 | 794.929427 | 1571.825028 | 786.416152 | 1570.841012 | 785.924144 | 10 |
| 7 | ***793.420279*** | 397.213778 | 776.393730 | 388.700503 | 775.409714 | 388.208495 | Q | 1475.767513 | 738.387395 | 1458.740964 | 729.874120 | 1457.756948 | 729.382112 | 9 |
| 8 | ***1232.645605*** | 616.826440 | 1215.619056 | 608.313166 | 1214.635040 | 607.821158 | Q | **1347.708935** | 674.358105 | 1330.682386 | 665.844831 | 1329.698370 | 665.352823 | 8 |
| 9 | ***1345.729669*** | 673.368472 | 1328.703120 | 664.855198 | 1327.719104 | 664.363190 | L | **908.483609** | 454.745443 | 891.457060 | 446.232168 | 890.473044 | 445.740160 | 7 |
| 10 | ***1473.788247*** | 737.397761 | 1456.761698 | 728.884487 | 1455.777682 | 728.392479 | Q | **795.399545** | 398.203411 | 778.372996 | 389.690136 | 777.388980 | 389.198128 | 6 |
| 11 | 1574.835926 | 787.921601 | 1557.809377 | 779.408326 | 1556.825361 | 778.916318 | T | **667.340967** | 334.174122 | 650.314418 | 325.660847 | 649.330402 | 325.168839 | 5 |
| 12 | 1703.878519 | 852.442897 | 1686.851970 | 843.929623 | 1685.867954 | 843.437615 | E | 566.293288 | 283.650282 | 549.266739 | 275.137008 | 548.282723 | 274.645000 | 4 |
| 13 | 1802.946933 | 901.977104 | 1785.920384 | 893.463830 | 1784.936368 | 892.971822 | V | **437.250695** | 219.128986 | 420.224146 | 210.615711 | | | 3 |
| 14 | 1966.010262 | 983.508769 | 1948.983713 | 974.995494 | 1947.999697 | 974.503486 | Y | 338.182281 | 169.594779 | 321.155732 | 161.081504 | | | 2 |
| 15 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of HLDSVLQQLQTEVYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.7 | 2139.114655 | 0.003887 | HLDSVLQQLQTEVYR |
| 24.4 | 2139.114655 | 0.003887 | HLDSVLQQLQTEVYR |
| 13.9 | 2139.114655 | 0.003887 | HLDSVLQQLQTEVYR |
| 0.2 | 2139.122025 | -0.003483 | FNVETMAQLLNIPPNK |

**Mascot:** http://www.matrixscience.com/

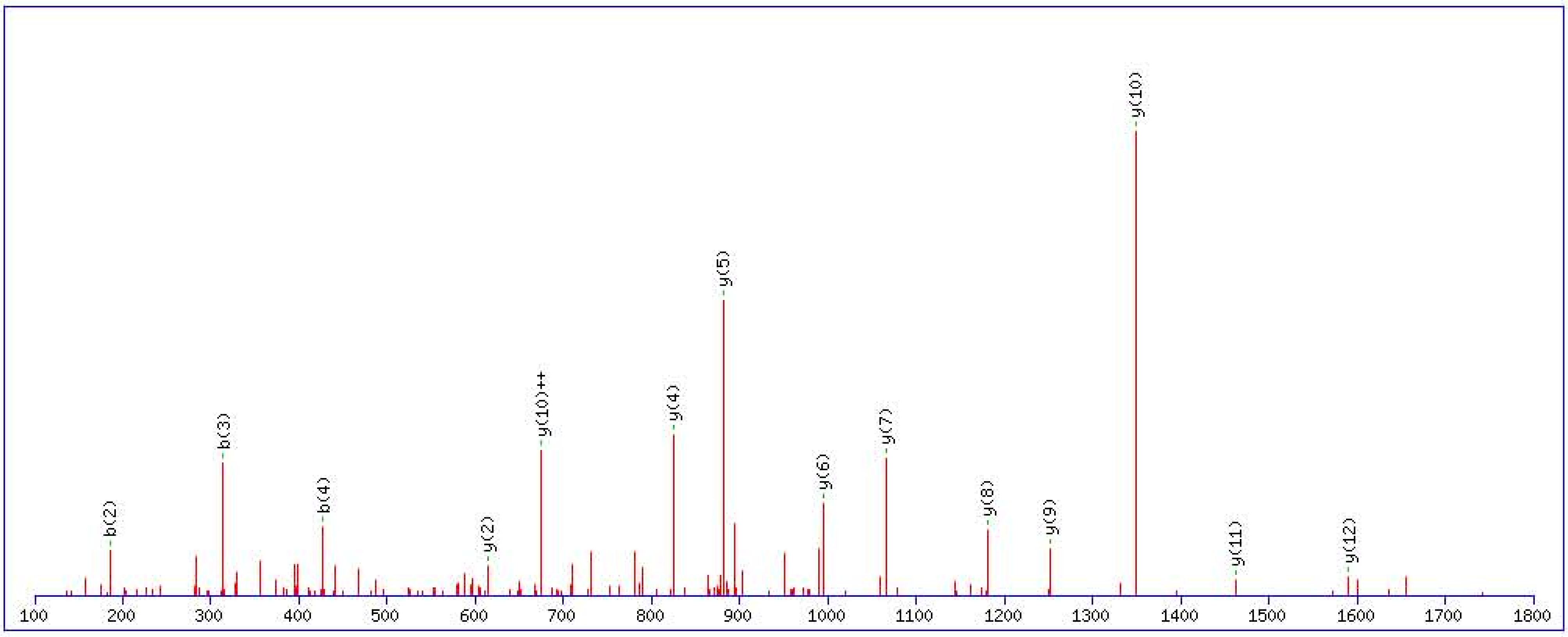
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LAELPADALGPLQR**
Found in **ALS_HUMAN**, Insulin-like growth factor-binding protein complex acid labile subunit OS=Homo sapiens GN=IGFALS PE=1 SV=1

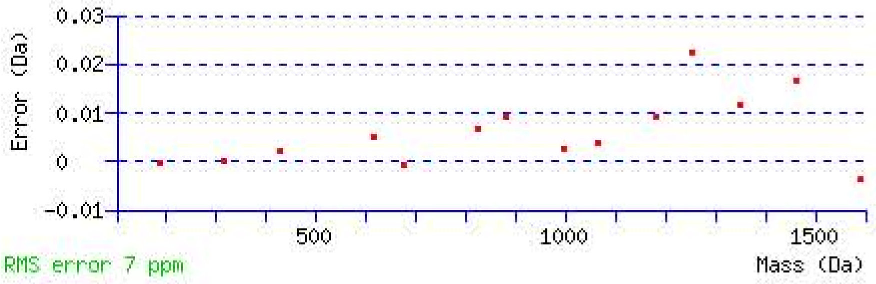
Match to Query 42262: 1773.994828 from(888.004690,2+) rtinseconds(2455) index(39149)
Title: Locus:1.1.1.3274.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

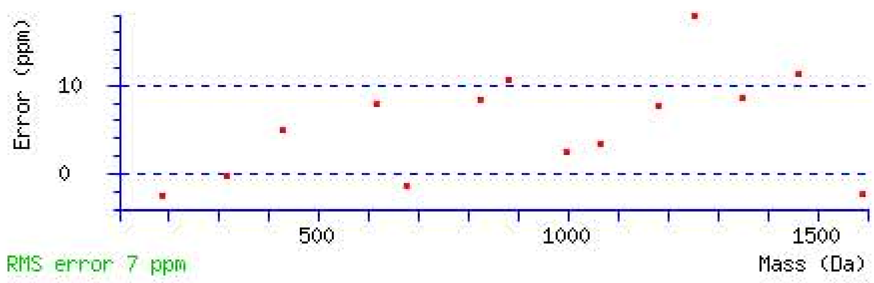
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1800] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1773.981094
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13    : Biotin:Thermo-21345 (Q)
Ions Score: 88  Expect: 1.8e-008
Matches : 14/114 fragment ions using 17 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 14 |
| 2 | **185.128454** | 93.067865 | | | | | A | 1661.904340 | 831.455808 | 1644.877791 | 822.942534 | 1643.893775 | 822.450526 | 13 |
| 3 | **314.171047** | 157.589161 | | | 296.160482 | 148.583879 | E | ***1590.867226*** | 795.937251 | 1573.840677 | 787.423977 | 1572.856661 | 786.931969 | 12 |
| 4 | **427.255111** | 214.131193 | | | 409.244546 | 205.125911 | L | ***1461.824633*** | 731.415955 | 1444.798084 | 722.902680 | 1443.814068 | 722.410672 | 11 |
| 5 | 524.307875 | 262.657576 | | | 506.297310 | 253.652293 | P | ***1348.740569*** | 674.873922 | 1331.714020 | 666.360648 | 1330.730004 | 665.868640 | 10 |
| 6 | 595.344989 | 298.176133 | | | 577.334424 | 289.170850 | A | ***1251.687805*** | 626.347540 | 1234.661256 | 617.834266 | 1233.677240 | 617.342258 | 9 |
| 7 | 710.371932 | 355.689604 | | | 692.361367 | 346.684322 | D | ***1180.650691*** | 590.828984 | 1163.624142 | 582.315709 | 1162.640126 | 581.823701 | 8 |
| 8 | 781.409046 | 391.208161 | | | 763.398481 | 382.202879 | A | ***1065.623748*** | 533.315512 | 1048.597199 | 524.802238 | | | 7 |
| 9 | 894.493110 | 447.750193 | | | 876.482545 | 438.744911 | L | ***994.586634*** | 497.796955 | 977.560085 | 489.283681 | | | 6 |
| 10 | 951.514574 | 476.260925 | | | 933.504009 | 467.255643 | G | ***881.502570*** | 441.254923 | 864.476021 | 432.741649 | | | 5 |
| 11 | 1048.567338 | 524.787307 | | | 1030.556773 | 515.782025 | P | ***824.481106*** | 412.744191 | 807.454557 | 404.230916 | | | 4 |
| 12 | 1161.651402 | 581.329339 | | | 1143.640837 | 572.324056 | L | 727.428342 | 364.217809 | 710.401793 | 355.704534 | | | 3 |
| 13 | 1600.876728 | 800.942002 | 1583.850179 | 792.428728 | 1582.866163 | 791.936719 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 14 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LAELPADALGPLQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 88.4 | 1773.981094 | 0.013734 | LAELPADALGPLQR |

**Mascot:** http://www.matrixscience.com/

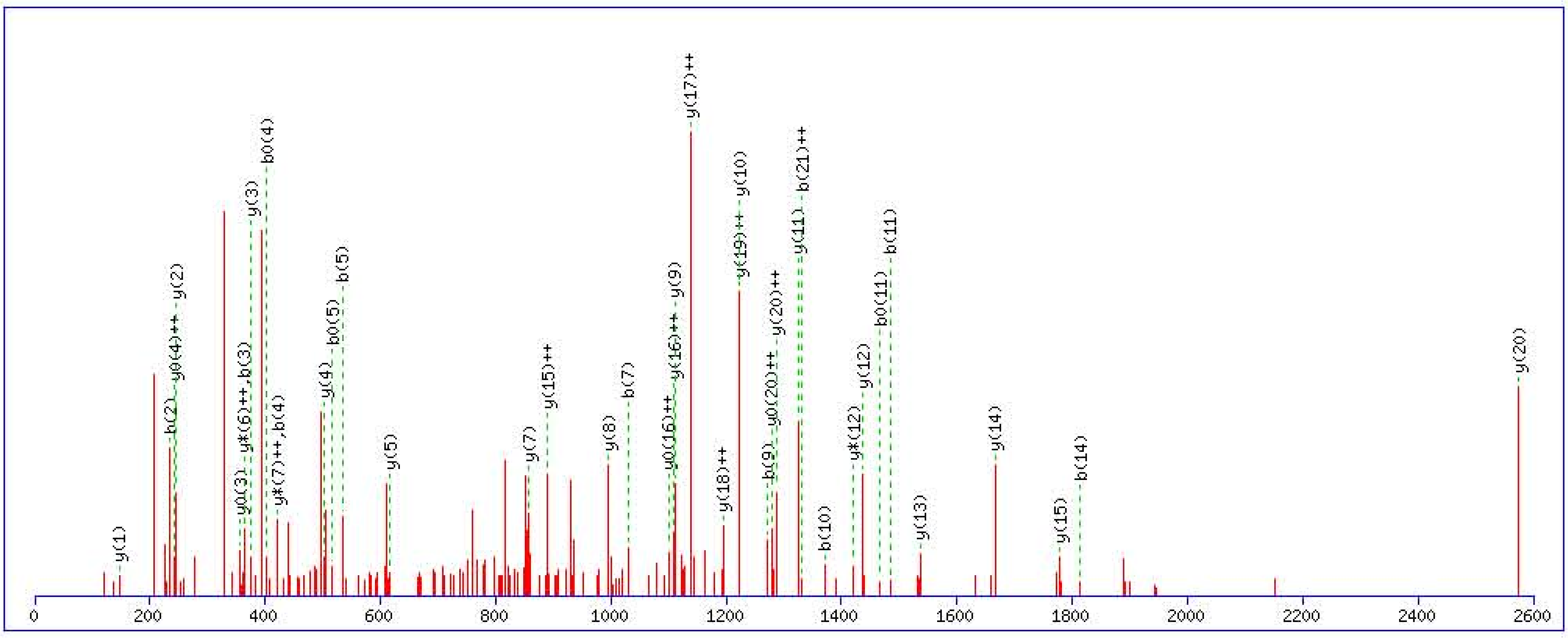
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SFEGLGQLEVLTLDHNQLQEVK**
Found in **ALS_HUMAN**, Insulin-like growth factor-binding protein complex acid labile subunit OS=Homo sapiens GN=IGFALS PE=1 SV=1

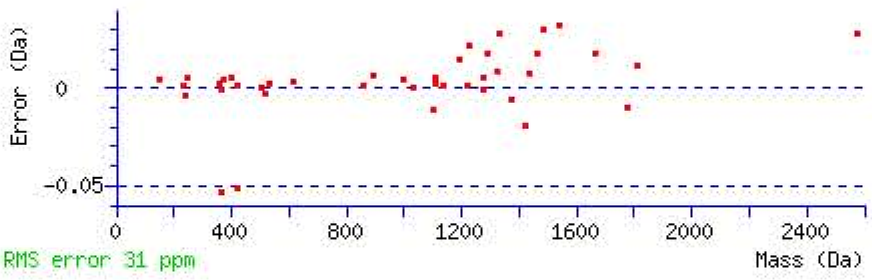
Match to Query 59504: 2807.470812 from(936.830880,3+) rtinseconds(2708) index(40870)
Title: Locus:1.1.1.3361.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

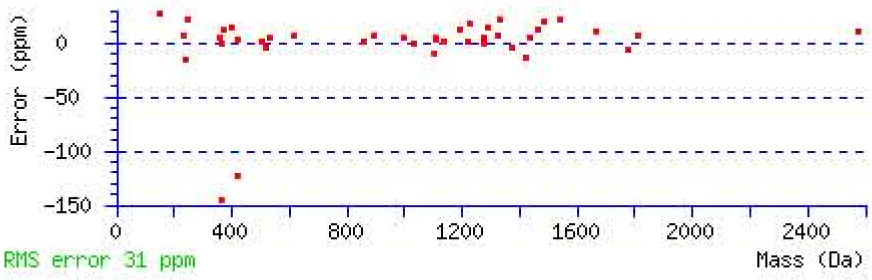
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2807.452759
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 58 **Expect:** 3.8e-005
**Matches :** 41/236 fragment ions using 100 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 22 |
| 2 | **235.107718** | 118.057497 | | | 217.097153 | 109.052214 | F | 2721.428016 | 1361.217646 | 2704.401467 | 1352.704371 | 2703.417451 | 1352.212363 | 21 |
| 3 | **364.150311** | 182.578793 | | | 346.139746 | 173.573511 | E | ***2574.359602*** | 1287.683439 | 2557.333053 | 1279.170164 | 2556.349037 | 1278.678156 | 20 |
| 4 | **421.171775** | 211.089525 | | | 403.161210 | 202.084243 | G | 2445.317009 | 1223.162142 | 2428.290460 | 1214.648868 | 2427.306444 | 1214.156860 | 19 |
| 5 | **534.255839** | 267.631558 | | | 516.245274 | 258.626275 | L | 2388.295545 | 1194.651410 | 2371.268996 | 1186.138136 | 2370.284980 | 1185.646128 | 18 |
| 6 | 591.277303 | 296.142290 | | | 573.266738 | 287.137007 | G | 2275.211481 | 1138.109378 | 2258.184932 | 1129.596104 | 2257.200916 | 1129.104096 | 17 |
| 7 | **1030.502629** | 515.754953 | 1013.476080 | 507.241678 | 1012.492064 | 506.749670 | Q | 2218.190017 | 1109.598646 | 2201.163468 | 1101.085372 | 2200.179452 | 1100.593364 | 16 |
| 8 | 1143.586693 | 572.296985 | 1126.560144 | 563.783710 | 1125.576128 | 563.291702 | L | ***1778.964691*** | 889.985984 | 1761.938142 | 881.472709 | 1760.954126 | 880.980701 | 15 |
| 9 | **1272.629286** | 636.818281 | 1255.602737 | 628.305007 | 1254.618721 | 627.812999 | E | ***1665.880627*** | 833.443952 | 1648.854078 | 824.930677 | 1647.870062 | 824.438669 | 14 |
| 10 | **1371.697700** | 686.352488 | 1354.671151 | 677.839214 | 1353.687135 | 677.347206 | V | ***1536.838034*** | 768.922655 | 1519.811485 | 760.409381 | 1518.827469 | 759.917373 | 13 |
| 11 | **1484.781764** | 742.894520 | 1467.755215 | 734.381246 | 1466.771199 | 733.889238 | L | ***1437.769620*** | 719.388448 | 1420.743071 | 710.875174 | 1419.759055 | 710.383166 | 12 |
| 12 | 1585.829443 | 793.418360 | 1568.802894 | 784.905085 | 1567.818878 | 784.413077 | T | ***1324.685556*** | 662.846416 | 1307.659007 | 654.333142 | 1306.674991 | 653.841134 | 11 |
| 13 | 1698.913507 | 849.960392 | 1681.886958 | 841.447117 | 1680.902942 | 840.955109 | L | ***1223.637877*** | 612.322577 | 1206.611328 | 603.809302 | 1205.627312 | 603.317294 | 10 |
| 14 | **1813.940450** | 907.473863 | 1796.913901 | 898.960589 | 1795.929885 | 898.468581 | D | ***1110.553813*** | 555.780545 | 1093.527264 | 547.267270 | 1092.543248 | 546.775262 | 9 |
| 15 | 1950.999362 | 976.003319 | 1933.972813 | 967.490045 | 1932.988797 | 966.998037 | H | ***995.526870*** | 498.267073 | 978.500321 | 489.753799 | 977.516305 | 489.261791 | 8 |
| 16 | 2065.042289 | 1033.024782 | 2048.015740 | 1024.511508 | 2047.031724 | 1024.019500 | N | ***858.467958*** | 429.737617 | 841.441409 | 421.224343 | 840.457393 | 420.732335 | 7 |
| 17 | 2193.100867 | 1097.054072 | 2176.074318 | 1088.540797 | 2175.090302 | 1088.048789 | Q | 744.425031 | 372.716154 | 727.398482 | 364.202879 | 726.414466 | 363.710871 | 6 |
| 18 | 2306.184931 | 1153.596104 | 2289.158382 | 1145.082829 | 2288.174366 | 1144.590821 | L | ***616.366453*** | 308.686865 | 599.339904 | 300.173590 | 598.355888 | 299.681582 | 5 |
| 19 | 2434.243509 | 1217.625393 | 2417.216960 | 1209.112118 | 2416.232944 | 1208.620110 | Q | ***503.282389*** | 252.144833 | 486.255840 | 243.631558 | 485.271824 | 243.139550 | 4 |
| 20 | 2563.286102 | 1282.146689 | 2546.259553 | 1273.633415 | 2545.275537 | 1273.141407 | E | ***375.223811*** | 188.115543 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 21 | 2662.354516 | 1331.680896 | 2645.327967 | 1323.167622 | 2644.343951 | 1322.675614 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080972 | | | 2 |
| 22 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SFEGLGQLEVLTLDHNQLQEVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.9 | 2807.452759 | 0.018053 | SFEGLGQLEVLTLDHNQLQEVK |
| 9.4 | 2807.452759 | 0.018053 | SFEGLGQLEVLTLDHNQLQEVK |
| 0.3 | 2807.452759 | 0.018053 | SFEGLGQLEVLTLDHNQLQEVK |

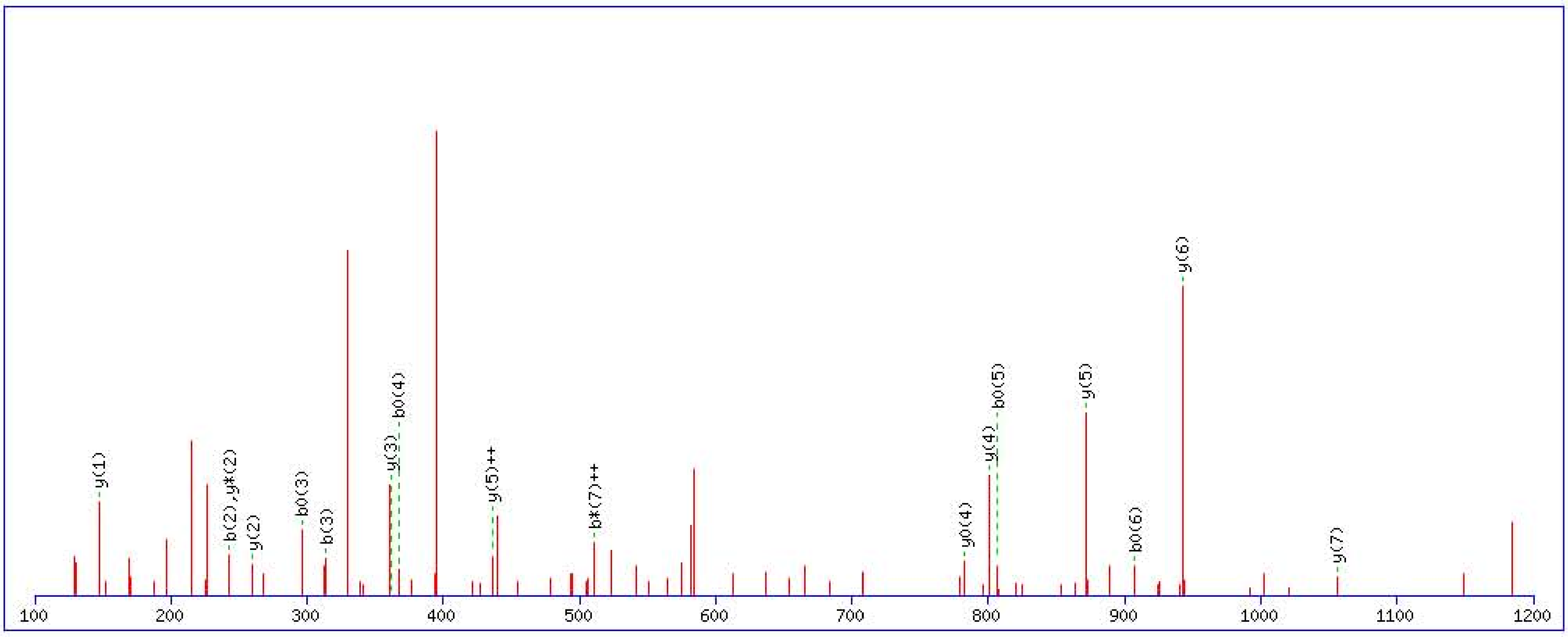
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ELAAQTIK**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

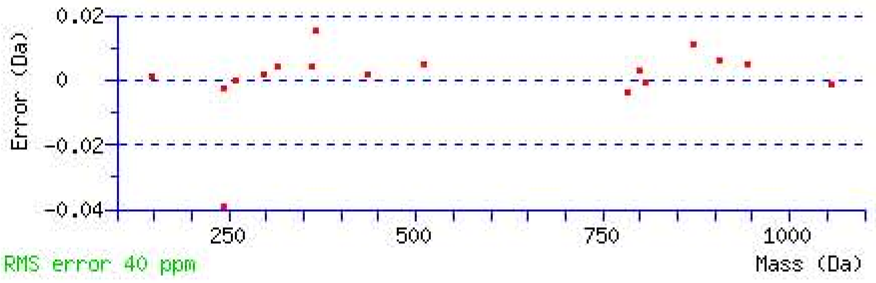
Match to Query 22876: 1183.664928 from(592.839740,2+) rtinseconds(1773) index(51327)
Title: Locus:1.1.1.1233.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

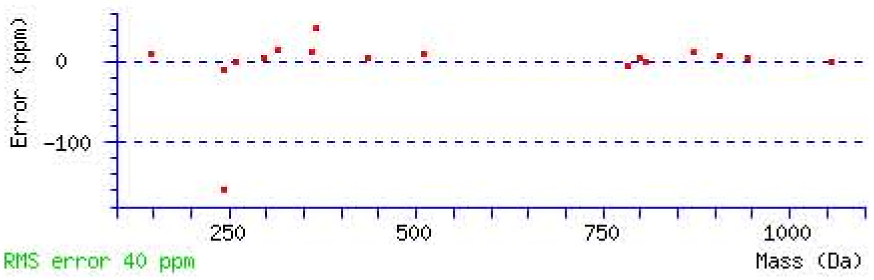
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1183.663452
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q5** : Biotin:Thermo-21345 (Q)
**Ions Score:** 38 **Expect:** 0.0035
**Matches :** 17/72 fragment ions using 38 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 8 |
| 2 | **243.133933** | 122.070605 | | | 225.123368 | 113.065322 | L | ***1055.628165*** | 528.317720 | 1038.601616 | 519.804446 | 1037.617600 | 519.312438 | 7 |
| 3 | **314.171047** | 157.589161 | | | 296.160482 | 148.583879 | A | ***942.544101*** | 471.775689 | 925.517552 | 463.262414 | 924.533536 | 462.770406 | 6 |
| 4 | 385.208161 | 193.107718 | | | 367.197596 | 184.102436 | A | ***871.506987*** | 436.257132 | 854.480438 | 427.743857 | 853.496422 | 427.251849 | 5 |
| 5 | 824.433487 | 412.720382 | 807.406938 | 404.207107 | 806.422922 | 403.715099 | Q | ***800.469873*** | 400.738575 | 783.443324 | 392.225300 | 782.459308 | 391.733292 | 4 |
| 6 | 925.481166 | 463.244221 | 908.454617 | 454.730947 | 907.470601 | 454.238939 | T | ***361.244547*** | 181.125911 | 344.217998 | 172.612637 | 343.233982 | 172.120629 | 3 |
| 7 | 1038.565230 | 519.786253 | 1021.538681 | 511.272978 | 1020.554665 | 510.780970 | I | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of ELAAQTIK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.9 | 1183.663452 | 0.001476 | ELAAQTIK |
| 31.4 | 1183.663452 | 0.001476 | ELAAQITK |
| 7.8 | 1183.667282 | -0.002354 | ELAERQGLLR |
| 6.1 | 1183.663452 | 0.001476 | LEQAATLK |
| 3.8 | 1183.667282 | -0.002354 | QLLRALEEGR |
| 3.7 | 1183.656937 | 0.007991 | MRPQTLK |
| 3.3 | 1183.663467 | 0.001461 | TQLSPSIK |
| 3.2 | 1183.681198 | -0.016270 | LEALLEAAGIGK |
| 2.2 | 1183.667297 | -0.002369 | EPTGRVEIRK |
| 2.2 | 1183.649551 | 0.015377 | KVCGHKQSLK |

**Mascot:** http://www.matrixscience.com/

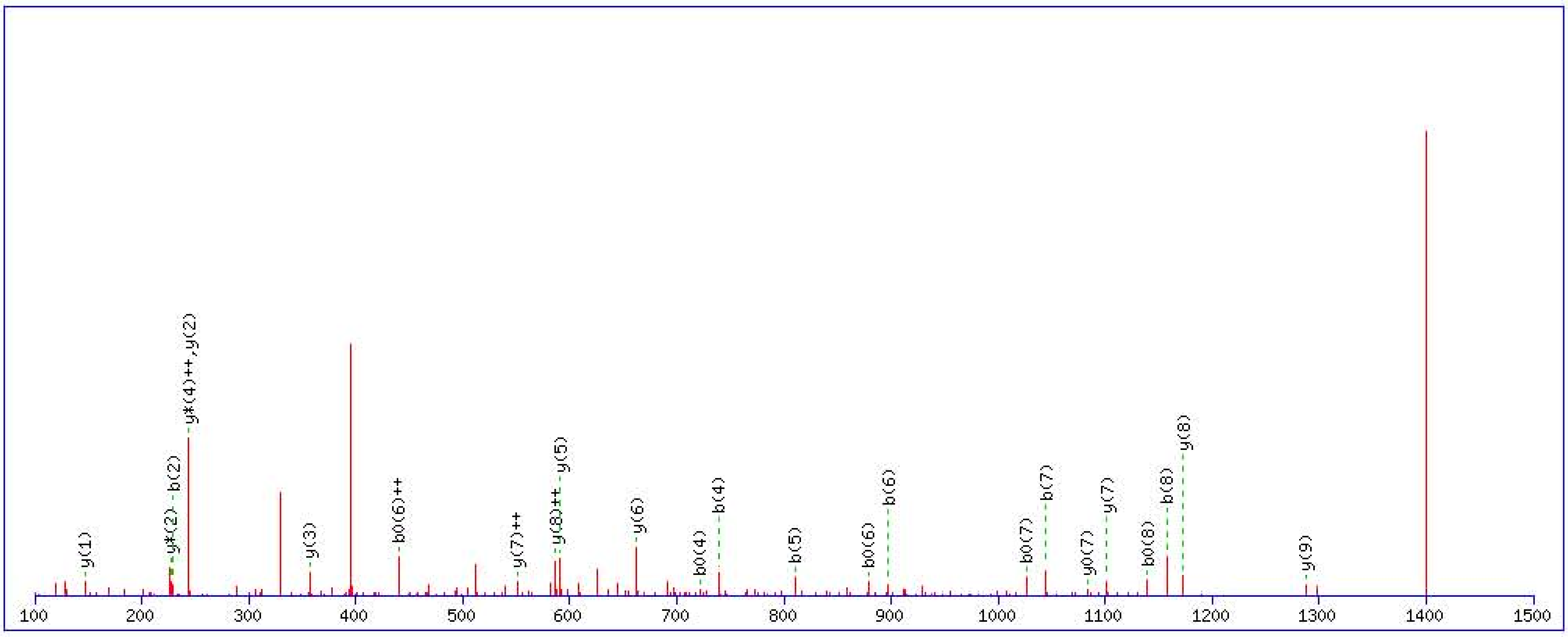
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LDAQASFLPK**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

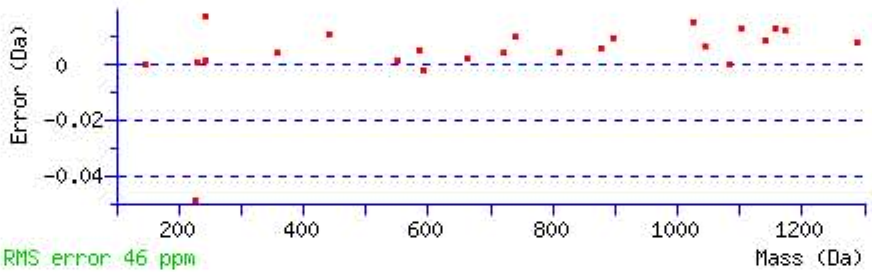
Match to Query 30132: 1399.762468 from(700.888510,2+) rtinseconds(2232) index(54445)
Title: Locus:1.1.1.1392.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

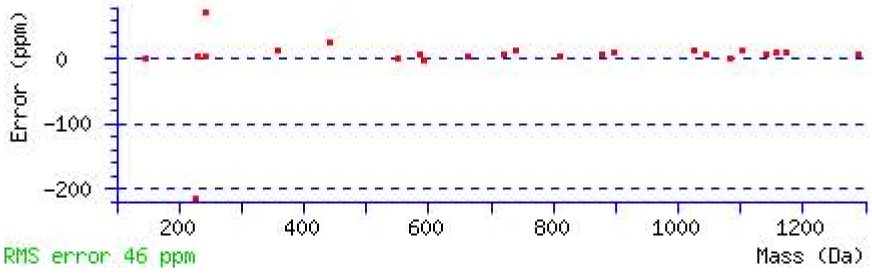
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1399.753342
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q4** : Biotin:Thermo-21345 (Q)
**Ions Score:** 43 **Expect:** 0.00047
**Matches :** 24/92 fragment ions using 46 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 10 |
| 2 | **229.118283** | 115.062779 | | | 211.107718 | 106.057497 | D | ***1287.676571*** | 644.341924 | 1270.650022 | 635.828649 | 1269.666006 | 635.336641 | 9 |
| 3 | 300.155397 | 150.581336 | | | 282.144832 | 141.576054 | A | ***1172.649628*** | 586.828452 | 1155.623079 | 578.315178 | 1154.639063 | 577.823169 | 8 |
| 4 | **739.380723** | 370.194000 | 722.354174 | 361.680725 | 721.370158 | 361.188717 | Q | ***1101.612514*** | 551.309895 | 1084.585965 | 542.796621 | 1083.601949 | 542.304612 | 7 |
| 5 | **810.417837** | 405.712557 | 793.391288 | 397.199282 | 792.407272 | 396.707274 | A | ***662.387188*** | 331.697232 | 645.360639 | 323.183957 | 644.376623 | 322.691949 | 6 |
| 6 | **897.449865** | 449.228570 | 880.423316 | 440.715296 | 879.439300 | 440.223288 | S | ***591.350074*** | 296.178675 | 574.323525 | 287.665400 | 573.339509 | 287.173392 | 5 |
| 7 | **1044.518279** | 522.762777 | 1027.491730 | 514.249503 | 1026.507714 | 513.757495 | F | 504.318046 | 252.662661 | 487.291497 | 244.149386 | | | 4 |
| 8 | **1157.602343** | 579.304809 | 1140.575794 | 570.791535 | 1139.591778 | 570.299527 | L | ***357.249632*** | 179.128454 | 340.223083 | 170.615179 | | | 3 |
| 9 | 1254.655107 | 627.831191 | 1237.628558 | 619.317917 | 1236.644542 | 618.825909 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LDAQASFLPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.2 | 1399.753342 | 0.009126 | LDAQASFLPK |
| 7.3 | 1399.745972 | 0.016496 | IDAATGIPVTTWR |
| 4.8 | 1399.771103 | -0.008635 | QKEPSVLFEVPK |
| 3.7 | 1399.755814 | 0.006654 | KTELGPLKEEEK |
| 0.7 | 1399.772430 | -0.009962 | QHAFKQAFAKPK |

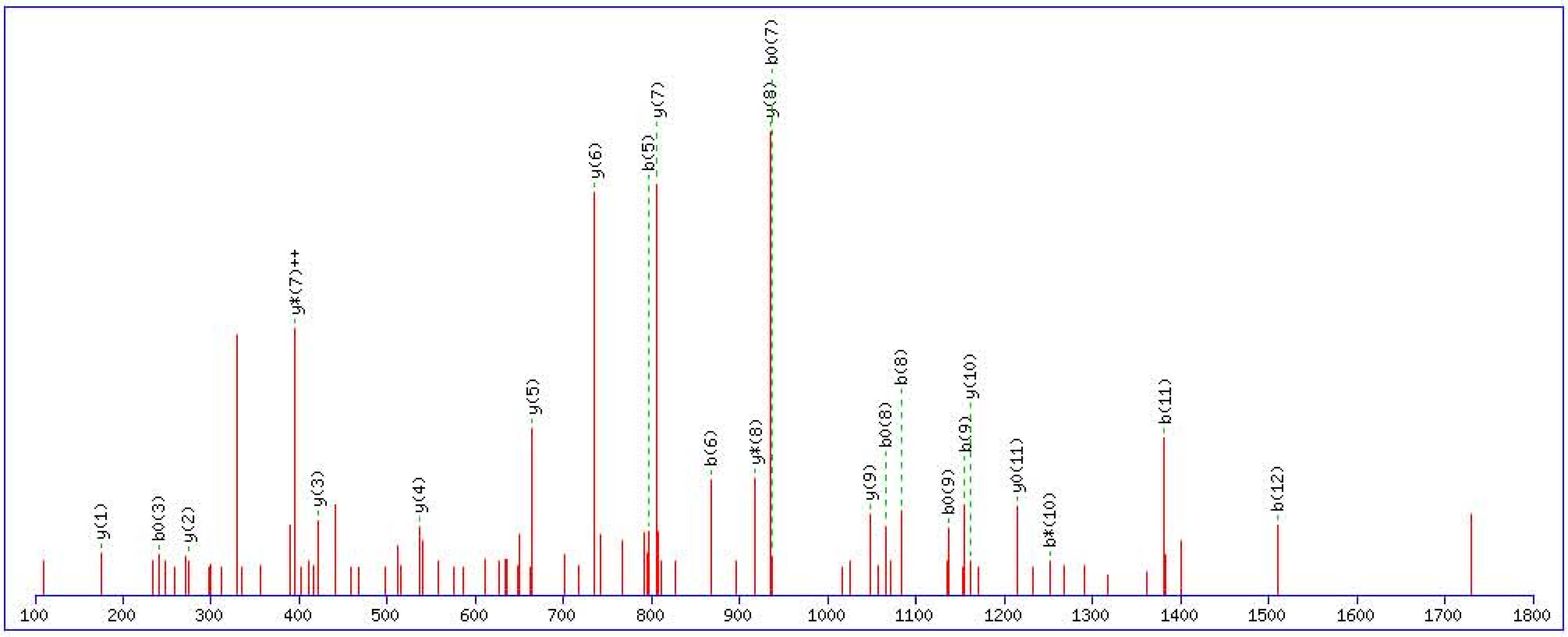
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GSLVQASEANLQAAQDFVR**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

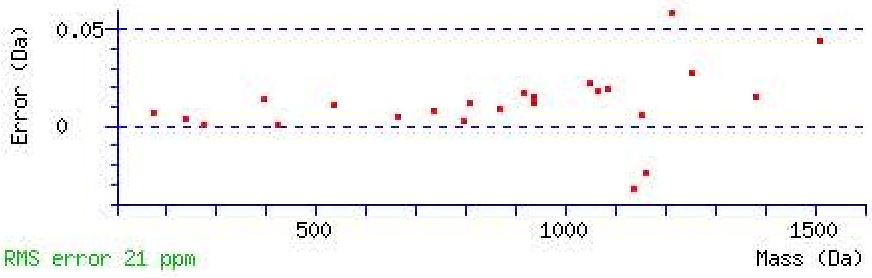
Match to Query 53224: 2314.183812 from(772.401880,3+) rtinseconds(2531) index(56101)
Title: Locus:1.1.1.1496.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

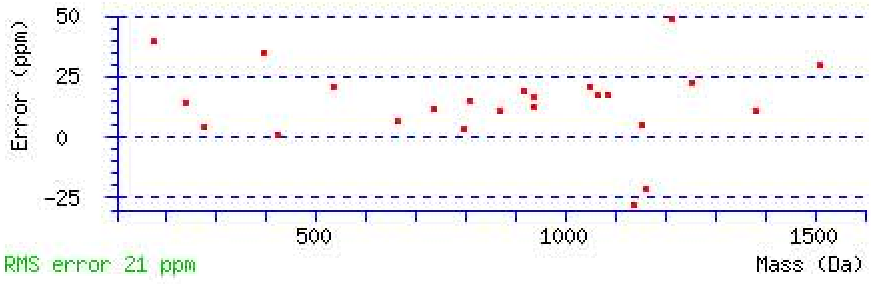
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2314.173950
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5     : Biotin:Thermo-21345 (Q)
Ions Score: 59  Expect: 3.8e-006
Matches : 24/200 fragment ions using 41 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 19 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | S | 2258.159779 | 1129.583527 | 2241.133230 | 1121.070253 | 2240.149214 | 1120.578245 | 18 |
| 3 | 258.144832 | 129.576054 | | | 240.134267 | 120.570772 | L | 2171.127751 | 1086.067513 | 2154.101202 | 1077.554239 | 2153.117186 | 1077.062231 | 17 |
| 4 | 357.213246 | 179.110261 | | | 339.202681 | 170.104979 | V | 2058.043687 | 1029.525481 | 2041.017138 | 1021.012207 | 2040.033122 | 1020.520199 | 16 |
| 5 | ***796.438572*** | 398.722924 | 779.412023 | 390.209650 | 778.428007 | 389.717642 | Q | 1958.975273 | 979.991274 | 1941.948724 | 971.478000 | 1940.964708 | 970.985992 | 15 |
| 6 | ***867.475686*** | 434.241481 | 850.449137 | 425.728207 | 849.465121 | 425.236199 | A | 1519.749947 | 760.378611 | 1502.723398 | 751.865337 | 1501.739382 | 751.373329 | 14 |
| 7 | 954.507714 | 477.757495 | 937.481165 | 469.244220 | 936.497149 | 468.752212 | S | 1448.712833 | 724.860054 | 1431.686284 | 716.346780 | 1430.702268 | 715.854772 | 13 |
| 8 | ***1083.550307*** | 542.278792 | 1066.523758 | 533.765517 | 1065.539742 | 533.273509 | E | 1361.680805 | 681.344040 | 1344.654256 | 672.830766 | 1343.670240 | 672.338758 | 12 |
| 9 | ***1154.587421*** | 577.797349 | 1137.560872 | 569.284074 | 1136.576856 | 568.792066 | A | 1232.638212 | 616.822744 | 1215.611663 | 608.309469 | 1214.627647 | 607.817461 | 11 |
| 10 | 1268.630348 | 634.818812 | 1251.603799 | 626.305538 | 1250.619783 | 625.813529 | N | ***1161.601098*** | 581.304187 | 1144.574549 | 572.790912 | 1143.590533 | 572.298904 | 10 |
| 11 | ***1381.714412*** | 691.360844 | 1364.687863 | 682.847569 | 1363.703847 | 682.355561 | L | ***1047.558171*** | 524.282723 | 1030.531622 | 515.769449 | 1029.547606 | 515.277441 | 9 |
| 12 | ***1509.772990*** | 755.390133 | 1492.746441 | 746.876858 | 1491.762425 | 746.384850 | Q | ***934.474107*** | 467.740692 | 917.447558 | 459.227417 | 916.463542 | 458.735409 | 8 |
| 13 | 1580.810104 | 790.908690 | 1563.783555 | 782.395415 | 1562.799539 | 781.903407 | A | ***806.415529*** | 403.711403 | 789.388980 | 395.198128 | 788.404964 | 394.706120 | 7 |
| 14 | 1651.847218 | 826.427247 | 1634.820669 | 817.913972 | 1633.836653 | 817.421964 | A | ***735.378415*** | 368.192846 | 718.351866 | 359.679571 | 717.367850 | 359.187563 | 6 |
| 15 | 1779.905796 | 890.456536 | 1762.879247 | 881.943261 | 1761.895231 | 881.451253 | Q | ***664.341301*** | 332.674289 | 647.314752 | 324.161014 | 646.330736 | 323.669006 | 5 |
| 16 | 1894.932739 | 947.970007 | 1877.906190 | 939.456733 | 1876.922174 | 938.964725 | D | ***536.282723*** | 268.645000 | 519.256174 | 260.131725 | 518.272158 | 259.639717 | 4 |
| 17 | 2042.001153 | 1021.504215 | 2024.974604 | 1012.990940 | 2023.990588 | 1012.498932 | F | ***421.255780*** | 211.131528 | 404.229231 | 202.618253 | | | 3 |
| 18 | 2141.069567 | 1071.038421 | 2124.043018 | 1062.525147 | 2123.059002 | 1062.033139 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084046 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GSLVQASEANLQAAQDFVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 59.0 | 2314.173950 | 0.009862 | GSLVQASEANLQAAQDFVR |
| 12.4 | 2314.173950 | 0.009862 | GSLVQASEANLQAAQDFVR |
| 1.1 | 2314.170776 | 0.013036 | MADLRQLVTEHAQMMQRIK |

**Mascot:** http://www.matrixscience.com/

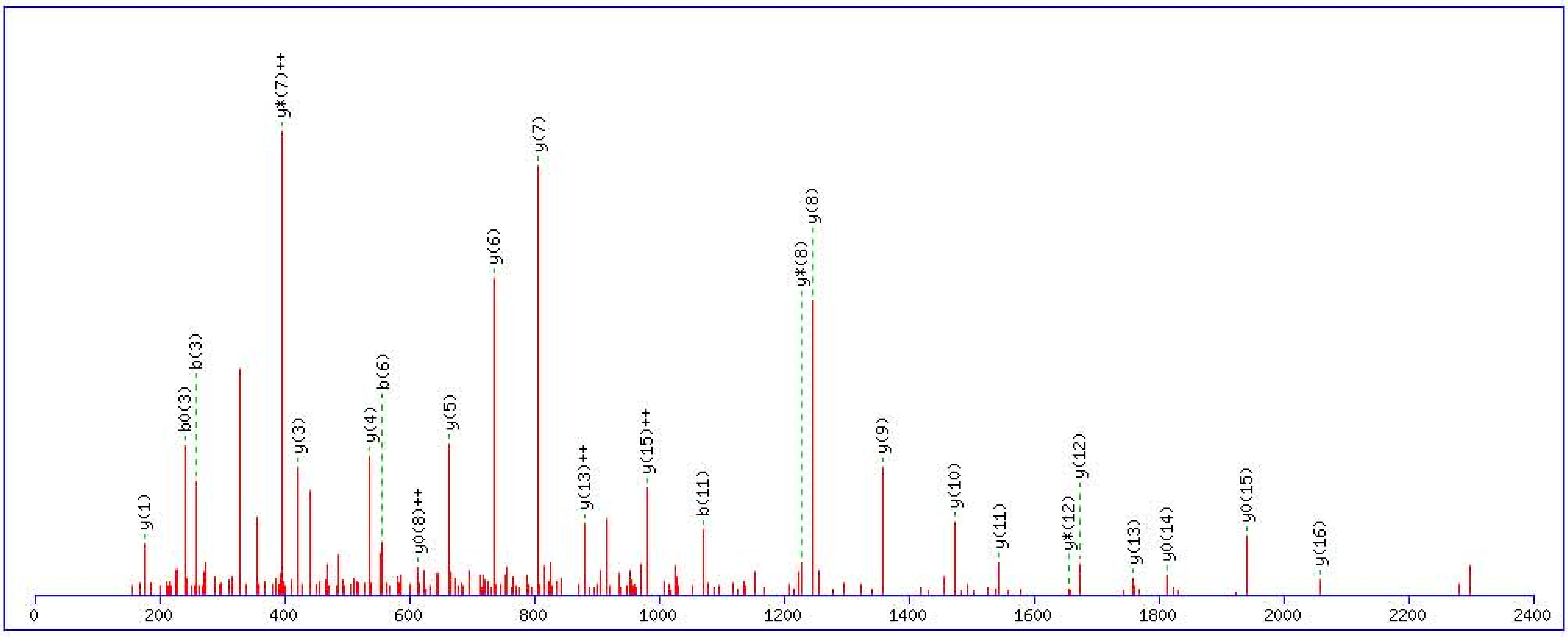
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GSLVQASEANLQAAQDFVR**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

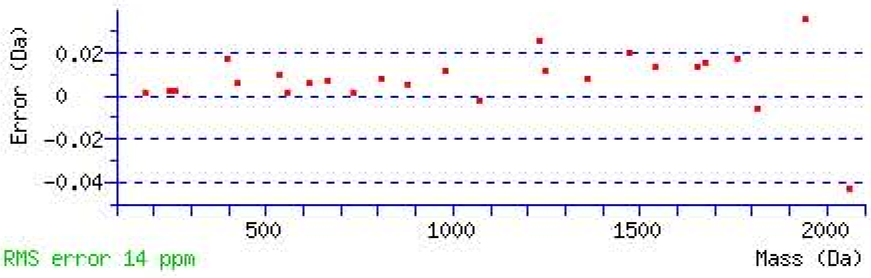
Match to Query 53225: 2314.193412 from(772.405080,3+) rtinseconds(2577) index(56391)
Title: Locus:1.1.1.1512.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

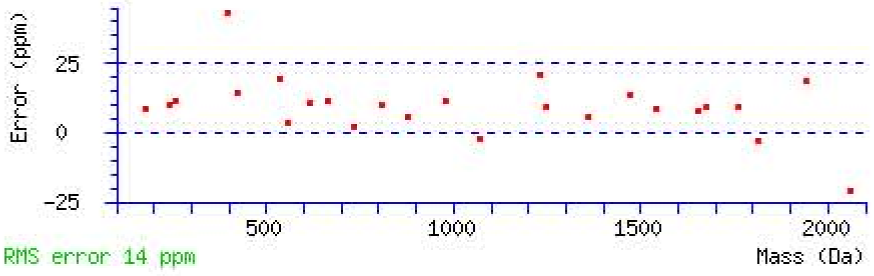
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2314.173950
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12    : Biotin:Thermo-21345 (Q)
Ions Score: 99  Expect: 3.9e-009
Matches : 25/200 fragment ions using 39 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 19 |
| 2 | 145.060768 | 73.034022 | | | 127.050203 | 64.028740 | S | 2258.159779 | 1129.583527 | 2241.133230 | 1121.070253 | 2240.149214 | 1120.578245 | 18 |
| 3 | **258.144832** | 129.576054 | | | 240.134267 | 120.570772 | L | 2171.127751 | 1086.067513 | 2154.101202 | 1077.554239 | 2153.117186 | 1077.062231 | 17 |
| 4 | 357.213246 | 179.110261 | | | 339.202681 | 170.104979 | V | ***2058.043687*** | 1029.525481 | 2041.017138 | 1021.012207 | 2040.033122 | 1020.520199 | 16 |
| 5 | 485.271824 | 243.139550 | 468.245275 | 234.626276 | 467.261259 | 234.134268 | Q | 1958.975273 | 979.991275 | 1941.948724 | 971.478000 | 1940.964708 | 970.985992 | 15 |
| 6 | **556.308938** | 278.658107 | 539.282389 | 270.144833 | 538.298373 | 269.652825 | A | 1830.916695 | 915.961986 | 1813.890146 | 907.448711 | 1812.906130 | 906.956703 | 14 |
| 7 | 643.340966 | 322.174121 | 626.314417 | 313.660847 | 625.330401 | 313.168839 | S | ***1759.879581*** | 880.443429 | 1742.853032 | 871.930154 | 1741.869016 | 871.438146 | 13 |
| 8 | 772.383559 | 386.695418 | 755.357010 | 378.182143 | 754.372994 | 377.690135 | E | ***1672.847553*** | 836.927415 | 1655.821004 | 828.414140 | 1654.836988 | 827.922132 | 12 |
| 9 | 843.420673 | 422.213975 | 826.394124 | 413.700700 | 825.410108 | 413.208692 | A | ***1543.804960*** | 772.406118 | 1526.778411 | 763.892844 | 1525.794395 | 763.400836 | 11 |
| 10 | 957.463600 | 479.235438 | 940.437051 | 470.722164 | 939.453035 | 470.230156 | N | ***1472.767846*** | 736.887561 | 1455.741297 | 728.374287 | 1454.757281 | 727.882279 | 10 |
| 11 | **1070.547664** | 535.777470 | 1053.521115 | 527.264196 | 1052.537099 | 526.772187 | L | ***1358.724919*** | 679.866098 | 1341.698370 | 671.352823 | 1340.714354 | 670.860815 | 9 |
| 12 | 1509.772990 | 755.390133 | 1492.746441 | 746.876859 | 1491.762425 | 746.384851 | Q | ***1245.640855*** | 623.324066 | 1228.614306 | 614.810791 | 1227.630290 | 614.318783 | 8 |
| 13 | 1580.810104 | 790.908690 | 1563.783555 | 782.395416 | 1562.799539 | 781.903408 | A | ***806.415529*** | 403.711403 | 789.388980 | 395.198128 | 788.404964 | 394.706120 | 7 |
| 14 | 1651.847218 | 826.427247 | 1634.820669 | 817.913973 | 1633.836653 | 817.421965 | A | ***735.378415*** | 368.192846 | 718.351866 | 359.679571 | 717.367850 | 359.187563 | 6 |
| 15 | 1779.905796 | 890.456536 | 1762.879247 | 881.943262 | 1761.895231 | 881.451254 | Q | ***664.341301*** | 332.674289 | 647.314752 | 324.161014 | 646.330736 | 323.669006 | 5 |
| 16 | 1894.932739 | 947.970008 | 1877.906190 | 939.456733 | 1876.922174 | 938.964725 | D | ***536.282723*** | 268.645000 | 519.256174 | 260.131725 | 518.272158 | 259.639717 | 4 |
| 17 | 2042.001153 | 1021.504215 | 2024.974604 | 1012.990940 | 2023.990588 | 1012.498932 | F | ***421.255780*** | 211.131528 | 404.229231 | 202.618253 | | | 3 |
| 18 | 2141.069567 | 1071.038421 | 2124.043018 | 1062.525147 | 2123.059002 | 1062.033139 | V | 274.187366 | 137.597321 | 257.160817 | 129.084046 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GSLVQASEANLQAAQDFVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 98.5 | 2314.173950 | 0.019462 | GSLVQASEANLQAAQDFVR |
| 58.6 | 2314.173950 | 0.019462 | GSLVQASEANLQAAQDFVR |
| 17.5 | 2314.173950 | 0.019462 | GSLVQASEANLQAAQDFVR |

**Mascot:** http://www.matrixscience.com/

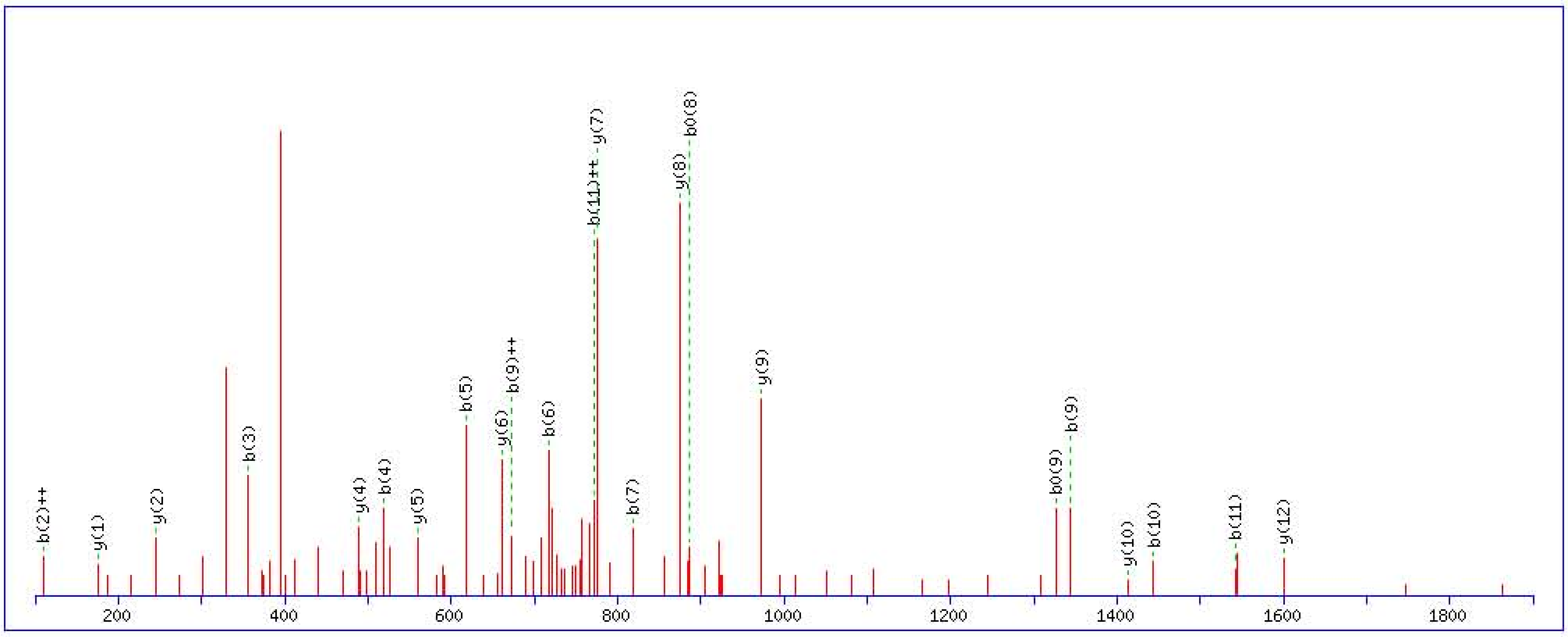
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **FAHYVVTSQVVNTANEAR**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

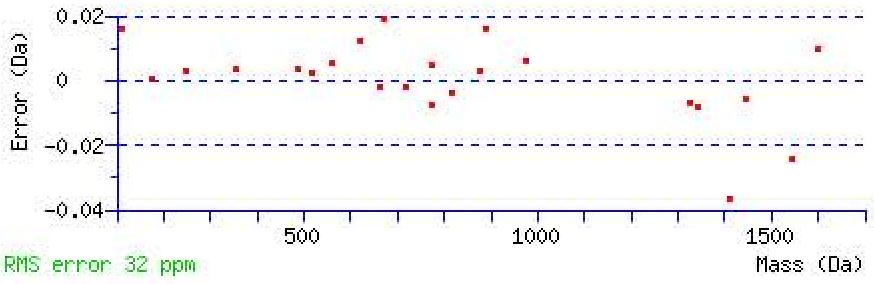
Match to Query 53259: 2316.178602 from(773.066810,3+) rtinseconds(1985) index(52769)
Title: Locus:1.1.1.1306.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

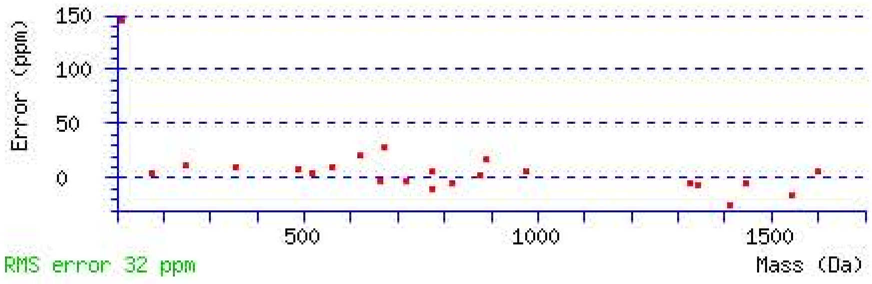
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2316.168488
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 64  Expect: 1.1e-005
Matches : 23/172 fragment ions using 43 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 18 |
| 2 | 219.112804 | **110.060040** | | | | | A | 2170.107350 | 1085.557313 | 2153.080801 | 1077.044038 | 2152.096785 | 1076.552030 | 17 |
| 3 | ***356.171716*** | 178.589496 | | | | | H | 2099.070236 | 1050.038756 | 2082.043687 | 1041.525481 | 2081.059671 | 1041.033473 | 16 |
| 4 | ***519.235045*** | 260.121161 | | | | | Y | 1962.011324 | 981.509300 | 1944.984775 | 972.996026 | 1944.000759 | 972.504018 | 15 |
| 5 | ***618.303459*** | 309.655368 | | | | | V | 1798.947995 | 899.977636 | 1781.921446 | 891.464361 | 1780.937430 | 890.972353 | 14 |
| 6 | ***717.371873*** | 359.189575 | | | | | V | 1699.879581 | 850.443429 | 1682.853032 | 841.930154 | 1681.869016 | 841.438146 | 13 |
| 7 | ***818.419552*** | 409.713414 | | | 800.408987 | 400.708132 | T | ***1600.811167*** | 800.909222 | 1583.784618 | 792.395947 | 1582.800602 | 791.903939 | 12 |
| 8 | 905.451580 | 453.229428 | | | 887.441015 | 444.224146 | S | 1499.763488 | 750.385382 | 1482.736939 | 741.872108 | 1481.752923 | 741.380100 | 11 |
| 9 | ***1344.676906*** | **672.842091** | 1327.650357 | 664.328817 | 1326.666341 | 663.836808 | Q | ***1412.731460*** | 706.869368 | 1395.704911 | 698.356094 | 1394.720895 | 697.864086 | 10 |
| 10 | ***1443.745320*** | 722.376298 | 1426.718771 | 713.863024 | 1425.734755 | 713.371016 | V | ***973.506134*** | 487.256705 | 956.479585 | 478.743431 | 955.495569 | 478.251423 | 9 |
| 11 | ***1542.813734*** | **771.910505** | 1525.787185 | 763.397231 | 1524.803169 | 762.905223 | V | ***874.437720*** | 437.722498 | 857.411171 | 429.209224 | 856.427155 | 428.717216 | 8 |
| 12 | 1656.856661 | 828.931969 | 1639.830112 | 820.418694 | 1638.846096 | 819.926686 | N | ***775.369306*** | 388.188291 | 758.342757 | 379.675017 | 757.358741 | 379.183009 | 7 |
| 13 | 1757.904340 | 879.455808 | 1740.877791 | 870.942534 | 1739.893775 | 870.450526 | T | ***661.326379*** | 331.166828 | 644.299830 | 322.653553 | 643.315814 | 322.161545 | 6 |
| 14 | 1828.941454 | 914.974365 | 1811.914905 | 906.461091 | 1810.930889 | 905.969083 | A | ***560.278700*** | 280.642988 | 543.252151 | 272.129714 | 542.268135 | 271.637706 | 5 |
| 15 | 1942.984381 | 971.995829 | 1925.957832 | 963.482554 | 1924.973816 | 962.990546 | N | ***489.241586*** | 245.124431 | 472.215037 | 236.611157 | 471.231021 | 236.119149 | 4 |
| 16 | 2072.026974 | 1036.517125 | 2055.000425 | 1028.003850 | 2054.016409 | 1027.511842 | E | 375.198659 | 188.102968 | 358.172110 | 179.589693 | 357.188094 | 179.097685 | 3 |
| 17 | 2143.064088 | 1072.035682 | 2126.037539 | 1063.522407 | 2125.053523 | 1063.030399 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068397 | | | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FAHYVVTSQVVNTANEAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 63.6 | 2316.168488 | 0.010114 | FAHYVVTSQVVNTANEAR |

**Mascot:** http://www.matrixscience.com/

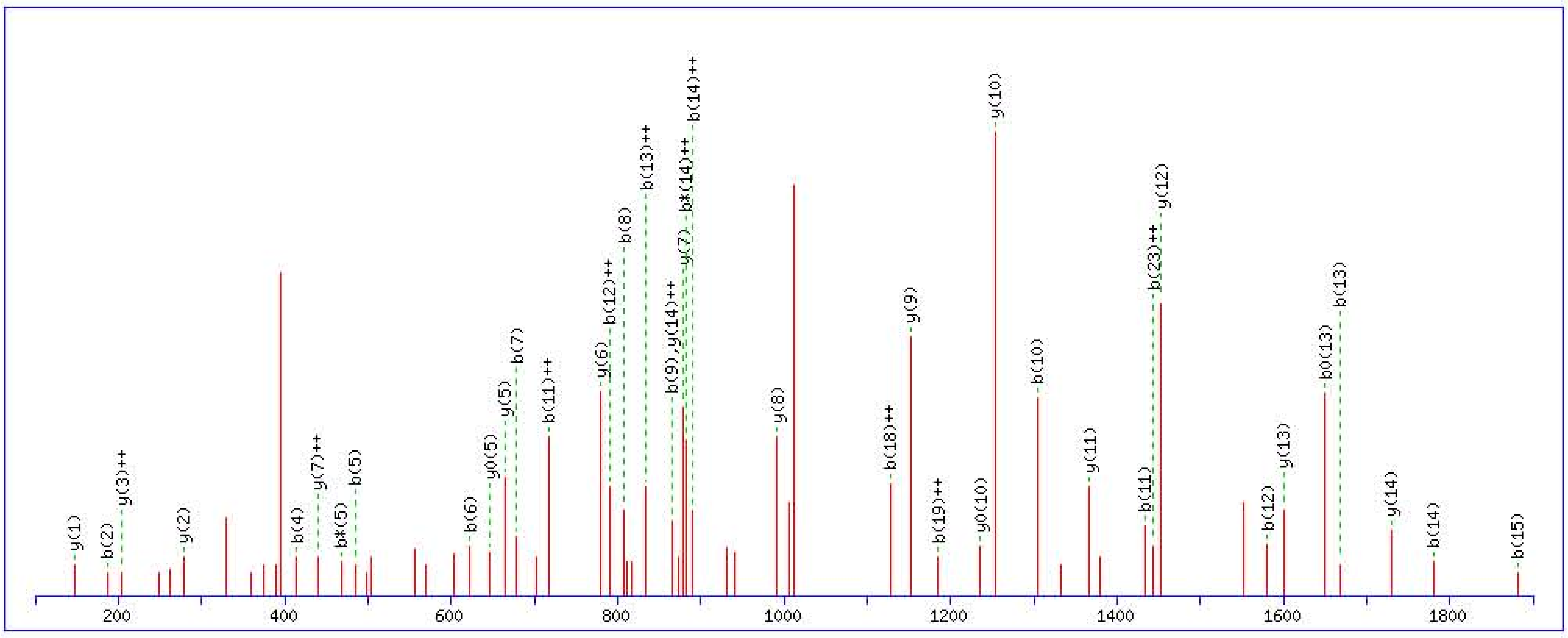
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ADVQAHGEGQEFSITCLVDEEEMK**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

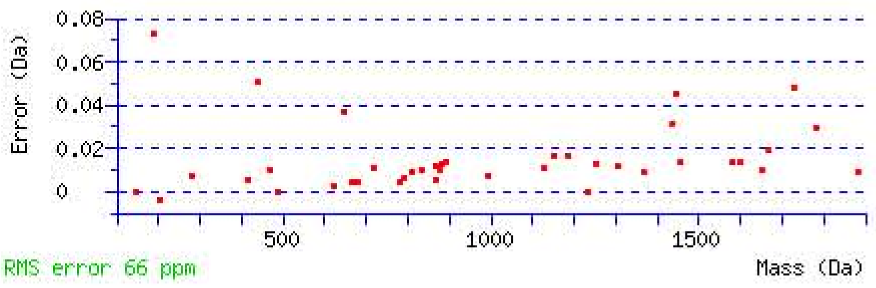
Match to Query 61928: 3032.393802 from(1011.805210,3+) rtinseconds(2544) index(56211)
Title: Locus:1.1.1.1500.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

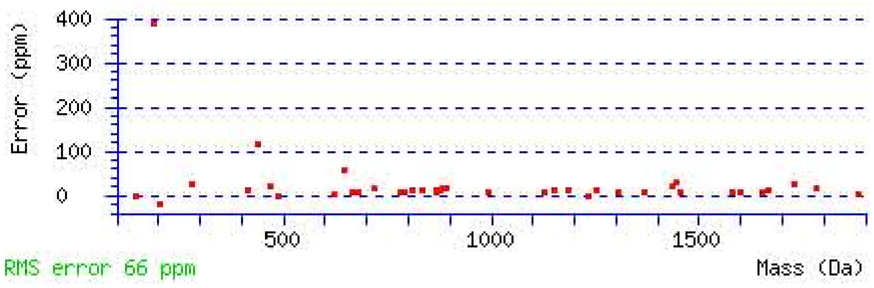
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3032.356552
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 103  Expect: 6e-010
Matches : 40/264 fragment ions using 58 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 24 |
| 2 | ***187.071333*** | 94.039304 | | | 169.060768 | 85.034022 | D | 2962.326724 | 1481.667000 | 2945.300175 | 1473.153725 | 2944.316159 | 1472.661717 | 23 |
| 3 | 286.139747 | 143.573512 | | | 268.129182 | 134.568229 | V | 2847.299781 | 1424.153528 | 2830.273232 | 1415.640254 | 2829.289216 | 1415.148246 | 22 |
| 4 | ***414.198325*** | 207.602801 | 397.171776 | 199.089526 | 396.187760 | 198.597518 | Q | 2748.231367 | 1374.619321 | 2731.204818 | 1366.106047 | 2730.220802 | 1365.614039 | 21 |
| 5 | ***485.235439*** | 243.121357 | 468.208890 | 234.608083 | 467.224874 | 234.116075 | A | 2620.172789 | 1310.590032 | 2603.146240 | 1302.076758 | 2602.162224 | 1301.584750 | 20 |
| 6 | ***622.294351*** | 311.650814 | 605.267802 | 303.137539 | 604.283786 | 302.645531 | H | 2549.135675 | 1275.071475 | 2532.109126 | 1266.558201 | 2531.125110 | 1266.066193 | 19 |
| 7 | ***679.315815*** | 340.161546 | 662.289266 | 331.648271 | 661.305250 | 331.156263 | G | 2412.076763 | 1206.542019 | 2395.050214 | 1198.028745 | 2394.066198 | 1197.536737 | 18 |
| 8 | ***808.358408*** | 404.682842 | 791.331859 | 396.169568 | 790.347843 | 395.677560 | E | 2355.055299 | 1178.031287 | 2338.028750 | 1169.518013 | 2337.044734 | 1169.026005 | 17 |
| 9 | ***865.379872*** | 433.193574 | 848.353323 | 424.680300 | 847.369307 | 424.188292 | G | 2226.012706 | 1113.509991 | 2208.986157 | 1104.996716 | 2208.002141 | 1104.504708 | 16 |
| 10 | ***1304.605198*** | 652.806237 | 1287.578649 | 644.292963 | 1286.594633 | 643.800954 | Q | 2168.991242 | 1084.999259 | 2151.964693 | 1076.485984 | 2150.980677 | 1075.993976 | 15 |
| 11 | ***1433.647791*** | **717.327534** | 1416.621242 | 708.814259 | 1415.637226 | 708.322251 | E | ***1729.765916*** | 865.386596 | 1712.739367 | 856.873322 | 1711.755351 | 856.381314 | 14 |
| 12 | ***1580.716205*** | **790.861741** | 1563.689656 | 782.348466 | 1562.705640 | 781.856458 | F | ***1600.723323*** | 800.865300 | 1583.696774 | 792.352025 | 1582.712758 | 791.860017 | 13 |
| 13 | ***1667.748233*** | **834.377755** | 1650.721684 | 825.864480 | 1649.737668 | 825.372472 | S | ***1453.654909*** | 727.331093 | 1436.628360 | 718.817818 | 1435.644344 | 718.325810 | 12 |
| 14 | ***1780.832297*** | **890.919787** | 1763.805748 | 882.406512 | 1762.821732 | 881.914504 | I | ***1366.622881*** | 683.815079 | 1349.596332 | 675.301804 | 1348.612316 | 674.809796 | 11 |
| 15 | ***1881.879976*** | 941.443626 | 1864.853427 | 932.930352 | 1863.869411 | 932.438344 | T | ***1253.538817*** | 627.273047 | 1236.512268 | 618.759772 | 1235.528252 | 618.267764 | 10 |
| 16 | 2041.910625 | 1021.458951 | 2024.884076 | 1012.945676 | 2023.900060 | 1012.453668 | C | ***1152.491138*** | 576.749207 | 1135.464589 | 568.235933 | 1134.480573 | 567.743925 | 9 |
| 17 | 2154.994689 | 1078.000983 | 2137.968140 | 1069.487708 | 2136.984124 | 1068.995700 | L | ***992.460489*** | 496.733883 | 975.433940 | 488.220608 | 974.449924 | 487.728600 | 8 |
| 18 | 2254.063103 | **1127.535189** | 2237.036554 | 1119.021915 | 2236.052538 | 1118.529907 | V | ***879.376425*** | 440.191851 | 862.349876 | 431.678576 | 861.365860 | 431.186568 | 7 |
| 19 | 2369.090046 | **1185.048661** | 2352.063497 | 1176.535386 | 2351.079481 | 1176.043378 | D | ***780.308011*** | 390.657644 | 763.281462 | 382.144369 | 762.297446 | 381.652361 | 6 |
| 20 | 2498.132639 | 1249.569957 | 2481.106090 | 1241.056683 | 2480.122074 | 1240.564675 | E | ***665.281068*** | 333.144172 | 648.254519 | 324.630898 | 647.270503 | 324.138890 | 5 |
| 21 | 2627.175232 | 1314.091254 | 2610.148683 | 1305.577979 | 2609.164667 | 1305.085971 | E | 536.238475 | 268.622876 | 519.211926 | 260.109601 | 518.227910 | 259.617593 | 4 |
| 22 | 2756.217825 | 1378.612551 | 2739.191276 | 1370.099276 | 2738.207260 | 1369.607268 | E | 407.195882 | 204.101579 | 390.169333 | 195.588305 | 389.185317 | 195.096297 | 3 |
| 23 | 2887.258310 | **1444.132793** | 2870.231761 | 1435.619518 | 2869.247745 | 1435.127511 | M | ***278.153289*** | 139.580282 | 261.126740 | 131.067008 | | | 2 |
| 24 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of ADVQAHGEGQEFSITCLVDEEEMK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 103.3 | 3032.356552 | 0.037250 | ADVQAHGEGQEFSITCLVDEEEMK |
| 80.9 | 3032.356552 | 0.037250 | ADVQAHGEGQEFSITCLVDEEEMK |

**Mascot:** http://www.matrixscience.com/

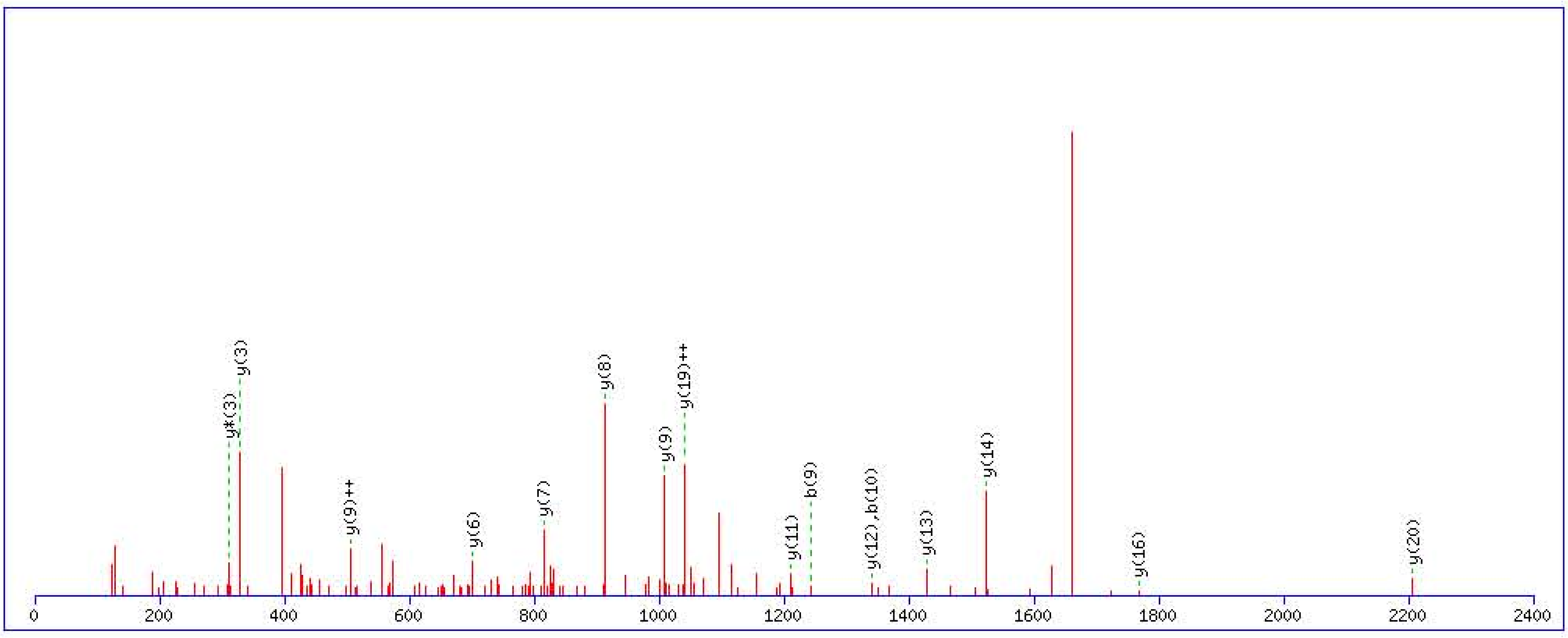
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GMADQDGLKPTIDKPSEDSPPLEMLGPR**
Found in **ITIH1_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H1 OS=Homo sapiens GN=ITIH1 PE=1 SV=3

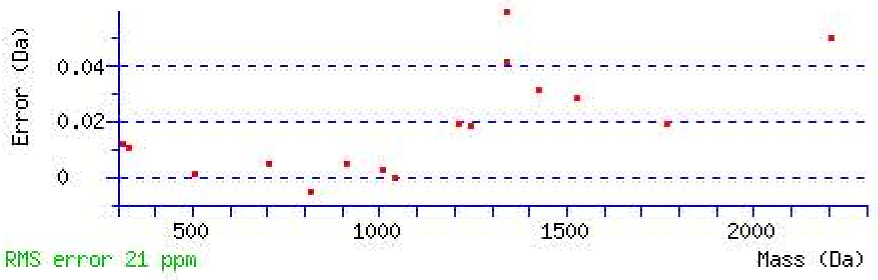
Match to Query 65781: 3320.644416 from(831.168380,4+) rtinseconds(2193) index(54171)
Title: Locus:1.1.1.1378.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

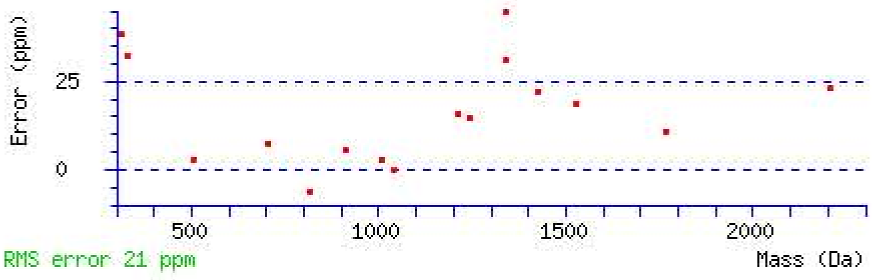
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3320.609070
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**M2** : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
**Q5** : Biotin:Thermo-21345 (Q)
**Ions Score:** 92 **Expect:** 3.9e-009
**Matches** : 16/452 fragment ions using 18 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 28 |
| 2 | 205.064140 | 103.035708 | | | | | M | 3264.594900 | 1632.801088 | 3247.568351 | 1624.287813 | 3246.584335 | 1623.795805 | 27 |
| 3 | 276.101254 | 138.554265 | | | | | A | 3117.559500 | 1559.283388 | 3100.532951 | 1550.770113 | 3099.548935 | 1550.278105 | 26 |
| 4 | 391.128197 | 196.067737 | | | 373.117632 | 187.062454 | D | 3046.522386 | 1523.764831 | 3029.495837 | 1515.251556 | 3028.511821 | 1514.759548 | 25 |
| 5 | 830.353523 | 415.680400 | 813.326974 | 407.167125 | 812.342958 | 406.675117 | Q | 2931.495443 | 1466.251359 | 2914.468894 | 1457.738085 | 2913.484878 | 1457.246077 | 24 |
| 6 | 945.380466 | 473.193871 | 928.353917 | 464.680597 | 927.369901 | 464.188589 | D | 2492.270117 | 1246.638696 | 2475.243568 | 1238.125422 | 2474.259552 | 1237.633414 | 23 |
| 7 | 1002.401930 | 501.704603 | 985.375381 | 493.191329 | 984.391365 | 492.699321 | G | 2377.243174 | 1189.125225 | 2360.216625 | 1180.611950 | 2359.232609 | 1180.119942 | 22 |
| 8 | 1115.485994 | 558.246635 | 1098.459445 | 549.733361 | 1097.475429 | 549.241353 | L | 2320.221710 | 1160.614493 | 2303.195161 | 1152.101218 | 2302.211145 | 1151.609210 | 21 |
| 9 | **1243.580957** | 622.294117 | 1226.554408 | 613.780842 | 1225.570392 | 613.288834 | K | ***2207.137646*** | 1104.072461 | 2190.111097 | 1095.559186 | 2189.127081 | 1095.067178 | 20 |
| 10 | **1340.633721** | 670.820499 | 1323.607172 | 662.307224 | 1322.623156 | 661.815216 | P | 2079.042683 | 1040.024980 | 2062.016134 | 1031.511705 | 2061.032118 | 1031.019697 | 19 |
| 11 | 1441.681400 | 721.344338 | 1424.654851 | 712.831064 | 1423.670835 | 712.339056 | T | 1981.989919 | 991.498598 | 1964.963370 | 982.985323 | 1963.979354 | 982.493315 | 18 |
| 12 | 1554.765464 | 777.886370 | 1537.738915 | 769.373096 | 1536.754899 | 768.881088 | I | 1880.942240 | 940.974758 | 1863.915691 | 932.461484 | 1862.931675 | 931.969476 | 17 |
| 13 | 1669.792407 | 835.399842 | 1652.765858 | 826.886567 | 1651.781842 | 826.394559 | D | ***1767.858176*** | 884.432726 | 1750.831627 | 875.919452 | 1749.847611 | 875.427444 | 16 |
| 14 | 1797.887370 | 899.447323 | 1780.860821 | 890.934049 | 1779.876805 | 890.442041 | K | 1652.831233 | 826.919255 | 1635.804684 | 818.405980 | 1634.820668 | 817.913972 | 15 |
| 15 | 1894.940134 | 947.973705 | 1877.913585 | 939.460431 | 1876.929569 | 938.968423 | P | ***1524.736270*** | 762.871773 | 1507.709721 | 754.358499 | 1506.725705 | 753.866491 | 14 |
| 16 | 1981.972162 | 991.489719 | 1964.945613 | 982.976445 | 1963.961597 | 982.484437 | S | ***1427.683506*** | 714.345391 | 1410.656957 | 705.832117 | 1409.672941 | 705.340109 | 13 |
| 17 | 2111.014755 | 1056.011016 | 2093.988206 | 1047.497741 | 2093.004190 | 1047.005733 | E | ***1340.651478*** | 670.829377 | 1323.624929 | 662.316103 | 1322.640913 | 661.824095 | 12 |
| 18 | 2226.041698 | 1113.524487 | 2209.015149 | 1105.011212 | 2208.031133 | 1104.519204 | D | ***1211.608885*** | 606.308081 | 1194.582336 | 597.794806 | 1193.598320 | 597.302798 | 11 |
| 19 | 2313.073726 | 1157.040501 | 2296.047177 | 1148.527226 | 2295.063161 | 1148.035218 | S | 1096.581942 | 548.794609 | 1079.555393 | 540.281335 | 1078.571377 | 539.789327 | 10 |
| 20 | 2410.126490 | 1205.566883 | 2393.099941 | 1197.053608 | 2392.115925 | 1196.561600 | P | ***1009.549914*** | 505.278595 | 992.523365 | 496.765321 | 991.539349 | 496.273313 | 9 |
| 21 | 2507.179254 | 1254.093265 | 2490.152705 | 1245.579990 | 2489.168689 | 1245.087983 | P | ***912.497150*** | 456.752213 | 895.470601 | 448.238939 | 894.486585 | 447.746931 | 8 |
| 22 | 2620.263318 | 1310.635297 | 2603.236769 | 1302.122023 | 2602.252753 | 1301.630015 | L | ***815.444386*** | 408.225831 | 798.417837 | 399.712557 | 797.433821 | 399.220549 | 7 |
| 23 | 2749.305911 | 1375.156594 | 2732.279362 | 1366.643319 | 2731.295346 | 1366.151311 | E | ***702.360322*** | 351.683799 | 685.333773 | 343.170525 | 684.349757 | 342.678517 | 6 |
| 24 | 2880.346396 | 1440.676836 | 2863.319847 | 1432.163562 | 2862.335831 | 1431.671554 | M | 573.317729 | 287.162503 | 556.291180 | 278.649228 | | | 5 |
| 25 | 2993.430460 | 1497.218868 | 2976.403911 | 1488.705594 | 2975.419895 | 1488.213586 | L | 442.277244 | 221.642260 | 425.250695 | 213.128986 | | | 4 |
| 26 | 3050.451924 | 1525.729600 | 3033.425375 | 1517.216326 | 3032.441359 | 1516.724318 | G | ***329.193180*** | 165.100228 | 312.166631 | 156.586953 | | | 3 |
| 27 | 3147.504688 | 1574.255982 | 3130.478139 | 1565.742708 | 3129.494123 | 1565.250700 | P | 272.171716 | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 28 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GMADQDGLKPTIDKPSEDSPPLEMLGPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 91.5 | 3320.609070 | 0.035346 | GMADQDGLKPTIDKPSEDSPPLEMLGPR |
| 1.8 | 3320.689682 | -0.045266 | LLSQLPEVHEPPQEKQEPPCSQSPKK |
| 0.9 | 3320.645462 | -0.001046 | QDIGDILHQIMTITDQSLDEAQAK |
| 0.2 | 3320.689682 | -0.045266 | LLSQLPEVHEPPQEKQEPPCSQSPKK |
| 0.2 | 3320.689682 | -0.045266 | LLSQLPEVHEPPQEKQEPPCSQSPKK |

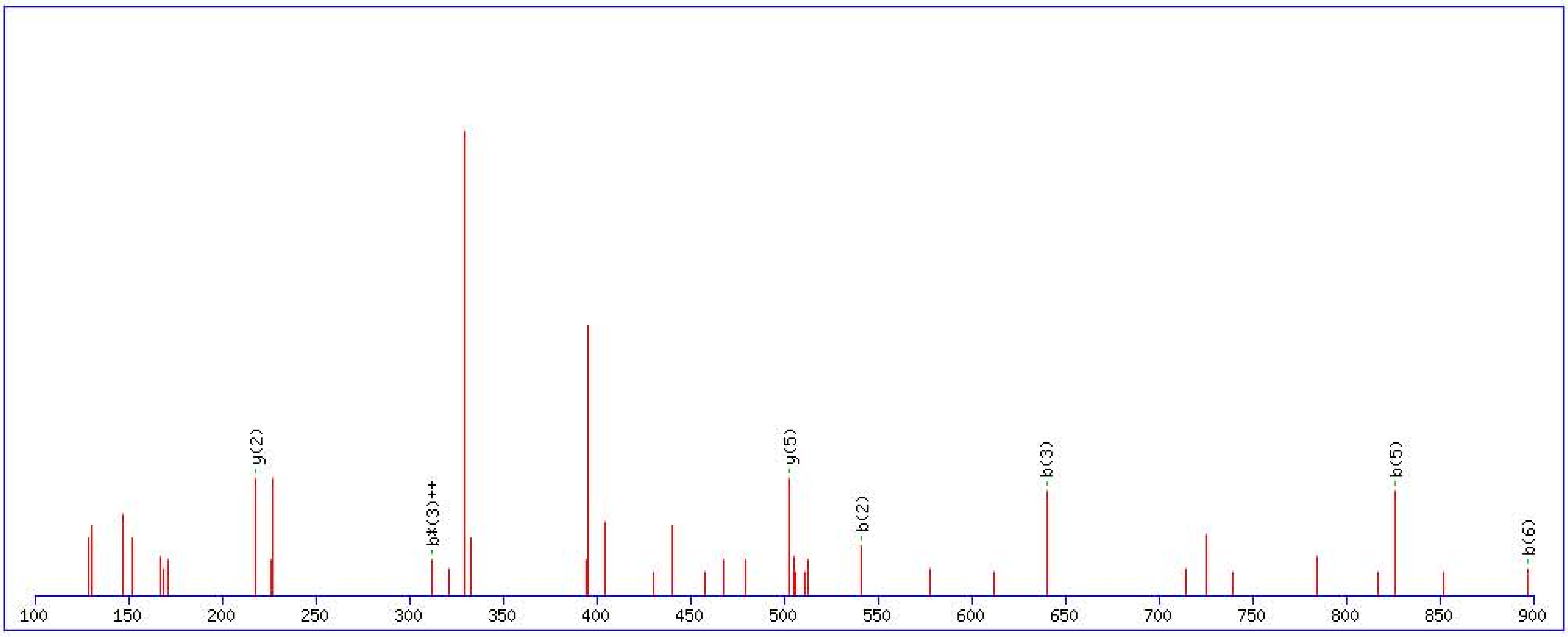
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **TQVADAK**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

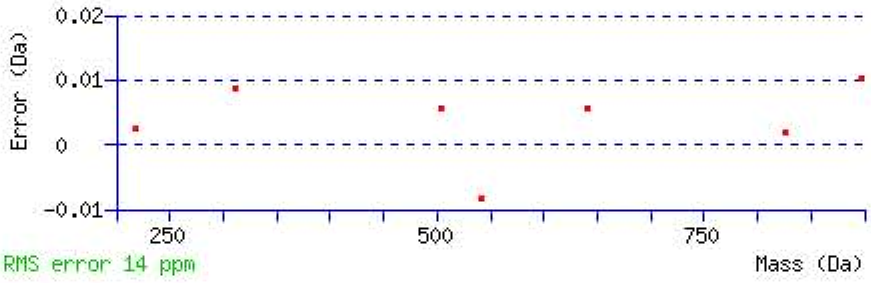
Match to Query 17358: 1042.548268 from(522.281410,2+) rtinseconds(1332) index(48430)
Title: Locus:1.1.1.1079.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

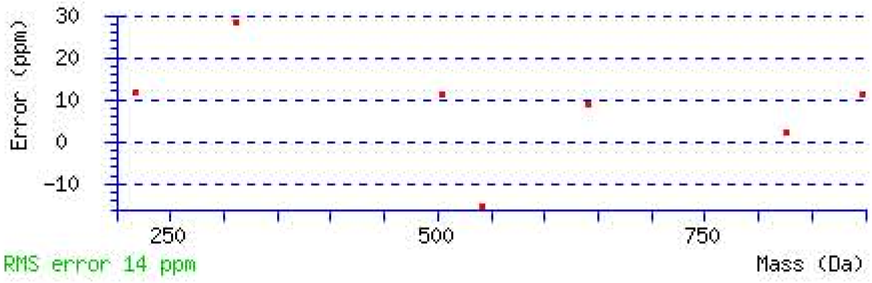
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1042.548111
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.027
Matches : 7/66 fragment ions using 8 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | **T** | | | | | | | 7 |
| 2 | ***541.280281*** | 271.143779 | 524.253732 | 262.630504 | 523.269716 | 262.138496 | **Q** | 942.507715 | 471.757496 | 925.481166 | 463.244221 | 924.497150 | 462.752213 | 6 |
| 3 | ***640.348695*** | 320.677986 | 623.322146 | 312.164711 | 622.338130 | 311.672703 | **V** | **503.282389** | 252.144832 | 486.255840 | 243.631558 | 485.271824 | 243.139550 | 5 |
| 4 | 711.385809 | 356.196543 | 694.359260 | 347.683268 | 693.375244 | 347.191260 | **A** | 404.213975 | 202.610625 | 387.187426 | 194.097351 | 386.203410 | 193.605343 | 4 |
| 5 | ***826.412752*** | 413.710014 | 809.386203 | 405.196739 | 808.402187 | 404.704731 | **D** | 333.176861 | 167.092068 | 316.150312 | 158.578794 | 315.166296 | 158.086786 | 3 |
| 6 | ***897.449866*** | 449.228571 | 880.423317 | 440.715296 | 879.439301 | 440.223288 | **A** | **218.149918** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 7 | | | | | | | **K** | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TQVADAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.0 | 1042.548111 | 0.000157 | TQVADAK |
| 12.4 | 1042.548096 | 0.000172 | SLQADAK |
| 11.7 | 1042.540726 | 0.007542 | KPVSEVGDGR |
| 10.0 | 1042.540680 | 0.007588 | EAEKRPADK |
| 8.7 | 1042.540695 | 0.007573 | GREPEASGLK |
| 8.4 | 1042.540680 | 0.007588 | SLENPAERK |
| 7.5 | 1042.548080 | 0.000188 | EKEQAK |
| 7.0 | 1042.548096 | 0.000172 | QTENLK |
| 6.3 | 1042.554611 | -0.006343 | EPSEIVELK |
| 6.1 | 1042.548096 | 0.000172 | QEAGLSK |

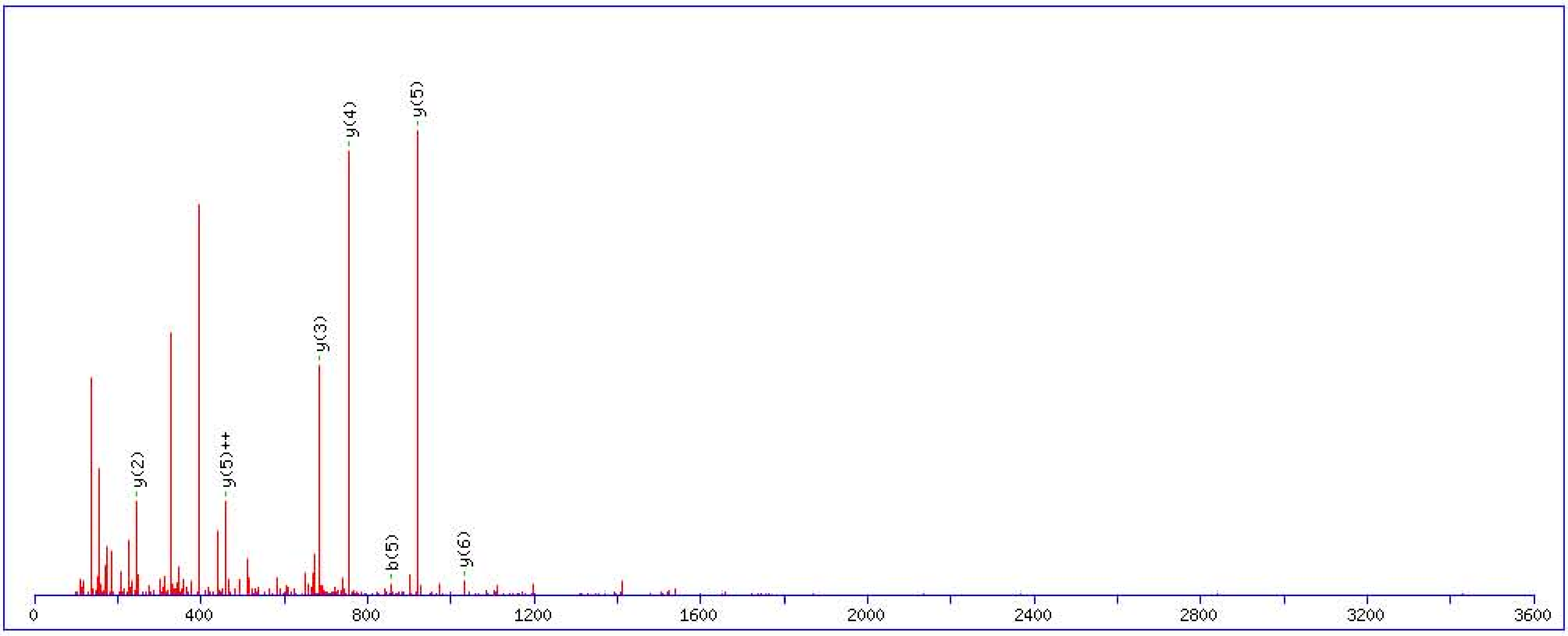
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ALYAQAR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

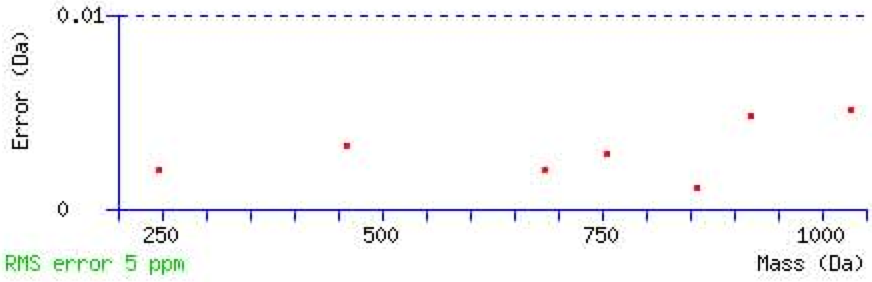
Match to Query 18789: 1102.595728 from(552.305140,2+) rtinseconds(1681) index(50706)
Title: Locus:1.1.1.1201.3 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

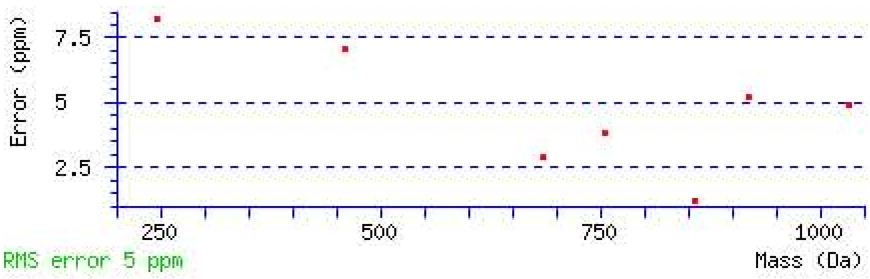
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1102.595703
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 38  Expect: 0.0034
Matches : 7/40 fragment ions using 10 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | A | | | | | 7 |
| 2 | 185.128454 | 93.067865 | | | L | *1032.565899* | 516.786588 | 1015.539350 | 508.273313 | 6 |
| 3 | 348.191783 | 174.599529 | | | Y | *919.481835* | 460.244556 | 902.455286 | 451.731281 | 5 |
| 4 | 419.228897 | 210.118087 | | | A | *756.418506* | 378.712891 | 739.391957 | 370.199617 | 4 |
| 5 | **858.454223** | 429.730750 | 841.427674 | 421.217475 | Q | *685.381392* | 343.194334 | 668.354843 | 334.681060 | 3 |
| 6 | 929.491337 | 465.249307 | 912.464788 | 456.736032 | A | *246.156066* | 123.581671 | 229.129517 | 115.068397 | 2 |
| 7 | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549840 | 1 |





NCBI **BLAST** search of ALYAQAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.5 | 1102.595703 | 0.000025 | ALYAQAR |
| 10.5 | 1102.602234 | -0.006506 | AIELGYNPVK |
| 3.6 | 1102.580460 | 0.015268 | AMVENVTLAR |
| 1.6 | 1102.584305 | 0.011423 | QSSQRGLTAR |
| 0.9 | 1102.598221 | -0.002493 | DDLKATLTAR |
| 0.7 | 1102.588333 | 0.007395 | SPYGLTPRGR |
| 0.3 | 1102.591660 | 0.004068 | KMREELAAR |

**Mascot:** http://www.matrixscience.com/

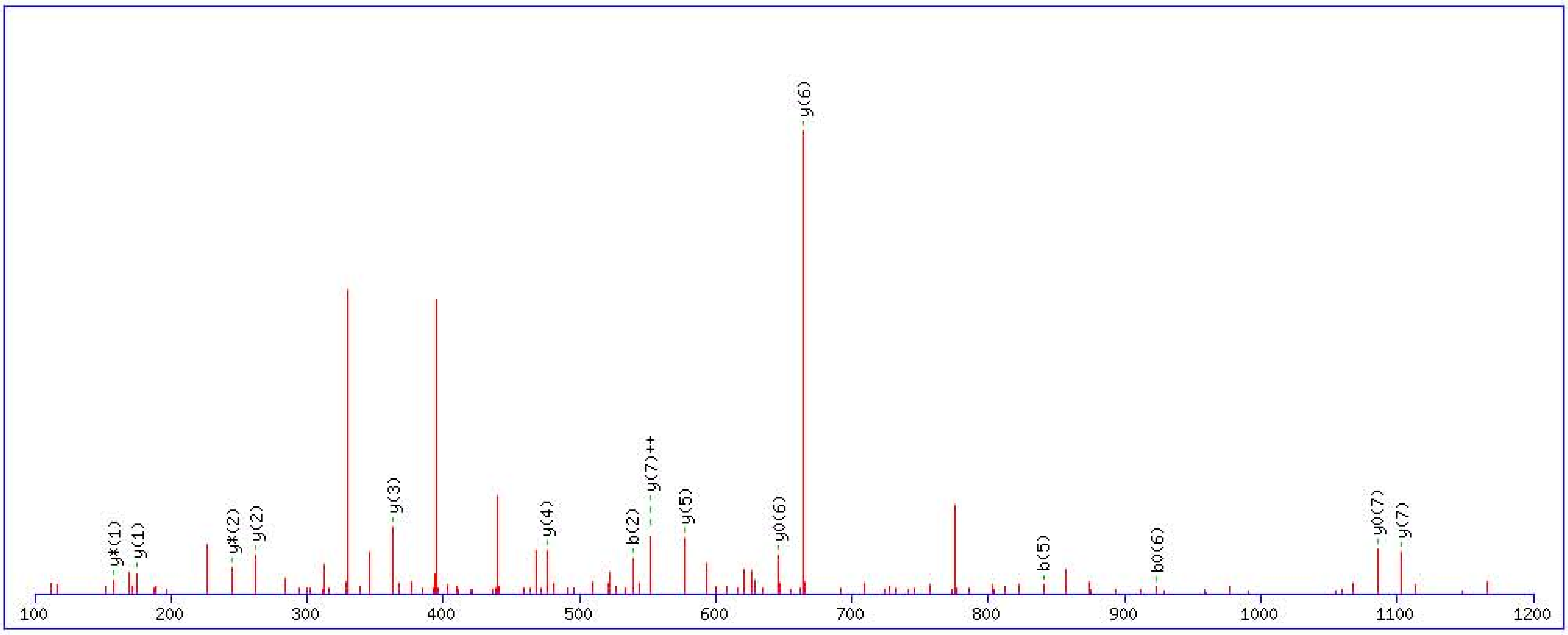
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VQSTITSR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

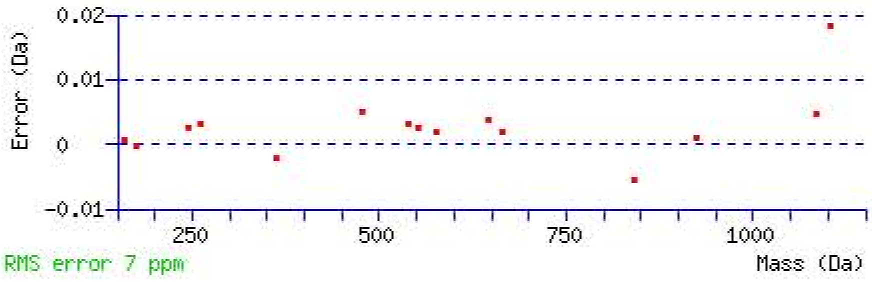
Match to Query 23336: 1201.649588 from(601.832070,2+) rtinseconds(1533) index(49759)
Title: Locus:1.1.1.1149.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

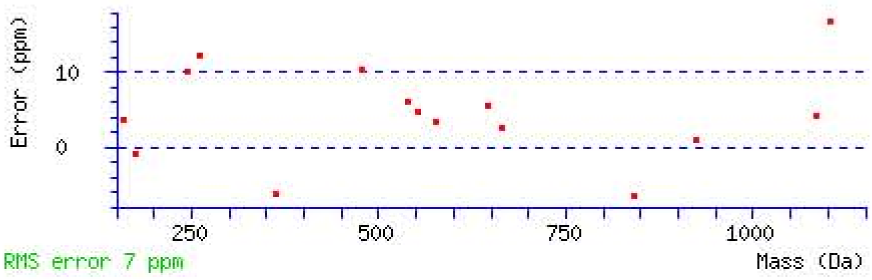
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1201.648895
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q2** : Biotin:Thermo-21345 (Q)
**Ions Score:** 37 **Expect:** 0.00042
**Matches** : 15/76 fragment ions using 33 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | **539.301016** | 270.154146 | 522.274467 | 261.640872 | | | Q | ***1103.587756*** | 552.297516 | 1086.561207 | 543.784242 | 1085.577191 | 543.292234 | 7 |
| 3 | 626.333044 | 313.670160 | 609.306495 | 305.156886 | 608.322479 | 304.664878 | S | ***664.362430*** | 332.684853 | 647.335881 | 324.171579 | 646.351865 | 323.679571 | 6 |
| 4 | 727.380723 | 364.194000 | 710.354174 | 355.680725 | 709.370158 | 355.188717 | T | ***577.330402*** | 289.168839 | 560.303853 | 280.655565 | 559.319837 | 280.163557 | 5 |
| 5 | **840.464787** | 420.736032 | 823.438238 | 412.222757 | 822.454222 | 411.730749 | I | ***476.282723*** | 238.645000 | 459.256174 | 230.131725 | 458.272158 | 229.639717 | 4 |
| 6 | 941.512466 | 471.259871 | 924.485917 | 462.746597 | 923.501901 | 462.254589 | T | ***363.198659*** | 182.102968 | 346.172110 | 173.589693 | 345.188094 | 173.097685 | 3 |
| 7 | 1028.544494 | 514.775885 | 1011.517945 | 506.262611 | 1010.533929 | 505.770603 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 8 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VQSTITSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.9 | 1201.648895 | 0.000693 | VQSTITSR |
| 0.9 | 1201.638992 | 0.010596 | VQPPSHAR |
| 0.3 | 1201.638992 | 0.010596 | VQGREFR |

**Mascot:** http://www.matrixscience.com/

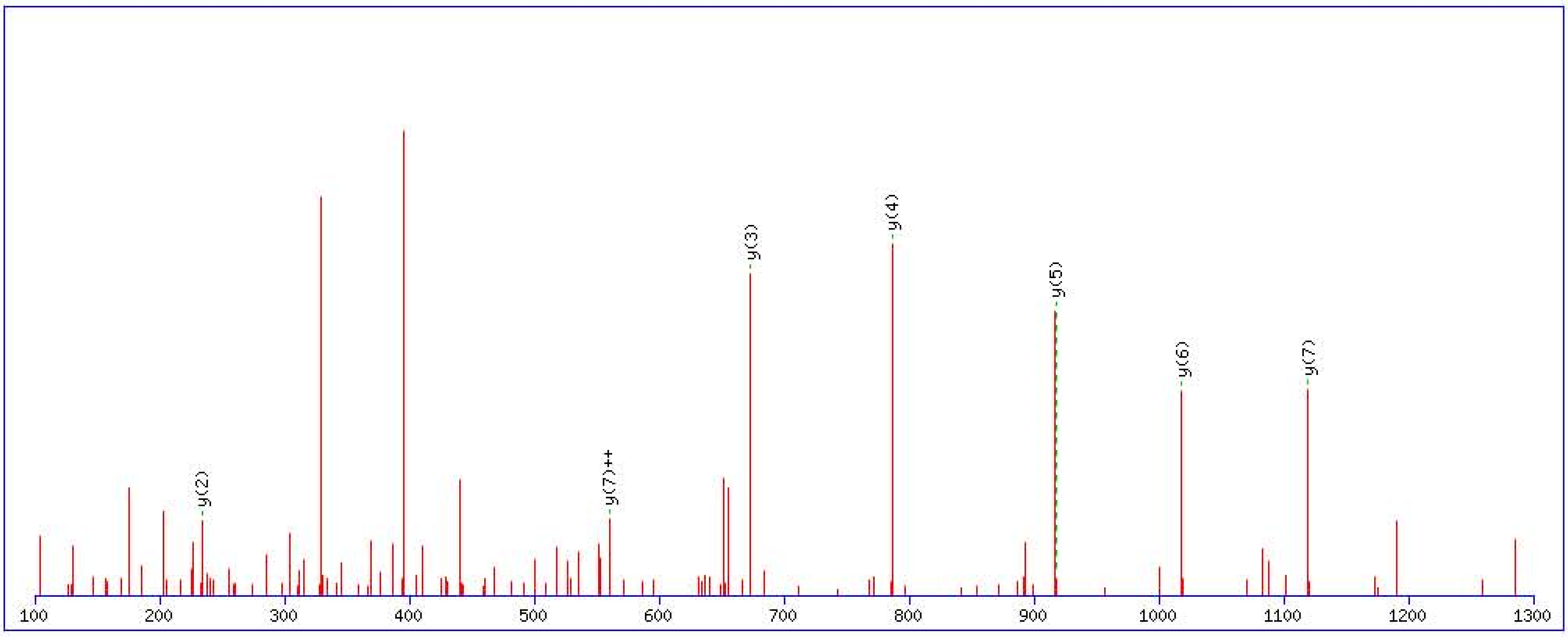
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MATTMIQSK**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

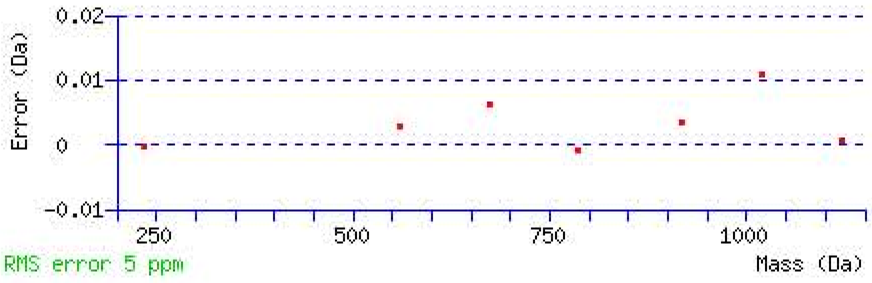
Match to Query 26547: 1320.664428 from(661.339490,2+) rtinseconds(1776) index(51353)
Title: Locus:1.1.1.1234.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

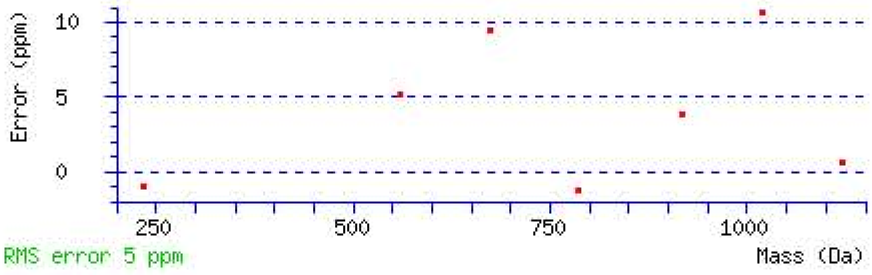
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1300] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1320.660370
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 40 **Expect:** 0.00075
**Matches :** 7/78 fragment ions using 12 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 132.047761 | 66.527518 | | | | | M | | | | | | | 9 |
| 2 | 203.084875 | 102.046075 | | | | | A | 1190.627179 | 595.817228 | 1173.600630 | 587.303953 | 1172.616614 | 586.811945 | 8 |
| 3 | 304.132554 | 152.569915 | | | 286.121989 | 143.564632 | T | ***1119.590065*** | 560.298671 | 1102.563516 | 551.785396 | 1101.579500 | 551.293388 | 7 |
| 4 | 405.180233 | 203.093754 | | | 387.169668 | 194.088472 | T | ***1018.542386*** | 509.774831 | 1001.515837 | 501.261557 | 1000.531821 | 500.769549 | 6 |
| 5 | 536.220718 | 268.613997 | | | 518.210153 | 259.608715 | M | ***917.494707*** | 459.250992 | 900.468158 | 450.737717 | 899.484142 | 450.245709 | 5 |
| 6 | 649.304782 | 325.156029 | | | 631.294217 | 316.150747 | I | ***786.454222*** | 393.730749 | 769.427673 | 385.217475 | 768.443657 | 384.725467 | 4 |
| 7 | 1088.530108 | 544.768692 | 1071.503559 | 536.255418 | 1070.519543 | 535.763410 | Q | ***673.370158*** | 337.188717 | 656.343609 | 328.675443 | 655.359593 | 328.183435 | 3 |
| 8 | 1175.562136 | 588.284706 | 1158.535587 | 579.771432 | 1157.551571 | 579.279424 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 9 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of MATTMIQSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.7 | 1320.660370 | 0.004058 | MATTMIQSK |
| 6.0 | 1320.677292 | -0.012864 | LATTTTDTSSVPK |
| 4.6 | 1320.670715 | -0.006287 | IAPKASMAGASSSK |
| 2.7 | 1320.675461 | -0.011033 | RMRLVVDGMGR |
| 1.8 | 1320.682816 | -0.018388 | RMKPLMMDRK |
| 0.9 | 1320.674759 | -0.010331 | QSTEFAISK |
| 0.4 | 1320.678574 | -0.014146 | SFRAAAAETLER |

**Mascot:** http://www.matrixscience.com/

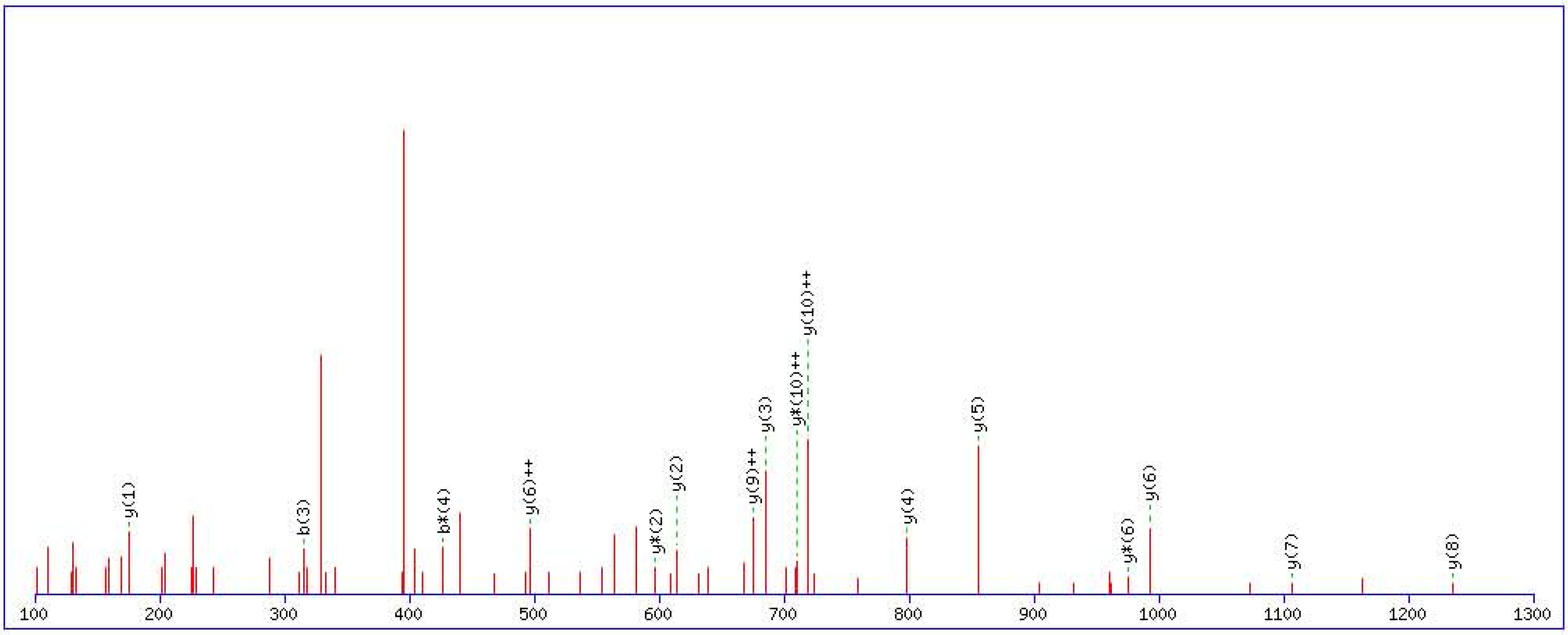
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LSNENHGIAQR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

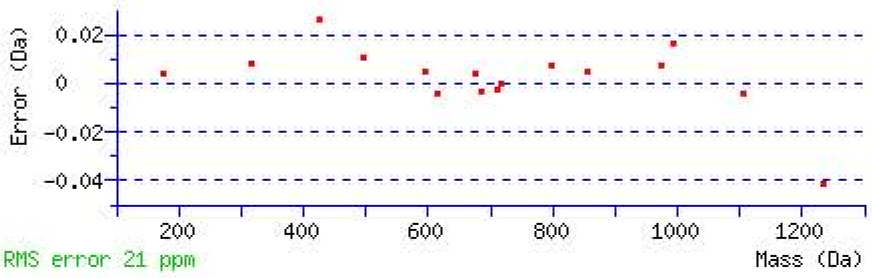
Match to Query 35026: 1548.764742 from(517.262190,3+) rtinseconds(1441) index(49103)
Title: Locus:1.1.1.1117.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

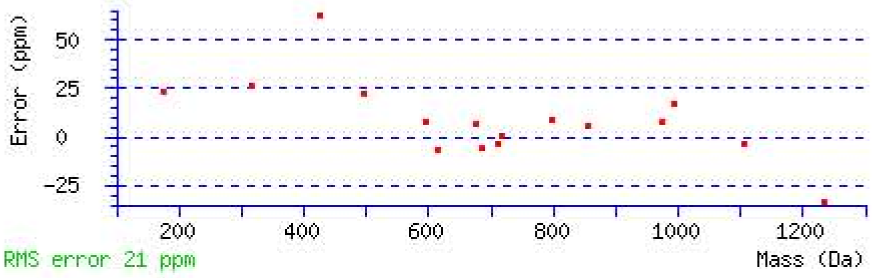
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1548.783066
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 44 **Expect:** 0.00012
**Matches :** 16/100 fragment ions using 29 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 11 |
| 2 | 201.123368 | 101.065322 | | | 183.112803 | 92.060039 | S | 1436.706307 | 718.856792 | 1419.679758 | 710.343517 | 1418.695742 | 709.851509 | 10 |
| 3 | 315.166295 | 158.086785 | 298.139746 | 149.573511 | 297.155730 | 149.081503 | N | 1349.674279 | 675.340778 | 1332.647730 | 666.827503 | 1331.663714 | 666.335495 | 9 |
| 4 | 444.208888 | 222.608082 | 427.182339 | 214.094808 | 426.198323 | 213.602800 | E | ***1235.631352*** | 618.319314 | 1218.604803 | 609.806040 | 1217.620787 | 609.314032 | 8 |
| 5 | 558.251815 | 279.629546 | 541.225266 | 271.116271 | 540.241250 | 270.624263 | N | ***1106.588759*** | 553.798018 | 1089.562210 | 545.284743 | | | 7 |
| 6 | 695.310727 | 348.159002 | 678.284178 | 339.645727 | 677.300162 | 339.153719 | H | ***992.545832*** | 496.776554 | 975.519283 | 488.263280 | | | 6 |
| 7 | 752.332191 | 376.669734 | 735.305642 | 368.156459 | 734.321626 | 367.664451 | G | ***855.486920*** | 428.247098 | 838.460371 | 419.733824 | | | 5 |
| 8 | 865.416255 | 433.211766 | 848.389706 | 424.698491 | 847.405690 | 424.206483 | I | ***798.465456*** | 399.736366 | 781.438907 | 391.223092 | | | 4 |
| 9 | 936.453369 | 468.730323 | 919.426820 | 460.217048 | 918.442804 | 459.725040 | A | ***685.381392*** | 343.194334 | 668.354843 | 334.681060 | | | 3 |
| 10 | 1375.678695 | 688.342986 | 1358.652146 | 679.829711 | 1357.668130 | 679.337703 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of LSNENHGIAQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.6 | 1548.783066 | -0.018324 | LSNENHGIAQR |
| 1.7 | 1548.786438 | -0.021696 | MMQAQEAVSRVKR |
| 1.7 | 1548.786438 | -0.021696 | MMQAQEAVSRVKR |

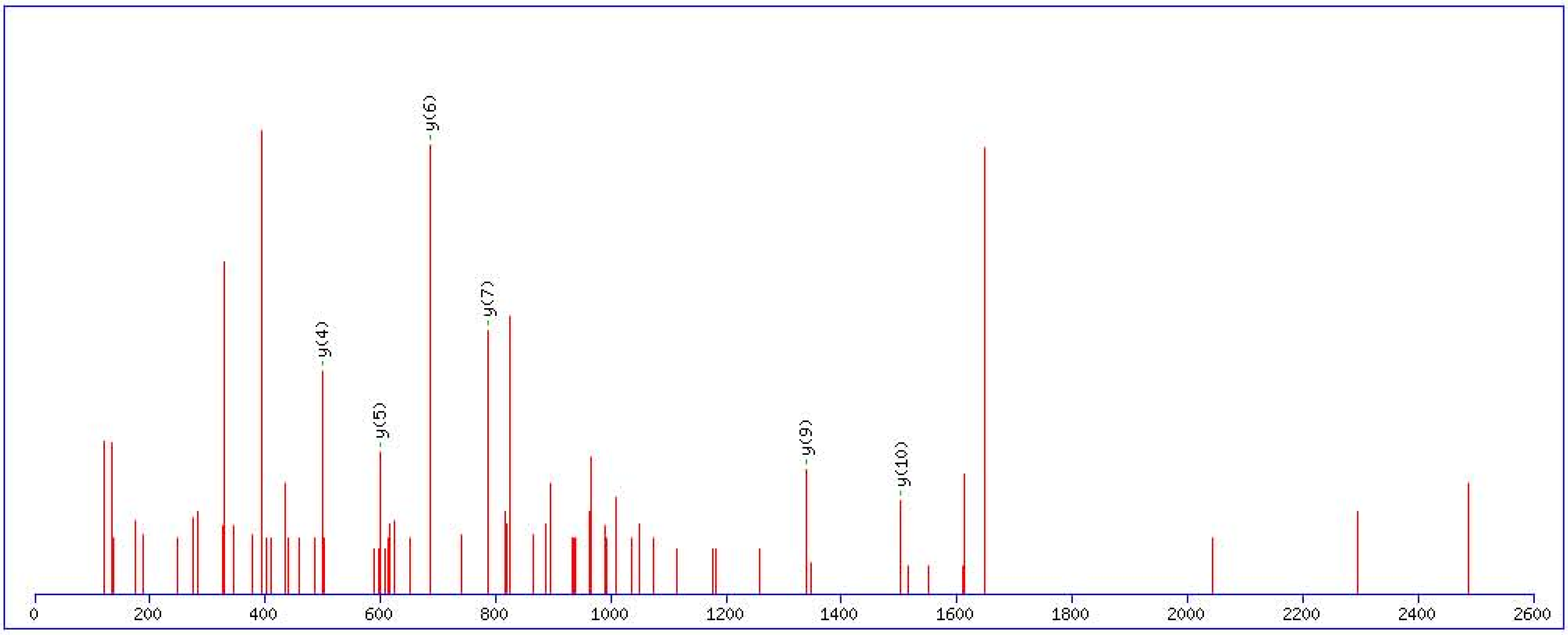
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **FYNQVSTPLLR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

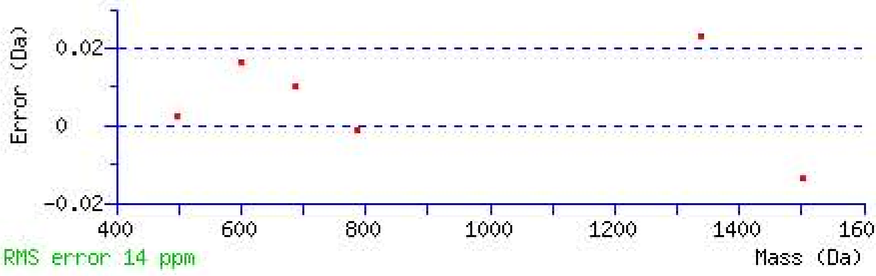
Match to Query 39357: 1647.871848 from(824.943200,2+) rtinseconds(2394) index(55338)
Title: Locus:1.1.1.1448.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

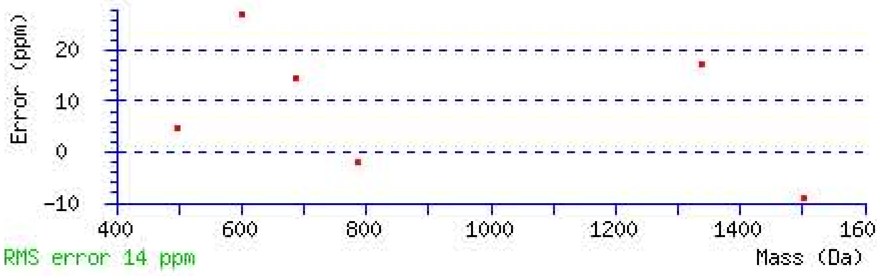
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1647.880676
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q4** : Biotin:Thermo-21345 (Q)
**Ions Score:** 26 **Expect:** 0.066
**Matches :** 6/98 fragment ions using 15 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 11 |
| 2 | 311.139019 | 156.073148 | | | | | Y | ***1501.819547*** | 751.413411 | 1484.792998 | 742.900137 | 1483.808982 | 742.408129 | 10 |
| 3 | 425.181946 | 213.094611 | 408.155397 | 204.581337 | | | N | ***1338.756218*** | 669.881747 | 1321.729669 | 661.368472 | 1320.745653 | 660.876464 | 9 |
| 4 | 864.407272 | 432.707274 | 847.380723 | 424.194000 | | | Q | 1224.713291 | 612.860283 | 1207.686742 | 604.347009 | 1206.702726 | 603.855001 | 8 |
| 5 | 963.475686 | 482.241481 | 946.449137 | 473.728207 | | | V | ***785.487965*** | 393.247620 | 768.461416 | 384.734346 | 767.477400 | 384.242338 | 7 |
| 6 | 1050.507714 | 525.757495 | 1033.481165 | 517.244221 | 1032.497149 | 516.752213 | S | ***686.419551*** | 343.713414 | 669.393002 | 335.200139 | 668.408986 | 334.708131 | 6 |
| 7 | 1151.555393 | 576.281335 | 1134.528844 | 567.768060 | 1133.544828 | 567.276052 | T | ***599.387523*** | 300.197399 | 582.360974 | 291.684125 | 581.376958 | 291.192117 | 5 |
| 8 | 1248.608157 | 624.807717 | 1231.581608 | 616.294442 | 1230.597592 | 615.802434 | P | ***498.339844*** | 249.673560 | 481.313295 | 241.160285 | | | 4 |
| 9 | 1361.692221 | 681.349749 | 1344.665672 | 672.836474 | 1343.681656 | 672.344466 | L | 401.287080 | 201.147178 | 384.260531 | 192.633903 | | | 3 |
| 10 | 1474.776285 | 737.891780 | 1457.749736 | 729.378506 | 1456.765720 | 728.886498 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FYNQVSTPLLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.9 | 1647.880676 | -0.008828 | FYNQVSTPLLR |

**Mascot:** http://www.matrixscience.com/

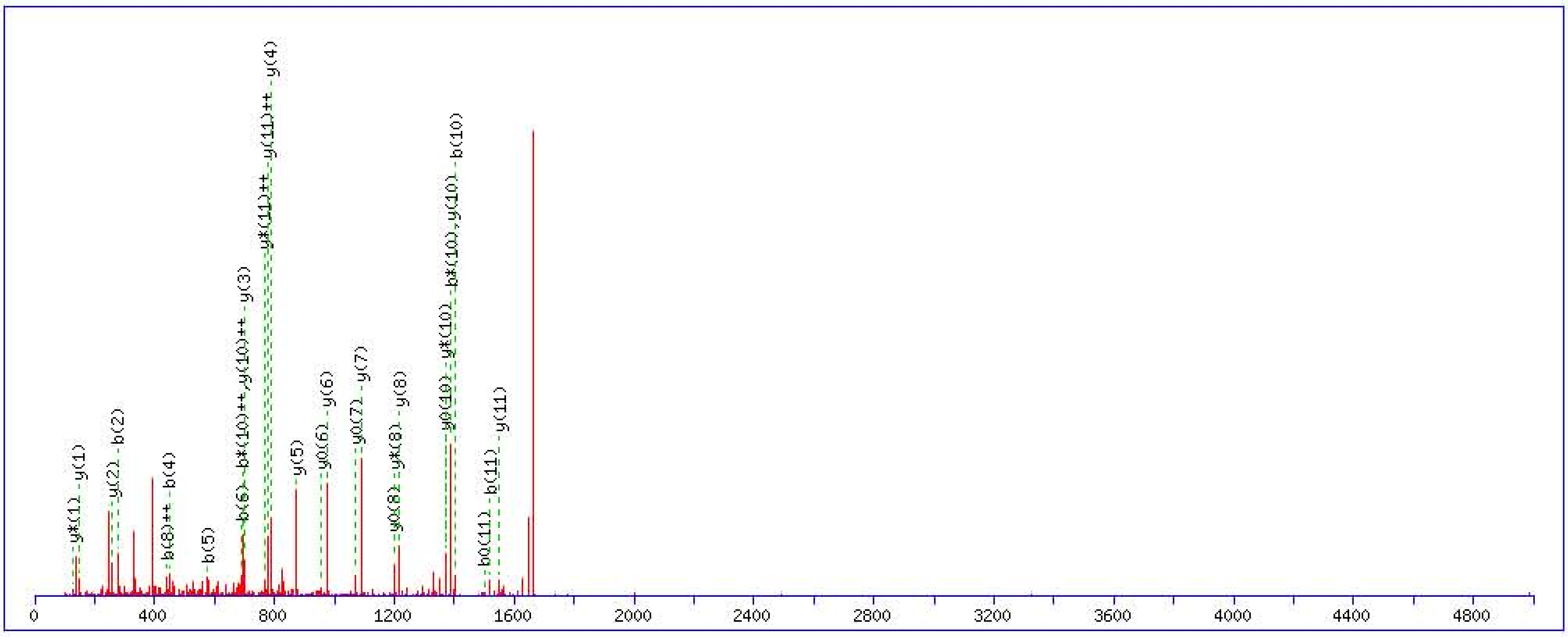
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **IYGNQDTSSQLK**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

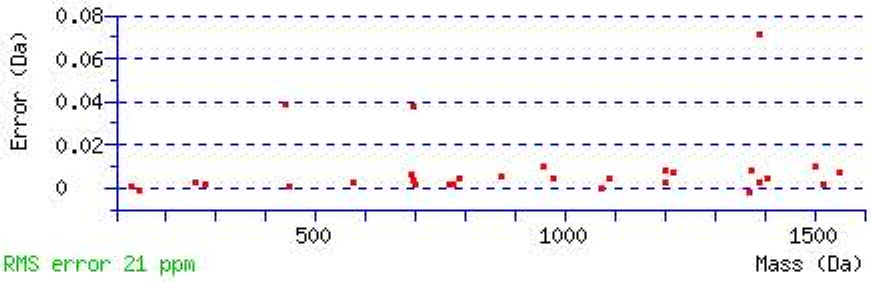
Match to Query 39662: 1663.830888 from(832.922720,2+) rtinseconds(1688) index(50741)
Title: Locus:1.1.1.1203.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

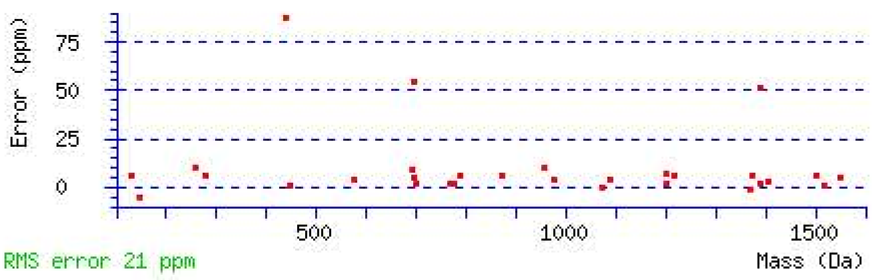
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 5000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1663.823944
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 67  Expect: 9e-007
Matches : 30/110 fragment ions using 48 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 12 |
| 2 | **277.154669** | 139.080973 | | | | | Y | ***1551.747170*** | 776.377223 | 1534.720621 | 767.863948 | 1533.736605 | 767.371940 | 11 |
| 3 | 334.176133 | 167.591704 | | | | | G | ***1388.683841*** | 694.845558 | 1371.657292 | 686.332284 | 1370.673276 | 685.840276 | 10 |
| 4 | **448.219060** | 224.613168 | 431.192511 | 216.099894 | | | N | 1331.662377 | 666.334826 | 1314.635828 | 657.821552 | 1313.651812 | 657.329544 | 9 |
| 5 | **576.277638** | 288.642457 | 559.251089 | 280.129183 | | | Q | ***1217.619450*** | 609.313363 | 1200.592901 | 600.800088 | 1199.608885 | 600.308080 | 8 |
| 6 | **691.304581** | 346.155929 | 674.278032 | 337.642654 | 673.294016 | 337.150646 | D | ***1089.560872*** | 545.284074 | 1072.534323 | 536.770799 | 1071.550307 | 536.278791 | 7 |
| 7 | 792.352260 | 396.679768 | 775.325711 | 388.166494 | 774.341695 | 387.674486 | T | ***974.533929*** | 487.770602 | 957.507380 | 479.257328 | 956.523364 | 478.765320 | 6 |
| 8 | 879.384288 | 440.195782 | 862.357739 | 431.682507 | 861.373723 | 431.190499 | S | ***873.486250*** | 437.246763 | 856.459701 | 428.733488 | 855.475685 | 428.241480 | 5 |
| 9 | 966.416316 | 483.711796 | 949.389767 | 475.198521 | 948.405751 | 474.706513 | S | ***786.454222*** | 393.730749 | 769.427673 | 385.217474 | 768.443657 | 384.725466 | 4 |
| 10 | **1405.641642** | 703.324459 | 1388.615093 | 694.811184 | 1387.631077 | 694.319176 | Q | ***699.422194*** | 350.214735 | 682.395645 | 341.701460 | | | 3 |
| 11 | **1518.725706** | 759.866491 | 1501.699157 | 751.353216 | 1500.715141 | 750.861208 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IYGNQDTSSQLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 67.2 | 1663.823944 | 0.006944 | IYGNQDTSSQLK |
| 13.6 | 1663.823944 | 0.006944 | IYGNQDTSSQLK |
| 2.6 | 1663.827957 | 0.002931 | EEAFLHVAVDMYLK |
| 2.4 | 1663.831345 | -0.000457 | QLTDCISEFLK |
| 2.1 | 1663.845078 | -0.014190 | LMSGVENSGKVDISTK |
| 1.6 | 1663.806183 | 0.024705 | DLSMFSQNMTHIIK |

**Mascot:** http://www.matrixscience.com/

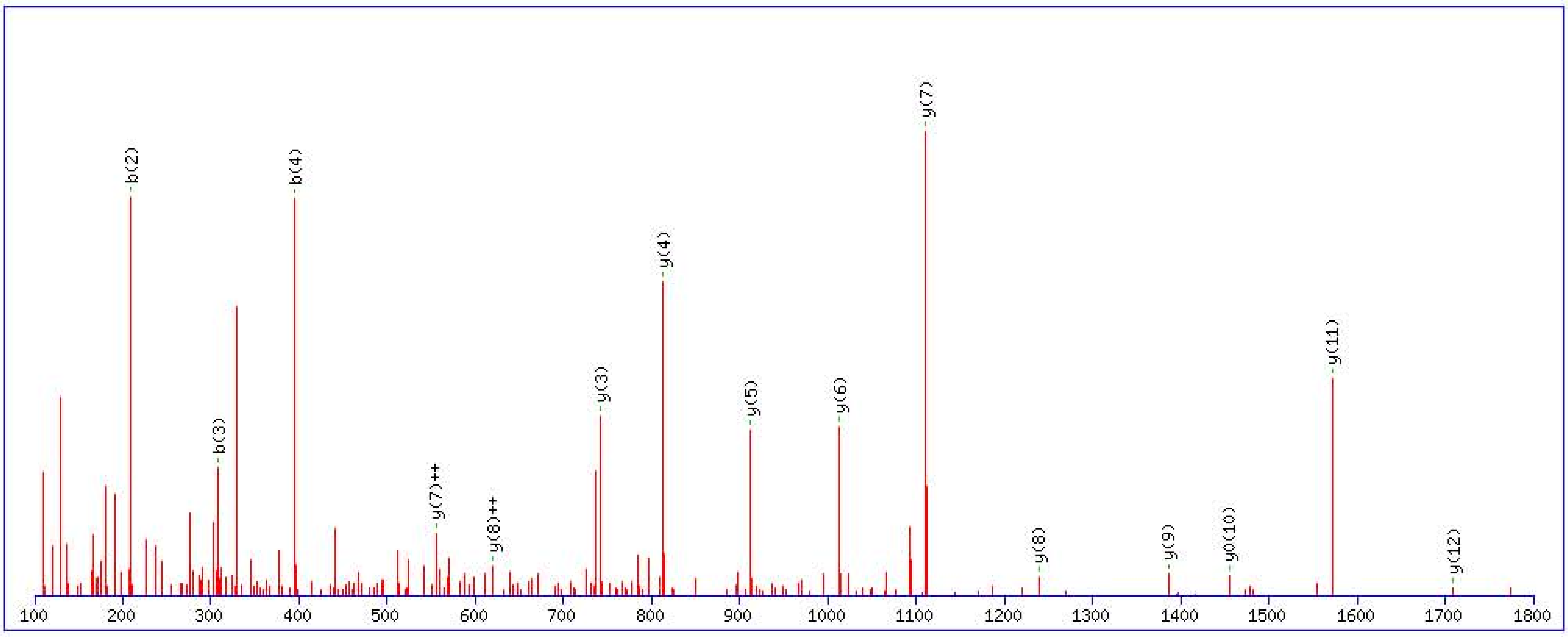
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AHVSFKPTVAQQR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

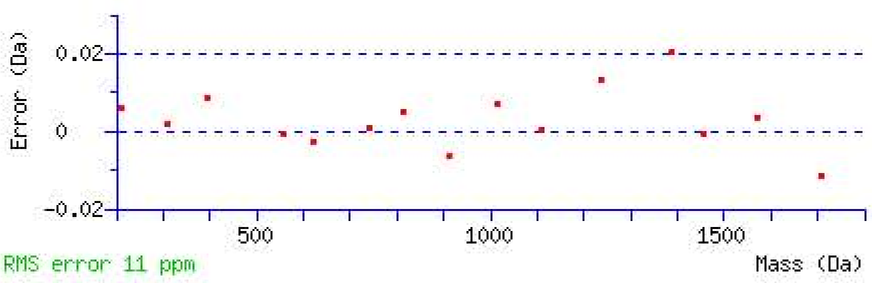
Match to Query 42336: 1778.961732 from(593.994520,3+) rtinseconds(1556) index(49906)
Title: Locus:1.1.1.1157.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

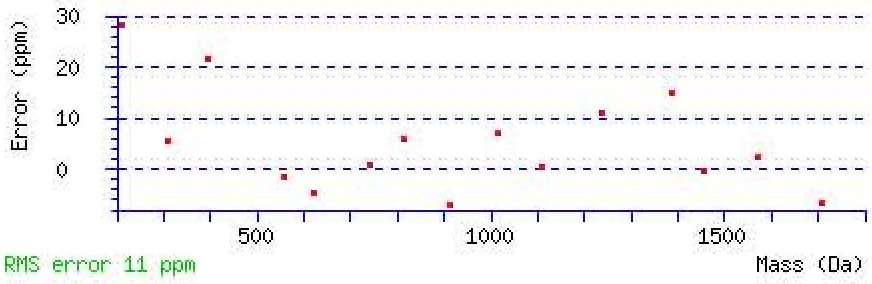
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1778.961395
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 82  Expect: 1.3e-007
Matches : 15/118 fragment ions using 17 most intense peaks   (help)
```

| # | b | b⁺⁺ | b* | b*⁺⁺ | b⁰ | b⁰⁺⁺ | Seq. | y | y⁺⁺ | y* | y*⁺⁺ | y⁰ | y⁰⁺⁺ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 13 |
| 2 | **209.103302** | 105.055289 | | | | | H | ***1708.931558*** | 854.969417 | 1691.905009 | 846.456143 | 1690.920993 | 845.964135 | 12 |
| 3 | **308.171716** | 154.589496 | | | | | V | ***1571.872646*** | 786.439961 | 1554.846097 | 777.926687 | 1553.862081 | 777.434679 | 11 |
| 4 | **395.203744** | 198.105510 | | | 377.193179 | 189.100227 | S | 1472.804232 | 736.905754 | 1455.777683 | 728.392480 | 1454.793667 | 727.900472 | 10 |
| 5 | 542.272158 | 271.639717 | | | 524.261593 | 262.634435 | F | ***1385.772204*** | 693.389740 | 1368.745655 | 684.876466 | 1367.761639 | 684.384458 | 9 |
| 6 | 670.367121 | 335.687199 | 653.340572 | 327.173924 | 652.356556 | 326.681916 | K | ***1238.703790*** | 619.855533 | 1221.677241 | 611.342259 | 1220.693225 | 610.850251 | 8 |
| 7 | 767.419885 | 384.213581 | 750.393336 | 375.700306 | 749.409320 | 375.208298 | P | ***1110.608827*** | 555.808052 | 1093.582278 | 547.294777 | 1092.598262 | 546.802769 | 7 |
| 8 | 868.467564 | 434.737420 | 851.441015 | 426.224146 | 850.456999 | 425.732138 | T | ***1013.556063*** | 507.281670 | 996.529514 | 498.768395 | 995.545498 | 498.276387 | 6 |
| 9 | 967.535978 | 484.271627 | 950.509429 | 475.758353 | 949.525413 | 475.266345 | V | ***912.508384*** | 456.757830 | 895.481835 | 448.244556 | | | 5 |
| 10 | 1038.573092 | 519.790184 | 1021.546543 | 511.276910 | 1020.562527 | 510.784902 | A | ***813.439970*** | 407.223623 | 796.413421 | 398.710349 | | | 4 |
| 11 | 1166.631670 | 583.819473 | 1149.605121 | 575.306199 | 1148.621105 | 574.814191 | Q | ***742.402856*** | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 12 | 1605.856996 | 803.432136 | 1588.830447 | 794.918862 | 1587.846431 | 794.426854 | Q | 614.344278 | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 13 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AHVSFKPTVAQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 81.7 | 1778.961395 | 0.000337 | AHVSFKPTVAQQR |
| 81.7 | 1778.961395 | 0.000337 | AHVSFKPTVAQQR |

**Mascot:** http://www.matrixscience.com/

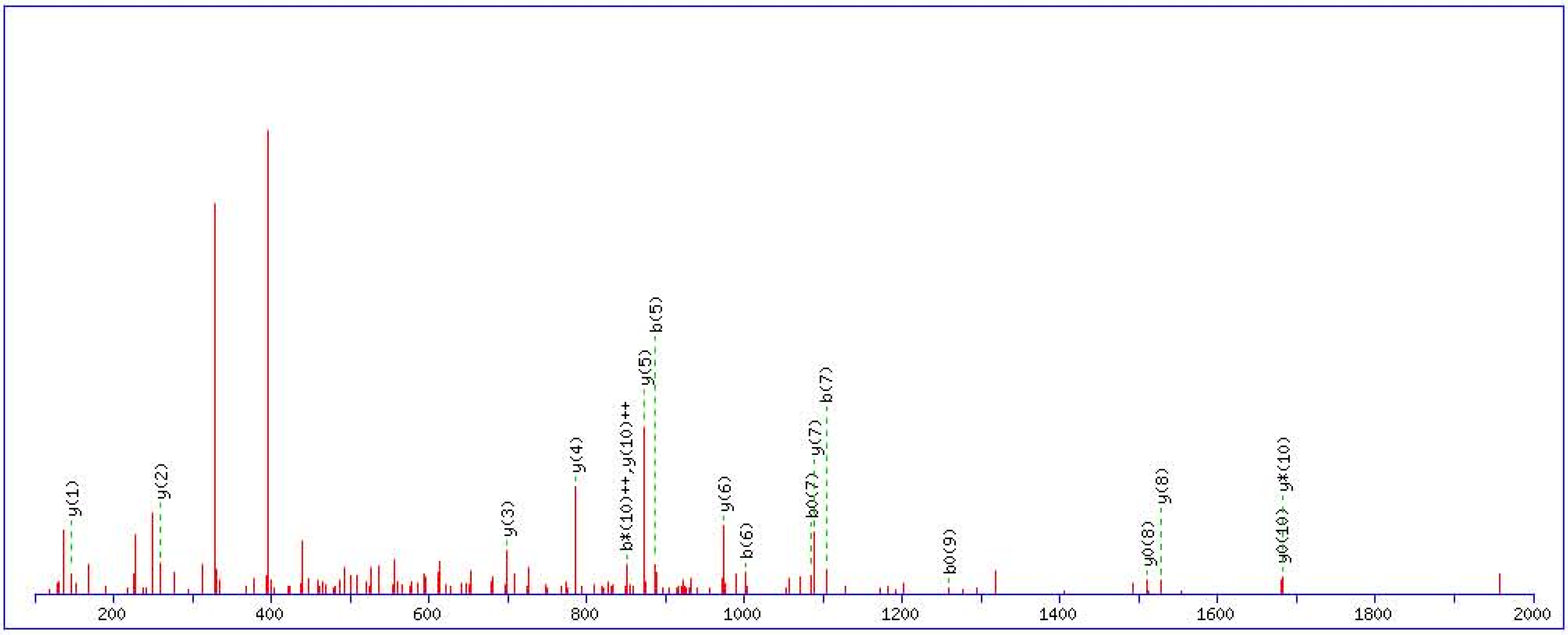
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IYGNQDTSSQLK**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

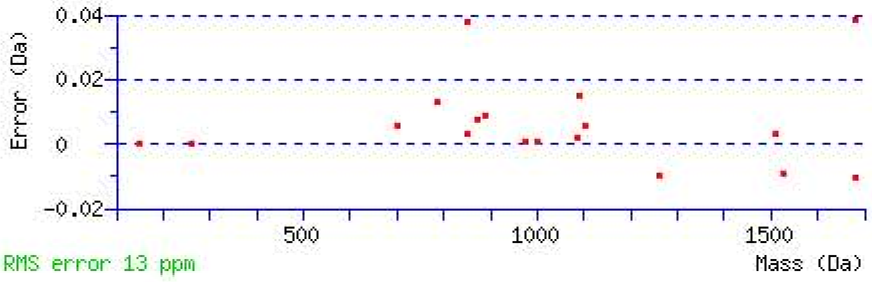
Match to Query 46034: 1974.996942 from(659.339590,3+) rtinseconds(2030) index(53152)
Title: Locus:1.1.1.1322.2 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

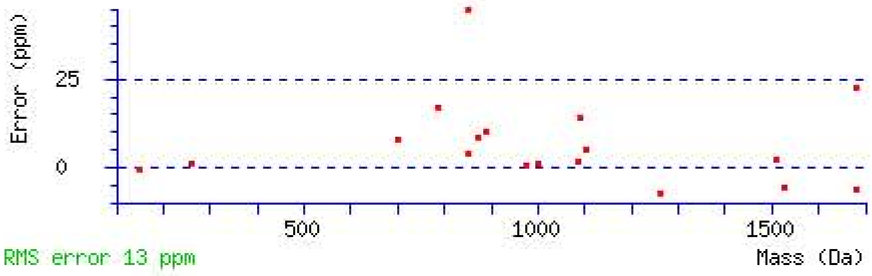
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1974.990692
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.0047
Matches : 18/110 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 12 |
| 2 | 277.154669 | 139.080973 | | | | | Y | 1862.913918 | 931.960597 | 1845.887369 | 923.447323 | 1844.903353 | 922.955315 | 11 |
| 3 | 334.176133 | 167.591704 | | | | | G | 1699.850589 | 850.428933 | 1682.824040 | 841.915658 | 1681.840024 | 841.423650 | 10 |
| 4 | 448.219060 | 224.613168 | 431.192511 | 216.099894 | | | N | 1642.829125 | 821.918201 | 1625.802576 | 813.404926 | 1624.818560 | 812.912918 | 9 |
| 5 | **887.444386** | 444.225831 | 870.417837 | 435.712557 | | | Q | ***1528.786198*** | 764.896737 | 1511.759649 | 756.383463 | 1510.775633 | 755.891455 | 8 |
| 6 | **1002.471329** | 501.739303 | 985.444780 | 493.226028 | 984.460764 | 492.734020 | D | ***1089.560872*** | 545.284074 | 1072.534323 | 536.770800 | 1071.550307 | 536.278792 | 7 |
| 7 | **1103.519008** | 552.263142 | 1086.492459 | 543.749868 | 1085.508443 | 543.257860 | T | ***974.533929*** | 487.770603 | 957.507380 | 479.257328 | 956.523364 | 478.765320 | 6 |
| 8 | 1190.551036 | 595.779156 | 1173.524487 | 587.265882 | 1172.540471 | 586.773874 | S | ***873.486250*** | 437.246763 | 856.459701 | 428.733489 | 855.475685 | 428.241481 | 5 |
| 9 | 1277.583064 | 639.295170 | 1260.556515 | 630.781896 | 1259.572499 | 630.289888 | S | ***786.454222*** | 393.730749 | 769.427673 | 385.217475 | 768.443657 | 384.725467 | 4 |
| 10 | 1716.808390 | 858.907833 | 1699.781841 | 850.394559 | 1698.797825 | 849.902551 | Q | ***699.422194*** | 350.214735 | 682.395645 | 341.701461 | | | 3 |
| 11 | 1829.892454 | 915.449865 | 1812.865905 | 906.936591 | 1811.881889 | 906.444583 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IYGNQDTSSQLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.9 | 1974.990692 | 0.006250 | IYGNQDTSSQLK |
| 2.1 | 1975.019684 | -0.022742 | SMTQTHNGKLYKIVDPK |

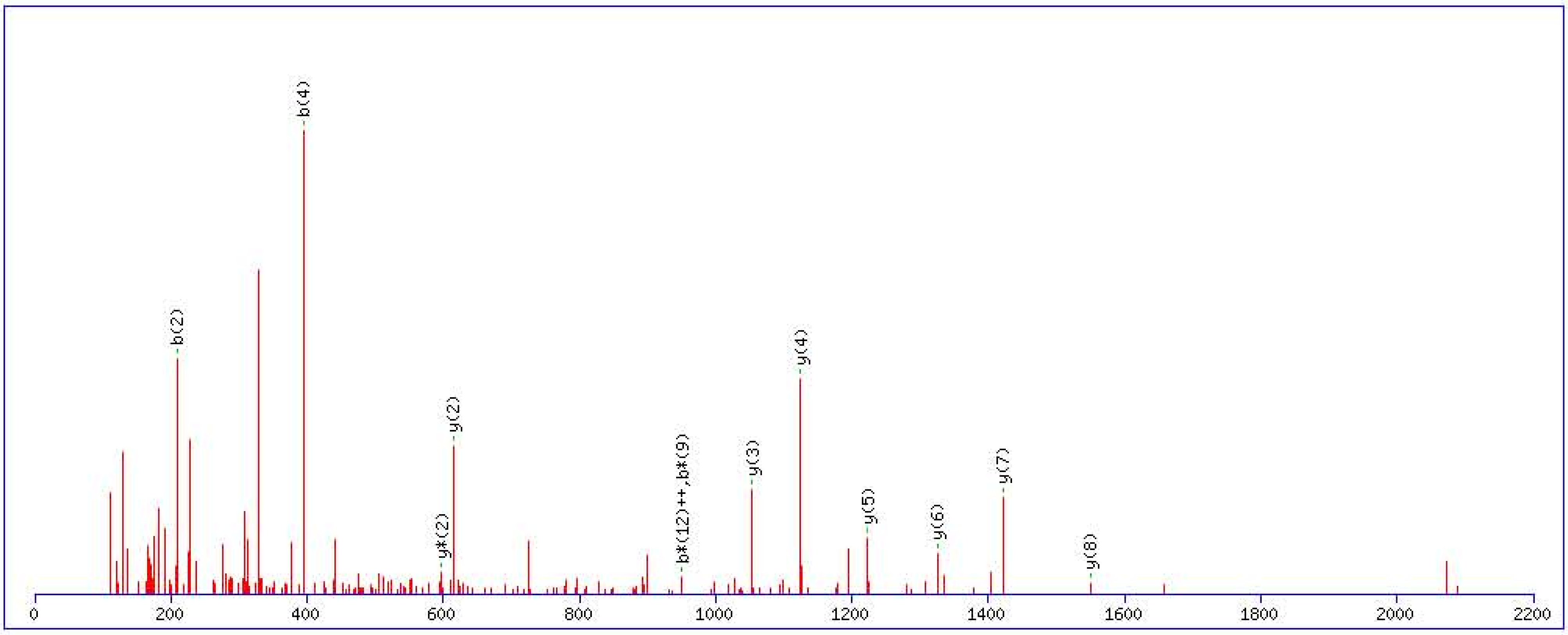
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **AHVSFKPTVAQQR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

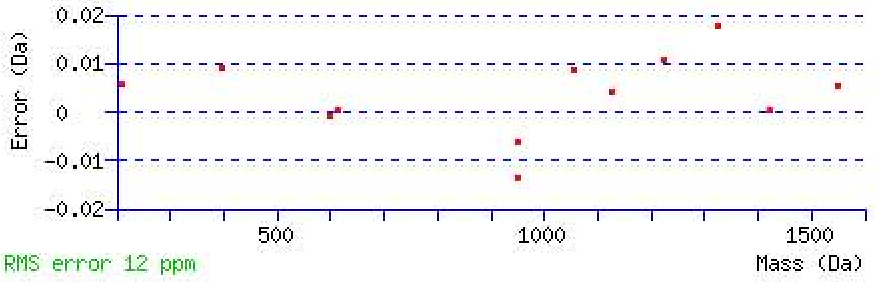
Match to Query 49079: 2090.132296 from(523.540350,4+) rtinseconds(1799) index(51516)
Title: Locus:1.1.1.1242.4 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

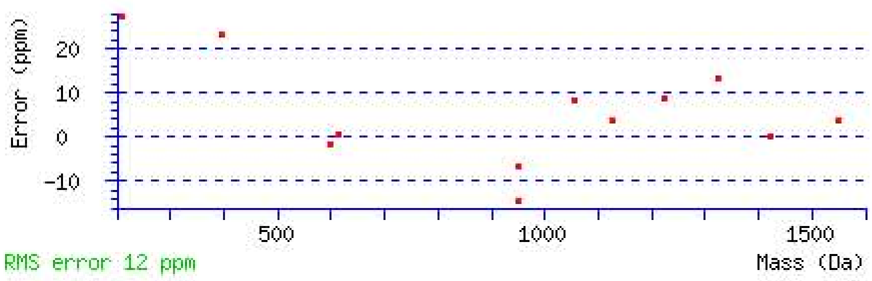
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2090.128143
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q11** : Biotin:Thermo-21345 (Q)
**Q12** : Biotin:Thermo-21345 (Q)
**Ions Score:** 43 **Expect:** 0.00097
**Matches :** 12/118 fragment ions using 17 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 13 |
| 2 | **209.103302** | 105.055289 | | | | | H | 2020.098306 | 1010.552791 | 2003.071757 | 1002.039517 | 2002.087741 | 1001.547509 | 12 |
| 3 | 308.171716 | 154.589496 | | | | | V | 1883.039394 | 942.023335 | 1866.012845 | 933.510061 | 1865.028829 | 933.018053 | 11 |
| 4 | **395.203744** | 198.105510 | | | 377.193179 | 189.100227 | S | 1783.970980 | 892.489128 | 1766.944431 | 883.975854 | 1765.960415 | 883.483846 | 10 |
| 5 | 542.272158 | 271.639717 | | | 524.261593 | 262.634435 | F | 1696.938952 | 848.973114 | 1679.912403 | 840.459840 | 1678.928387 | 839.967832 | 9 |
| 6 | 670.367121 | 335.687199 | 653.340572 | 327.173924 | 652.356556 | 326.681916 | K | ***1549.870538*** | 775.438907 | 1532.843989 | 766.925633 | 1531.859973 | 766.433625 | 8 |
| 7 | 767.419885 | 384.213581 | 750.393336 | 375.700306 | 749.409320 | 375.208298 | P | ***1421.775575*** | 711.391426 | 1404.749026 | 702.878151 | 1403.765010 | 702.386143 | 7 |
| 8 | 868.467564 | 434.737420 | 851.441015 | 426.224146 | 850.456999 | 425.732138 | T | ***1324.722811*** | 662.865044 | 1307.696262 | 654.351769 | 1306.712246 | 653.859761 | 6 |
| 9 | 967.535978 | 484.271627 | 950.509429 | 475.758353 | 949.525413 | 475.266345 | V | ***1223.675132*** | 612.341204 | 1206.648583 | 603.827930 | | | 5 |
| 10 | 1038.573092 | 519.790184 | 1021.546543 | 511.276910 | 1020.562527 | 510.784902 | A | ***1124.606718*** | 562.806997 | 1107.580169 | 554.293723 | | | 4 |
| 11 | 1477.798418 | 739.402847 | 1460.771869 | 730.889573 | 1459.787853 | 730.397565 | Q | ***1053.569604*** | 527.288440 | 1036.543055 | 518.775166 | | | 3 |
| 12 | 1917.023744 | 959.015510 | 1899.997195 | 950.502236 | 1899.013179 | 950.010228 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 13 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of AHVSFKPTVAQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 43.0 | 2090.128143 | 0.004153 | AHVSFKPTVAQQR |

**Mascot:** http://www.matrixscience.com/

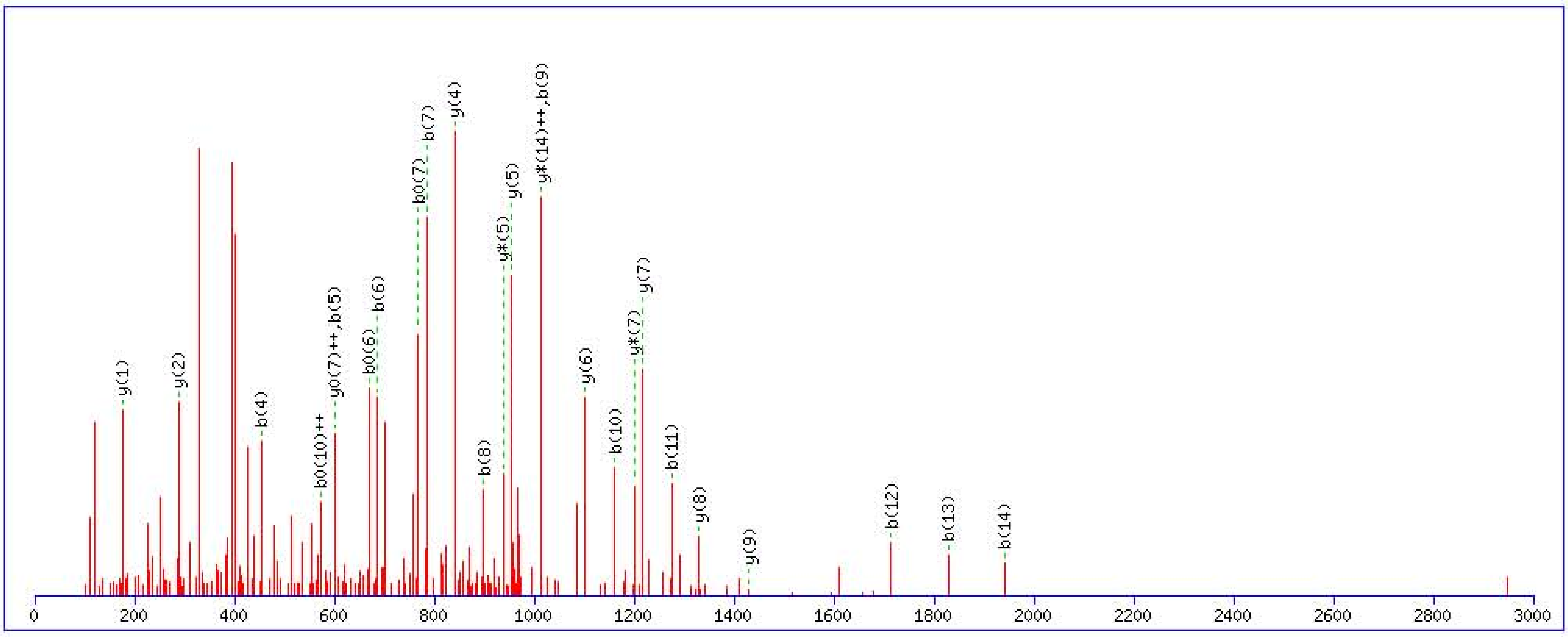
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AEDHFSVIDFNQNIR**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

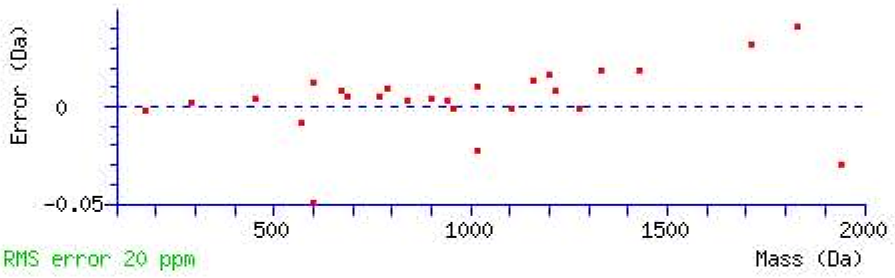
Match to Query 49452: 2115.032982 from(706.018270,3+) rtinseconds(2301) index(54854)
Title: Locus:1.1.1.1416.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

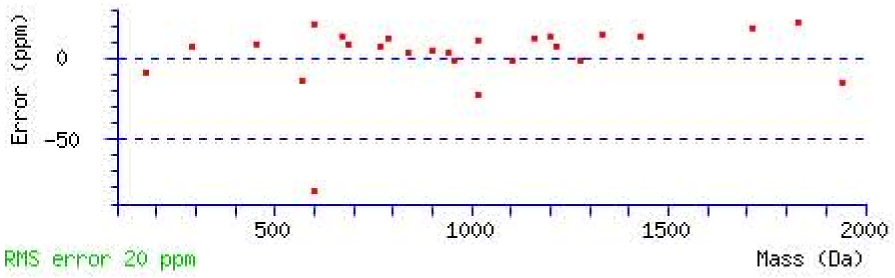
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2115.020752
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 78  Expect: 1.7e-007
Matches : 26/134 fragment ions using 35 most intense peaks   (help)
```

| # | b | b<sup>++</sup> | b* | b*<sup>++</sup> | b<sup>0</sup> | b<sup>0++</sup> | Seq. | y | y<sup>++</sup> | y* | y*<sup>++</sup> | y<sup>0</sup> | y<sup>0++</sup> | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 15 |
| 2 | 201.086983 | 101.047130 | | | 183.076418 | 92.041847 | E | 2044.990921 | 1022.999099 | 2027.964372 | 1014.485824 | 2026.980356 | 1013.993816 | 14 |
| 3 | 316.113926 | 158.560601 | | | 298.103361 | 149.555319 | D | 1915.948328 | 958.477802 | 1898.921779 | 949.964528 | 1897.937763 | 949.472519 | 13 |
| 4 | ***453.172838*** | 227.090057 | | | 435.162273 | 218.084775 | H | 1800.921385 | 900.964331 | 1783.894836 | 892.451056 | 1782.910820 | 891.959048 | 12 |
| 5 | ***600.241252*** | 300.624264 | | | 582.230687 | 291.618982 | F | 1663.862473 | 832.434874 | 1646.835924 | 823.921600 | 1645.851908 | 823.429592 | 11 |
| 6 | ***687.273280*** | 344.140278 | | | 669.262715 | 335.134996 | S | 1516.794059 | 758.900668 | 1499.767510 | 750.387393 | 1498.783494 | 749.895385 | 10 |
| 7 | ***786.341694*** | 393.674485 | | | 768.331129 | 384.669202 | V | **1429.762031** | 715.384654 | 1412.735482 | 706.871379 | 1411.751466 | 706.379371 | 9 |
| 8 | ***899.425758*** | 450.216517 | | | 881.415193 | 441.211234 | I | **1330.693617** | 665.850447 | 1313.667068 | 657.337172 | 1312.683052 | 656.845164 | 8 |
| 9 | ***1014.452701*** | 507.729988 | | | 996.442136 | 498.724706 | D | **1217.609553** | 609.308415 | 1200.583004 | 600.795140 | 1199.598988 | 600.303132 | 7 |
| 10 | ***1161.521115*** | 581.264196 | | | 1143.510550 | 572.258913 | F | **1102.582610** | 551.794943 | 1085.556061 | 543.281669 | | | 6 |
| 11 | ***1275.564042*** | 638.285659 | 1258.537493 | 629.772385 | 1257.553477 | 629.280376 | N | **955.514196** | 478.260736 | 938.487647 | 469.747462 | | | 5 |
| 12 | ***1714.789368*** | 857.898322 | 1697.762819 | 849.385048 | 1696.778803 | 848.893039 | Q | **841.471269** | 421.239273 | 824.444720 | 412.725998 | | | 4 |
| 13 | ***1828.832295*** | 914.919785 | 1811.805746 | 906.406511 | 1810.821730 | 905.914503 | N | 402.245943 | 201.626610 | 385.219394 | 193.113335 | | | 3 |
| 14 | ***1941.916359*** | 971.461817 | 1924.889810 | 962.948543 | 1923.905794 | 962.456535 | I | **288.203016** | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 15 | | | | | | | R | **175.118952** | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of AEDHFSVIDFNQNIR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 77.9 | 2115.020752 | 0.012230 | AEDHFSVIDFNQNIR |
| 5.5 | 2115.033981 | -0.000999 | ESADRQVLMQEEEIK |
| 1.2 | 2115.008850 | 0.024132 | LTSDAEKESVMMFGRNLR |

**Mascot:** http://www.matrixscience.com/

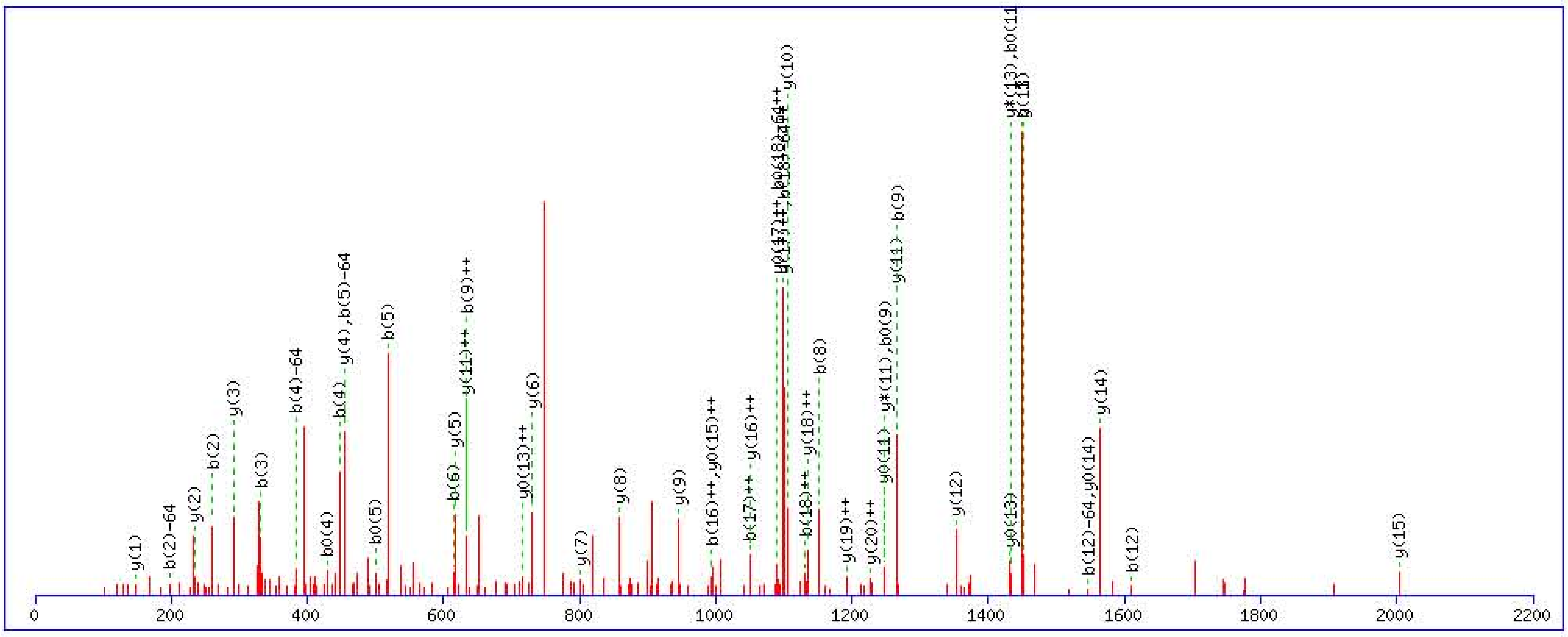
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **MLADAPPQDPSCCSGALYYGSK**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

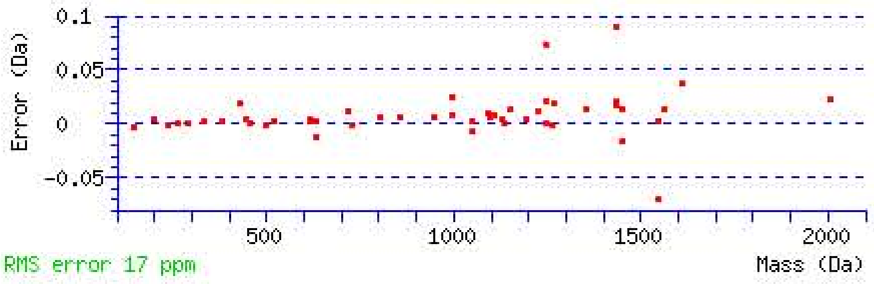
Match to Query 58488: 2714.208042 from(905.743290,3+) rtinseconds(2038) index(53197)
Title: Locus:1.1.1.1324.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

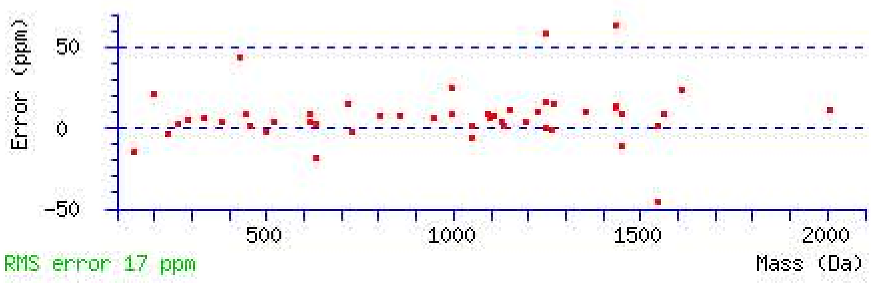
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2714.184860
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
M1      : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 78  Expect: 1.2e-007
Matches : 52/336 fragment ions using 96 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.042676 | 74.524976 | | | | | M | | | | | | | 22 |
| 2 | ***261.126740*** | 131.067008 | | | | | L | 2568.156746 | 1284.582011 | 2551.130197 | 1276.068736 | 2550.146181 | 1275.576728 | 21 |
| 3 | ***332.163854*** | 166.585565 | | | | | A | 2455.072682 | 1228.039979 | 2438.046133 | 1219.526704 | 2437.062117 | 1219.034696 | 20 |
| 4 | ***447.190797*** | 224.099036 | | | 429.180232 | 215.093754 | D | 2384.035568 | 1192.521422 | 2367.009019 | 1184.008147 | 2366.025003 | 1183.516139 | 19 |
| 5 | ***518.227911*** | 259.617594 | | | 500.217346 | 250.612311 | A | 2269.008625 | 1135.007950 | 2251.982076 | 1126.494676 | 2250.998060 | 1126.002668 | 18 |
| 6 | ***615.280675*** | 308.143976 | | | 597.270110 | 299.138693 | P | 2197.971511 | 1099.489393 | 2180.944962 | 1090.976119 | 2179.960946 | 1090.484111 | 17 |
| 7 | 712.333439 | 356.670358 | | | 694.322874 | 347.665075 | P | 2100.918747 | 1050.963011 | 2083.892198 | 1042.449737 | 2082.908182 | 1041.957729 | 16 |
| 8 | ***1151.558765*** | 576.283021 | 1134.532216 | 567.769746 | 1133.548200 | 567.277738 | Q | ***2003.865983*** | 1002.436630 | 1986.839434 | 993.923355 | 1985.855418 | 993.431347 | 15 |
| 9 | ***1266.585708*** | **633.796492** | 1249.559159 | 625.283218 | 1248.575143 | 624.791210 | D | ***1564.640657*** | 782.823967 | 1547.614108 | 774.310692 | 1546.630092 | 773.818684 | 14 |
| 10 | 1363.638472 | 682.322874 | 1346.611923 | 673.809600 | 1345.627907 | 673.317592 | P | ***1449.613714*** | 725.310495 | 1432.587165 | 716.797221 | 1431.603149 | 716.305213 | 13 |
| 11 | ***1450.670500*** | 725.838888 | 1433.643951 | 717.325614 | 1432.659935 | 716.833606 | S | ***1352.560950*** | 676.784113 | 1335.534401 | 668.270839 | 1334.550385 | 667.778831 | 12 |
| 12 | ***1610.701149*** | 805.854213 | 1593.674600 | 797.340938 | 1592.690584 | 796.848930 | C | ***1265.528922*** | 633.268099 | 1248.502373 | 624.754825 | 1247.518357 | 624.262817 | 11 |
| 13 | 1770.731798 | 885.869537 | 1753.705249 | 877.356263 | 1752.721233 | 876.864255 | C | ***1105.498273*** | 553.252775 | 1088.471724 | 544.739500 | 1087.487708 | 544.247492 | 10 |
| 14 | 1857.763826 | 929.385551 | 1840.737277 | 920.872277 | 1839.753261 | 920.380269 | S | ***945.467624*** | 473.237450 | 928.441075 | 464.724176 | 927.457059 | 464.232168 | 9 |
| 15 | 1914.785290 | 957.896283 | 1897.758741 | 949.383009 | 1896.774725 | 948.891001 | G | ***858.435596*** | 429.721436 | 841.409047 | 421.208162 | 840.425031 | 420.716154 | 8 |
| 16 | 1985.822404 | **993.414840** | 1968.795855 | 984.901566 | 1967.811839 | 984.409558 | A | ***801.414132*** | 401.210704 | 784.387583 | 392.697430 | 783.403567 | 392.205422 | 7 |
| 17 | 2098.906468 | **1049.956872** | 2081.879919 | 1041.443597 | 2080.895903 | 1040.951590 | L | ***730.377018*** | 365.692147 | 713.350469 | 357.178873 | 712.366453 | 356.686865 | 6 |
| 18 | 2261.969797 | **1131.488537** | 2244.943248 | 1122.975262 | 2243.959232 | 1122.483254 | Y | ***617.292954*** | 309.150115 | 600.266405 | 300.636841 | 599.282389 | 300.144833 | 5 |
| 19 | 2425.033126 | 1213.020201 | 2408.006577 | 1204.506927 | 2407.022561 | 1204.014919 | Y | ***454.229625*** | 227.618451 | 437.203076 | 219.105176 | 436.219060 | 218.613168 | 4 |
| 20 | 2482.054590 | 1241.530933 | 2465.028041 | 1233.017658 | 2464.044025 | 1232.525651 | G | ***291.166296*** | 146.086786 | 274.139747 | 137.573512 | 273.155731 | 137.081504 | 3 |
| 21 | 2569.086618 | 1285.046947 | 2552.060069 | 1276.533673 | 2551.076053 | 1276.041665 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 22 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of MLADAPPQDPSCCSGALYYGSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 77.9 | 2714.184860 | 0.023182 | MLADAPPQDPSCCSGALYYGSK |

**Mascot:** http://www.matrixscience.com/

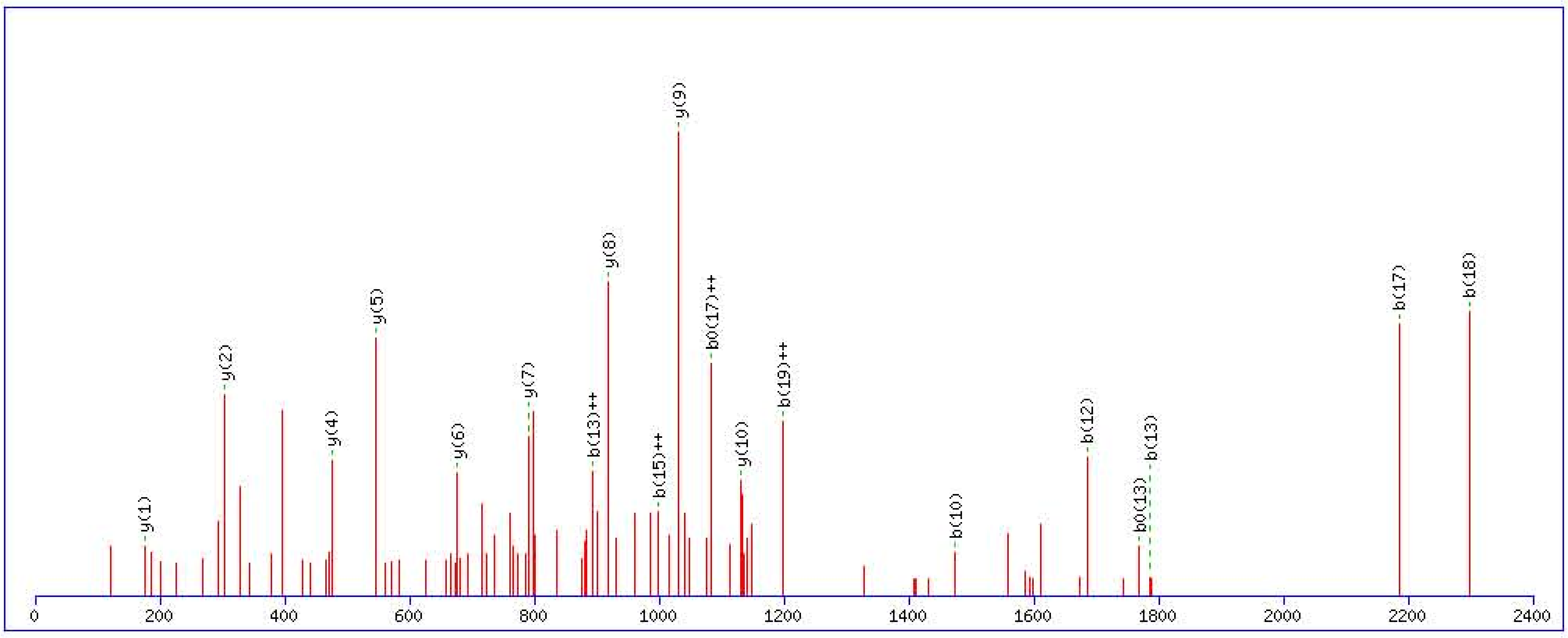
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SILQMSLDHHIVTPLTSLVIENEAGDER**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

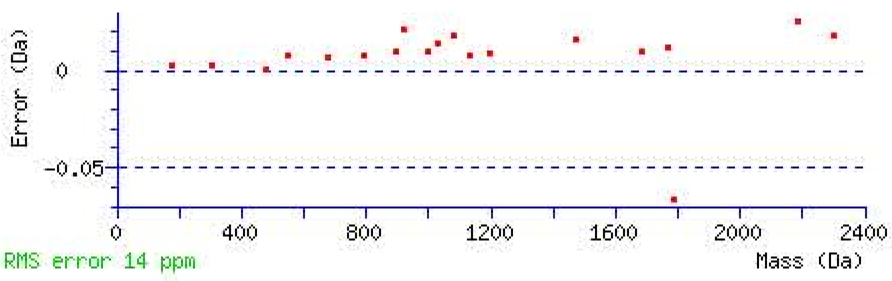
Match to Query 66512: 3427.779056 from(857.952040,4+) rtinseconds(2760) index(57514)
Title: Locus:1.1.1.1575.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

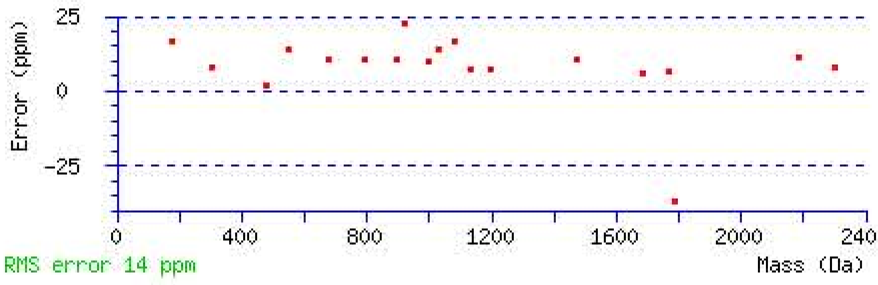
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3427.747940
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 0.00073
Matches : 19/316 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 28 |
| 2 | 201.123368 | 101.065322 | | | 183.112803 | 92.060039 | I | 3341.723211 | 1671.365243 | 3324.696662 | 1662.851969 | 3323.712646 | 1662.359961 | 27 |
| 3 | 314.207432 | 157.607354 | | | 296.196867 | 148.602071 | L | 3228.639147 | 1614.823211 | 3211.612598 | 1606.309937 | 3210.628582 | 1605.817929 | 26 |
| 4 | 753.432758 | 377.220017 | 736.406209 | 368.706743 | 735.422193 | 368.214735 | Q | 3115.555083 | 1558.281179 | 3098.528534 | 1549.767905 | 3097.544518 | 1549.275897 | 25 |
| 5 | 884.473243 | 442.740260 | 867.446694 | 434.226985 | 866.462678 | 433.734977 | M | 2676.329757 | 1338.668516 | 2659.303208 | 1330.155242 | 2658.319192 | 1329.663234 | 24 |
| 6 | 971.505271 | 486.256274 | 954.478722 | 477.742999 | 953.494706 | 477.250991 | S | 2545.289272 | 1273.148274 | 2528.262723 | 1264.634999 | 2527.278707 | 1264.142991 | 23 |
| 7 | 1084.589335 | 542.798305 | 1067.562786 | 534.285031 | 1066.578770 | 533.793023 | L | 2458.257244 | 1229.632260 | 2441.230695 | 1221.118985 | 2440.246679 | 1220.626977 | 22 |
| 8 | 1199.616278 | 600.311777 | 1182.589729 | 591.798503 | 1181.605713 | 591.306494 | D | 2345.173180 | 1173.090228 | 2328.146631 | 1164.576953 | 2327.162615 | 1164.084945 | 21 |
| 9 | 1336.675190 | 668.841233 | 1319.648641 | 660.327959 | 1318.664625 | 659.835950 | H | 2230.146237 | 1115.576756 | 2213.119688 | 1107.063482 | 2212.135672 | 1106.571474 | 20 |
| 10 | ***1473.734102*** | 737.370689 | 1456.707553 | 728.857415 | 1455.723537 | 728.365406 | H | 2093.087325 | 1047.047300 | 2076.060776 | 1038.534026 | 2075.076760 | 1038.042018 | 19 |
| 11 | 1586.818166 | 793.912721 | 1569.791617 | 785.399446 | 1568.807601 | 784.907438 | I | 1956.028413 | 978.517845 | 1939.001864 | 970.004570 | 1938.017848 | 969.512562 | 18 |
| 12 | ***1685.886580*** | 843.446928 | 1668.860031 | 834.933653 | 1667.876015 | 834.441645 | V | 1842.944349 | 921.975813 | 1825.917800 | 913.462538 | 1824.933784 | 912.970530 | 17 |
| 13 | ***1786.934259*** | **893.970767** | 1769.907710 | 885.457493 | 1768.923694 | 884.965485 | T | 1743.875935 | 872.441606 | 1726.849386 | 863.928331 | 1725.865370 | 863.436323 | 16 |
| 14 | 1883.987023 | 942.497149 | 1866.960474 | 933.983875 | 1865.976458 | 933.491867 | P | 1642.828256 | 821.917766 | 1625.801707 | 813.404492 | 1624.817691 | 812.912484 | 15 |
| 15 | 1997.071087 | **999.039181** | 1980.044538 | 990.525907 | 1979.060522 | 990.033899 | L | 1545.775492 | 773.391384 | 1528.748943 | 764.878110 | 1527.764927 | 764.386102 | 14 |
| 16 | 2098.118766 | 1049.563021 | 2081.092217 | 1041.049746 | 2080.108201 | 1040.557738 | T | 1432.691428 | 716.849352 | 1415.664879 | 708.336078 | 1414.680863 | 707.844070 | 13 |
| 17 | ***2185.150794*** | 1093.079035 | 2168.124245 | 1084.565760 | 2167.140229 | 1084.073752 | S | 1331.643749 | 666.325513 | 1314.617200 | 657.812238 | 1313.633184 | 657.320230 | 12 |
| 18 | ***2298.234858*** | 1149.621067 | 2281.208309 | 1141.107792 | 2280.224293 | 1140.615784 | L | 1244.611721 | 622.809499 | 1227.585172 | 614.296224 | 1226.601156 | 613.804216 | 11 |
| 19 | 2397.303272 | **1199.155274** | 2380.276723 | 1190.641999 | 2379.292707 | 1190.149991 | V | ***1131.527657*** | 566.267467 | 1114.501108 | 557.754192 | 1113.517092 | 557.262184 | 10 |
| 20 | 2510.387336 | 1255.697306 | 2493.360787 | 1247.184031 | 2492.376771 | 1246.692023 | I | ***1032.459243*** | 516.733260 | 1015.432694 | 508.219985 | 1014.448678 | 507.727977 | 9 |
| 21 | 2639.429929 | 1320.218602 | 2622.403380 | 1311.705328 | 2621.419364 | 1311.213320 | E | ***919.375179*** | 460.191228 | 902.348630 | 451.677953 | 901.364614 | 451.185945 | 8 |
| 22 | 2753.472856 | 1377.240066 | 2736.446307 | 1368.726791 | 2735.462291 | 1368.234783 | N | ***790.332586*** | 395.669931 | 773.306037 | 387.156657 | 772.322021 | 386.664649 | 7 |
| 23 | 2882.515449 | 1441.761362 | 2865.488900 | 1433.248088 | 2864.504884 | 1432.756080 | E | ***676.289659*** | 338.648468 | 659.263110 | 330.135193 | 658.279094 | 329.643185 | 6 |
| 24 | 2953.552563 | 1477.279920 | 2936.526014 | 1468.766645 | 2935.541998 | 1468.274637 | A | ***547.247066*** | 274.127171 | 530.220517 | 265.613897 | 529.236501 | 265.121889 | 5 |
| 25 | 3010.574027 | 1505.790652 | 2993.547478 | 1497.277377 | 2992.563462 | 1496.785369 | G | ***476.209952*** | 238.608614 | 459.183403 | 230.095339 | 458.199387 | 229.603331 | 4 |
| 26 | 3125.600970 | 1563.304123 | 3108.574421 | 1554.790848 | 3107.590405 | 1554.298840 | D | 419.188488 | 210.097882 | 402.161939 | 201.584607 | 401.177923 | 201.092599 | 3 |
| 27 | 3254.643563 | 1627.825420 | 3237.617014 | 1619.312145 | 3236.632998 | 1618.820137 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 28 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SILQMSLDHHIVTPLTSLVIENEAGDER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.1 | 3427.747940 | 0.031116 | SILQMSLDHHIVTPLTSLVIENEAGDER |

**Mascot:** http://www.matrixscience.com/

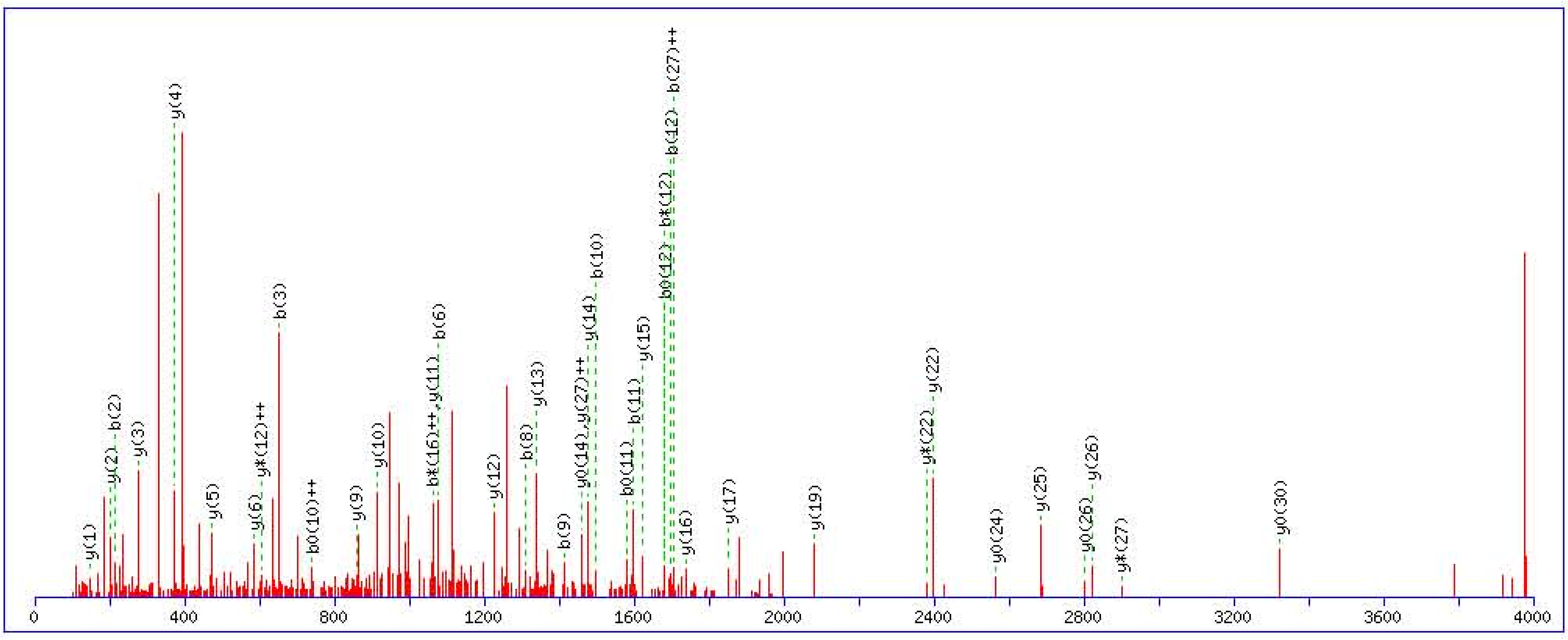
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NVQFNYPHTSVTDVTQNNFHNYFGGSEIVVAGK**
Found in **ITIH2_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H2 OS=Homo sapiens GN=ITIH2 PE=1 SV=2

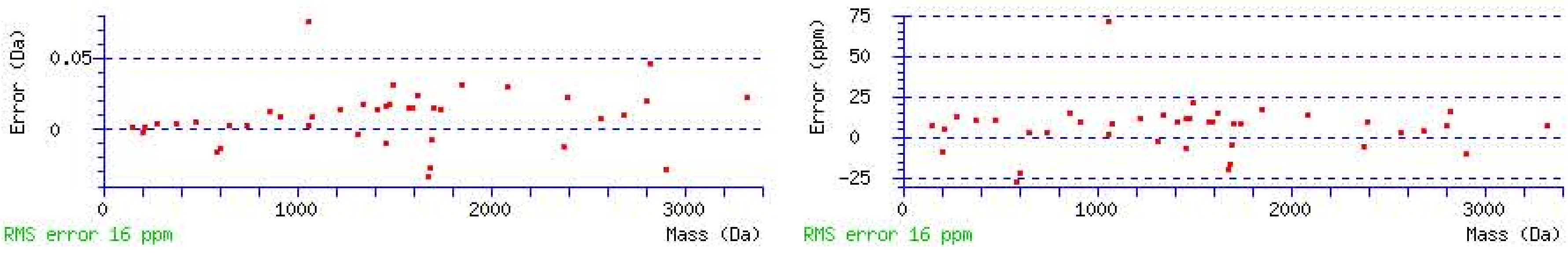
Match to Query 69824: 3993.948016 from(999.494280,4+) rtinseconds(2411) index(55456)
Title: Locus:1.1.1.1454.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 4000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3993.910858
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 82 **Expect:** 1.4e-007
**Matches :** 41/356 fragment ions using 92 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 33 |
| 2 | **214.118617** | 107.562947 | 197.092068 | 99.049672 | | | V | 3880.875173 | 1940.941224 | 3863.848624 | 1932.427950 | 3862.864608 | 1931.935942 | 32 |
| 3 | **653.343943** | 327.175610 | 636.317394 | 318.662335 | | | Q | 3781.806759 | 1891.407017 | 3764.780210 | 1882.893743 | 3763.796194 | 1882.401735 | 31 |
| 4 | 800.412357 | 400.709817 | 783.385808 | 392.196542 | | | F | 3342.581433 | 1671.794354 | 3325.554884 | 1663.281080 | 3324.570868 | 1662.789072 | 30 |
| 5 | 914.455284 | 457.731280 | 897.428735 | 449.218006 | | | N | 3195.513019 | 1598.260147 | 3178.486470 | 1589.746873 | 3177.502454 | 1589.254865 | 29 |
| 6 | **1077.518613** | 539.262945 | 1060.492064 | 530.749670 | | | Y | 3081.470092 | 1541.238684 | 3064.443543 | 1532.725409 | 3063.459527 | 1532.233401 | 28 |
| 7 | 1174.571377 | 587.789327 | 1157.544828 | 579.276052 | | | P | 2918.406763 | 1459.707019 | 2901.380214 | 1451.193745 | 2900.396198 | 1450.701737 | 27 |
| 8 | **1311.630289** | 656.318783 | 1294.603740 | 647.805508 | | | H | ***2821.353999*** | 1411.180637 | 2804.327450 | 1402.667363 | 2803.343434 | 1402.175355 | 26 |
| 9 | **1412.677968** | 706.842622 | 1395.651419 | 698.329348 | 1394.667403 | 697.837339 | T | ***2684.295087*** | 1342.651181 | 2667.268538 | 1334.137907 | 2666.284522 | 1333.645899 | 25 |
| 10 | **1499.709996** | 750.358636 | 1482.683447 | 741.845362 | 1481.699431 | 741.353354 | S | 2583.247408 | 1292.127342 | 2566.220859 | 1283.614067 | 2565.236843 | 1283.122059 | 24 |
| 11 | **1598.778410** | 799.892843 | 1581.751861 | 791.379569 | 1580.767845 | 790.887561 | V | 2496.215380 | 1248.611328 | 2479.188831 | 1240.098053 | 2478.204815 | 1239.606045 | 23 |
| 12 | **1699.826089** | 850.416683 | 1682.799540 | 841.903408 | 1681.815524 | 841.411400 | T | ***2397.146966*** | 1199.077121 | 2380.120417 | 1190.563846 | 2379.136401 | 1190.071838 | 22 |
| 13 | 1814.853032 | 907.930154 | 1797.826483 | 899.416880 | 1796.842467 | 898.924872 | D | 2296.099287 | 1148.553281 | 2279.072738 | 1140.040007 | 2278.088722 | 1139.547999 | 21 |
| 14 | 1913.921446 | 957.464361 | 1896.894897 | 948.951087 | 1895.910881 | 948.459079 | V | 2181.072344 | 1091.039810 | 2164.045795 | 1082.526535 | 2163.061779 | 1082.034527 | 20 |
| 15 | 2014.969125 | 1007.988201 | 1997.942576 | 999.474926 | 1996.958560 | 998.982918 | T | ***2082.003930*** | 1041.505603 | 2064.977381 | 1032.992328 | 2063.993365 | 1032.500320 | 19 |
| 16 | 2143.027703 | 1072.017490 | 2126.001154 | 1063.504215 | 2125.017138 | 1063.012207 | Q | 1980.956251 | 990.981763 | 1963.929702 | 982.468489 | 1962.945686 | 981.976481 | 18 |
| 17 | 2257.070630 | 1129.038953 | 2240.044081 | 1120.525678 | 2239.060065 | 1120.033671 | N | ***1852.897673*** | 926.952474 | 1835.871124 | 918.439200 | 1834.887108 | 917.947192 | 17 |
| 18 | 2371.113557 | 1186.060417 | 2354.087008 | 1177.547142 | 2353.102992 | 1177.055134 | N | ***1738.854746*** | 869.931011 | 1721.828197 | 861.417736 | 1720.844181 | 860.925728 | 16 |
| 19 | 2518.181971 | 1259.594623 | 2501.155422 | 1251.081349 | 2500.171406 | 1250.589341 | F | ***1624.811819*** | 812.909547 | 1607.785270 | 804.396273 | 1606.801254 | 803.904265 | 15 |
| 20 | 2655.240883 | 1328.124079 | 2638.214334 | 1319.610805 | 2637.230318 | 1319.118797 | H | ***1477.743405*** | 739.375340 | 1460.716856 | 730.862066 | 1459.732840 | 730.370058 | 14 |
| 21 | 2769.283810 | 1385.145543 | 2752.257261 | 1376.632268 | 2751.273245 | 1376.140260 | N | ***1340.684493*** | 670.845885 | 1323.657944 | 662.332610 | 1322.673928 | 661.840602 | 13 |
| 22 | 2932.347139 | 1466.677207 | 2915.320590 | 1458.163933 | 2914.336574 | 1457.671925 | Y | ***1226.641566*** | 613.824421 | 1209.615017 | 605.311147 | 1208.631001 | 604.819139 | 12 |
| 23 | 3079.415553 | 1540.211414 | 3062.389004 | 1531.698140 | 3061.404988 | 1531.206132 | F | ***1063.578237*** | 532.292757 | 1046.551688 | 523.779482 | 1045.567672 | 523.287474 | 11 |
| 24 | 3136.437017 | 1568.722146 | 3119.410468 | 1560.208872 | 3118.426452 | 1559.716864 | G | ***916.509823*** | 458.758550 | 899.483274 | 450.245275 | 898.499258 | 449.753267 | 10 |
| 25 | 3193.458481 | 1597.232878 | 3176.431932 | 1588.719604 | 3175.447916 | 1588.227596 | G | ***859.488359*** | 430.247818 | 842.461810 | 421.734543 | 841.477794 | 421.242535 | 9 |
| 26 | 3280.490509 | 1640.748892 | 3263.463960 | 1632.235618 | 3262.479944 | 1631.743610 | S | 802.466895 | 401.737086 | 785.440346 | 393.223811 | 784.456330 | 392.731803 | 8 |
| 27 | 3409.533102 | 1705.270189 | 3392.506553 | 1696.756914 | 3391.522537 | 1696.264906 | E | 715.434867 | 358.221072 | 698.408318 | 349.707797 | 697.424302 | 349.215789 | 7 |
| 28 | 3522.617166 | 1761.812221 | 3505.590617 | 1753.298946 | 3504.606601 | 1752.806938 | I | ***586.392274*** | 293.699775 | 569.365725 | 285.186501 | | | 6 |
| 29 | 3621.685580 | 1811.346428 | 3604.659031 | 1802.833153 | 3603.675015 | 1802.341145 | V | ***473.308210*** | 237.157743 | 456.281661 | 228.644468 | | | 5 |
| 30 | 3720.753994 | 1860.880635 | 3703.727445 | 1852.367360 | 3702.743429 | 1851.875352 | V | ***374.239796*** | 187.623536 | 357.213247 | 179.110261 | | | 4 |
| 31 | 3791.791108 | 1896.399192 | 3774.764559 | 1887.885917 | 3773.780543 | 1887.393909 | A | ***275.171382*** | 138.089329 | 258.144833 | 129.576055 | | | 3 |
| 32 | 3848.812572 | 1924.909924 | 3831.786023 | 1916.396649 | 3830.802007 | 1915.904641 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 33 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of NVQFNYPHTSVTDVTQNNFHNYFGGSEIVVAGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 82.2 | 3993.910858 | 0.037158 | NVQFNYPHTSVTDVTQNNFHNYFGGSEIVVAGK |
| 26.1 | 3993.910858 | 0.037158 | NVQFNYPHTSVTDVTQNNFHNYFGGSEIVVAGK |

**Mascot:** http://www.matrixscience.com/

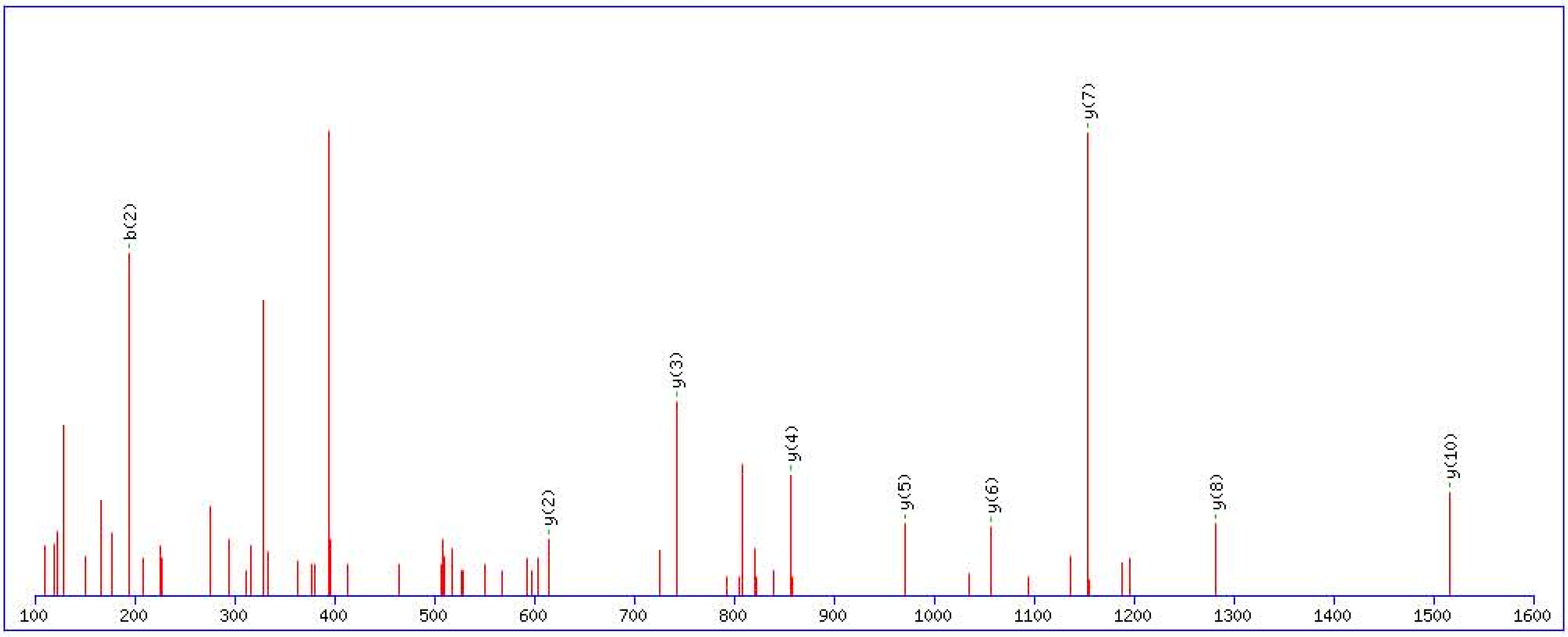
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GHVSFKPSLDQQR**
Found in **ITIH3_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H3 OS=Homo sapiens GN=ITIH3 PE=1 SV=2

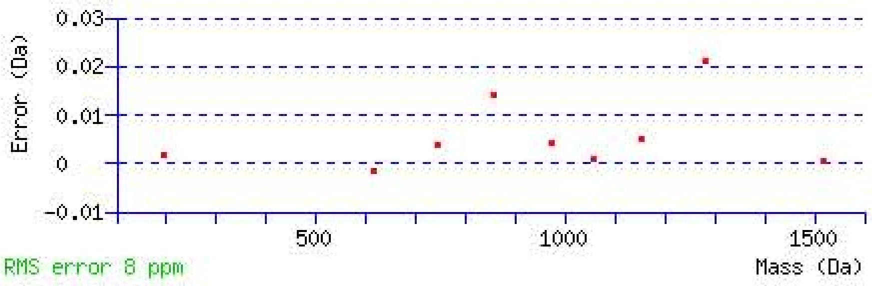
Match to Query 42894: 1808.937672 from(603.986500,3+) rtinseconds(1608) index(50300)
Title: Locus:1.1.1.1175.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

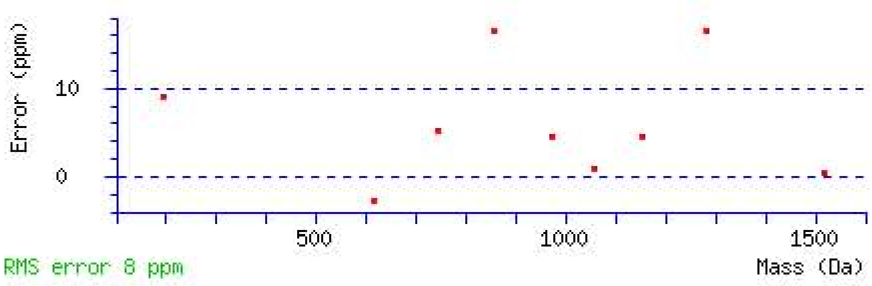
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1808.935577
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 60  Expect: 2.9e-005
Matches : 9/122 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 13 |
| 2 | **195.087652** | 98.047464 | | | | | H | 1752.921386 | 876.964331 | 1735.894837 | 868.451057 | 1734.910821 | 867.959049 | 12 |
| 3 | 294.156066 | 147.581671 | | | | | V | 1615.862474 | 808.434875 | 1598.835925 | 799.921601 | 1597.851909 | 799.429593 | 11 |
| 4 | 381.188094 | 191.097685 | | | 363.177529 | 182.092403 | S | ***1516.794060*** | 758.900668 | 1499.767511 | 750.387394 | 1498.783495 | 749.895386 | 10 |
| 5 | 528.256508 | 264.631892 | | | 510.245943 | 255.626610 | F | 1429.762032 | 715.384654 | 1412.735483 | 706.871380 | 1411.751467 | 706.379372 | 9 |
| 6 | 656.351471 | 328.679374 | 639.324922 | 320.166099 | 638.340906 | 319.674091 | K | ***1282.693618*** | 641.850447 | 1265.667069 | 633.337173 | 1264.683053 | 632.845165 | 8 |
| 7 | 753.404235 | 377.205756 | 736.377686 | 368.692481 | 735.393670 | 368.200473 | P | ***1154.598655*** | 577.802966 | 1137.572106 | 569.289691 | 1136.588090 | 568.797683 | 7 |
| 8 | 840.436263 | 420.721770 | 823.409714 | 412.208495 | 822.425698 | 411.716487 | S | ***1057.545891*** | 529.276584 | 1040.519342 | 520.763309 | 1039.535326 | 520.271301 | 6 |
| 9 | 953.520327 | 477.263802 | 936.493778 | 468.750527 | 935.509762 | 468.258519 | L | ***970.513863*** | 485.760570 | 953.487314 | 477.247295 | 952.503298 | 476.755287 | 5 |
| 10 | 1068.547270 | 534.777273 | 1051.520721 | 526.263999 | 1050.536705 | 525.771991 | D | ***857.429799*** | 429.218538 | 840.403250 | 420.705263 | 839.419234 | 420.213255 | 4 |
| 11 | 1196.605848 | 598.806562 | 1179.579299 | 590.293288 | 1178.595283 | 589.801279 | Q | ***742.402856*** | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 12 | 1635.831174 | 818.419225 | 1618.804625 | 809.905951 | 1617.820609 | 809.413943 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 13 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GHVSFKPSLDQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 59.5 | 1808.935577 | 0.002095 | GHVSFKPSLDQQR |
| 45.3 | 1808.935577 | 0.002095 | GHVSFKPSLDQQR |

**Mascot:** http://www.matrixscience.com/

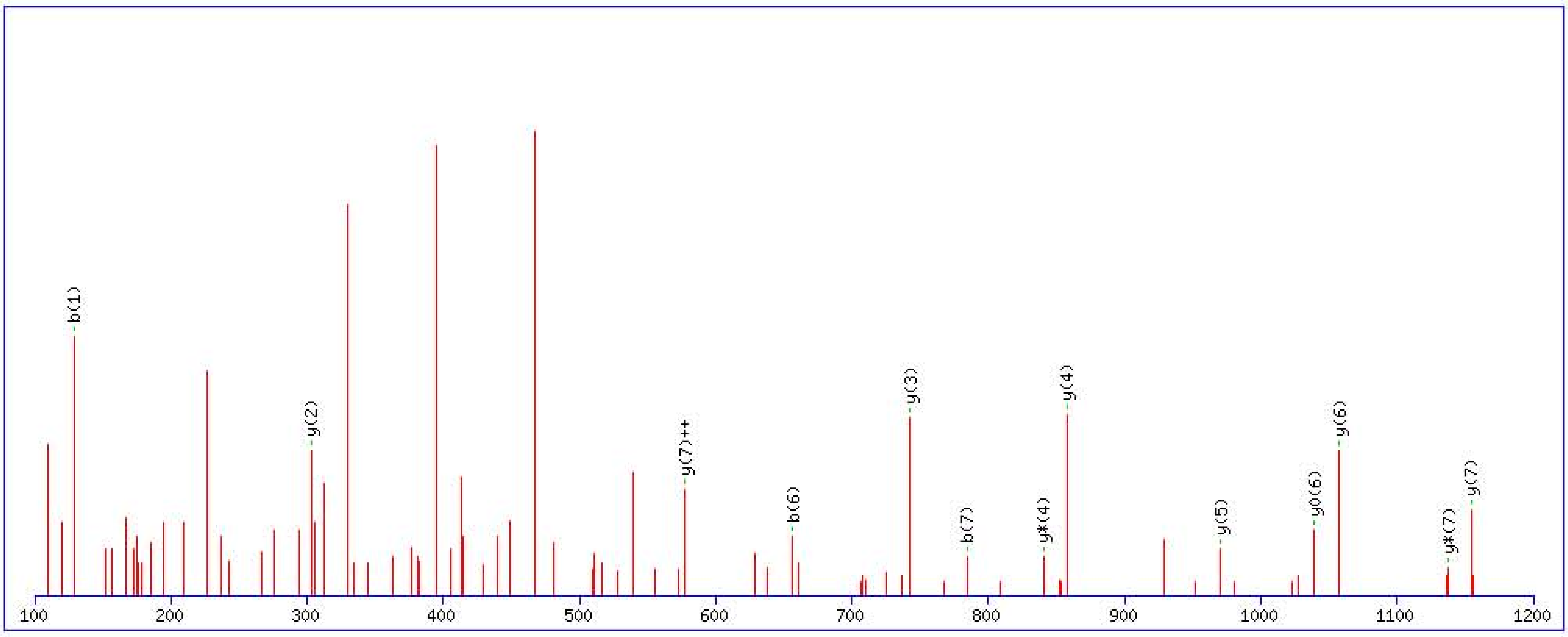
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KGHVSFKPSLDQQR**
Found in **ITIH3_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H3 OS=Homo sapiens GN=ITIH3 PE=1 SV=2

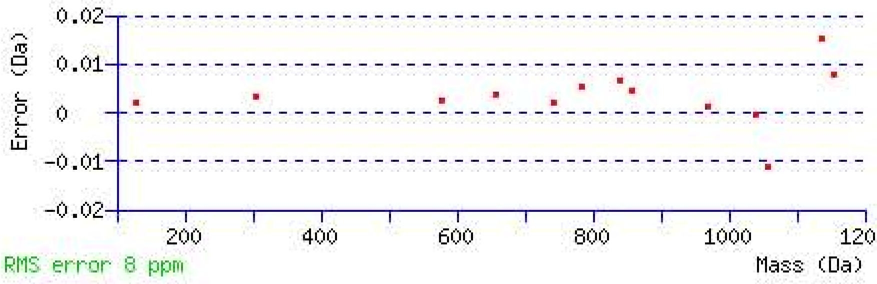
Match to Query 45313: 1937.031456 from(485.265140,4+) rtinseconds(1532) index(49755)
Title: Locus:1.1.1.1149.5 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●

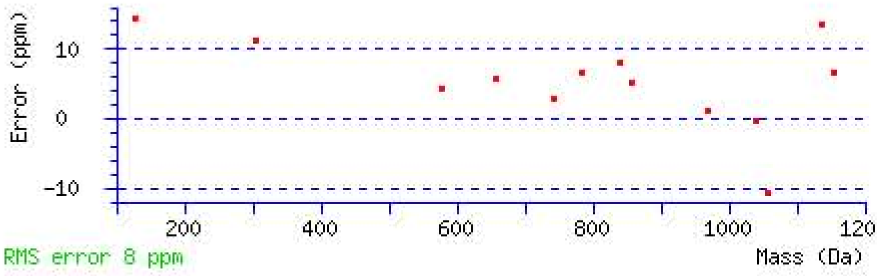


```
Monoisotopic mass of neutral peptide Mr(calc): 1937.030533
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.048
Matches : 13/142 fragment ions using 22 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 14 |
| 2 | 186.123703 | 93.565489 | 169.097154 | 85.052215 | | | G | 1809.942850 | 905.475063 | 1792.916301 | 896.961789 | 1791.932285 | 896.469781 | 13 |
| 3 | 323.182615 | 162.094945 | 306.156066 | 153.581671 | | | H | 1752.921386 | 876.964331 | 1735.894837 | 868.451057 | 1734.910821 | 867.959049 | 12 |
| 4 | 422.251029 | 211.629153 | 405.224480 | 203.115878 | | | V | 1615.862474 | 808.434875 | 1598.835925 | 799.921601 | 1597.851909 | 799.429593 | 11 |
| 5 | 509.283057 | 255.145167 | 492.256508 | 246.631892 | 491.272492 | 246.139884 | S | 1516.794060 | 758.900668 | 1499.767511 | 750.387394 | 1498.783495 | 749.895386 | 10 |
| 6 | **656.351471** | 328.679374 | 639.324922 | 320.166099 | 638.340906 | 319.674091 | F | 1429.762032 | 715.384654 | 1412.735483 | 706.871380 | 1411.751467 | 706.379372 | 9 |
| 7 | **784.446434** | 392.726855 | 767.419885 | 384.213581 | 766.435869 | 383.721573 | K | 1282.693618 | 641.850447 | 1265.667069 | 633.337173 | 1264.683053 | 632.845165 | 8 |
| 8 | 881.499198 | 441.253237 | 864.472649 | 432.739963 | 863.488633 | 432.247955 | P | ***1154.598655*** | 577.802966 | 1137.572106 | 569.289691 | 1136.588090 | 568.797683 | 7 |
| 9 | 968.531226 | 484.769251 | 951.504677 | 476.255977 | 950.520661 | 475.763969 | S | ***1057.545891*** | 529.276584 | 1040.519342 | 520.763309 | 1039.535326 | 520.271301 | 6 |
| 10 | 1081.615290 | 541.311283 | 1064.588741 | 532.798009 | 1063.604725 | 532.306000 | L | ***970.513863*** | 485.760570 | 953.487314 | 477.247295 | 952.503298 | 476.755287 | 5 |
| 11 | 1196.642233 | 598.824755 | 1179.615684 | 590.311480 | 1178.631668 | 589.819472 | D | ***857.429799*** | 429.218538 | 840.403250 | 420.705263 | 839.419234 | 420.213255 | 4 |
| 12 | 1635.867559 | 818.437418 | 1618.841010 | 809.924143 | 1617.856994 | 809.432135 | Q | ***742.402856*** | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 13 | 1763.926137 | 882.466707 | 1746.899588 | 873.953432 | 1745.915572 | 873.461424 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 14 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 8 ppm



RMS error 8 ppm

NCBI **BLAST** search of KGHVSFKPSLDQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.9 | 1937.030533 | 0.000923 | KGHVSFKPSLDQQR |
| 19.1 | 1937.030533 | 0.000923 | KGHVSFKPSLDQQR |

**Mascot:** http://www.matrixscience.com/

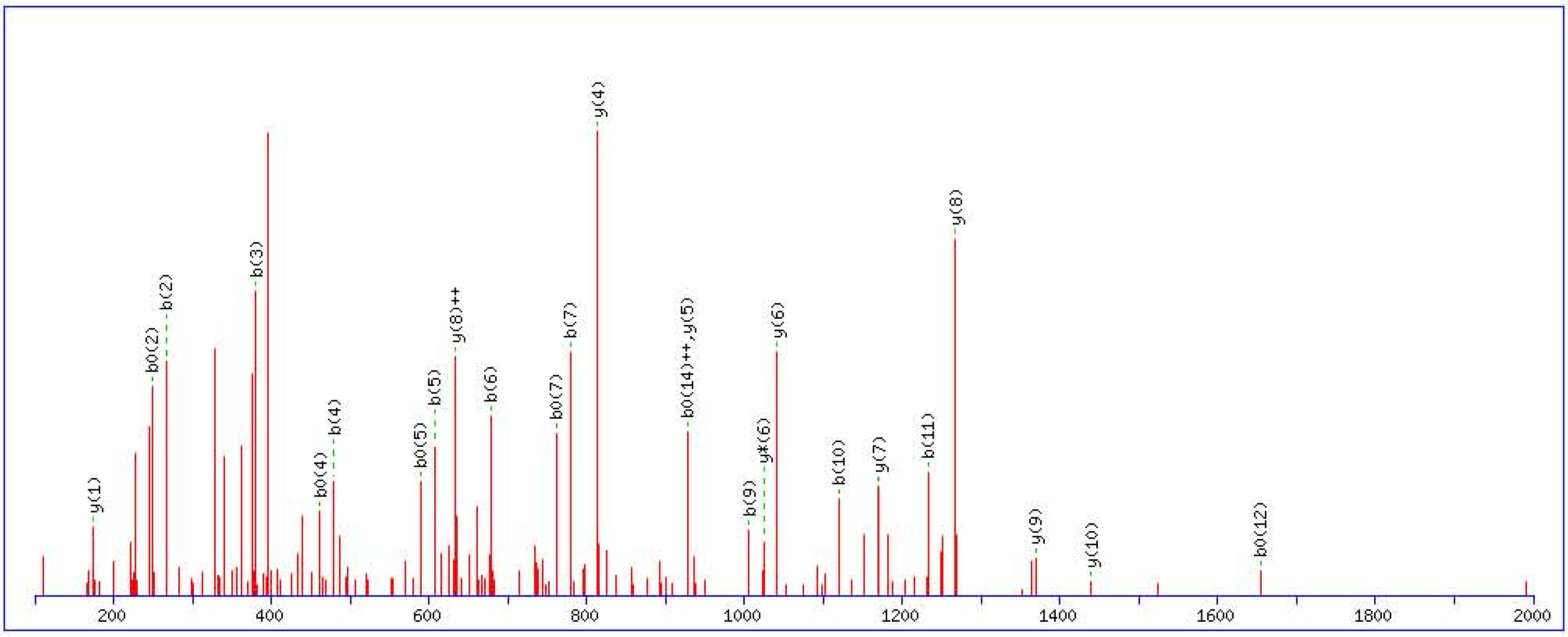
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EHLVQATPENLQEAR**
Found in **ITIH3_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H3 OS=Homo sapiens GN=ITIH3 PE=1 SV=2

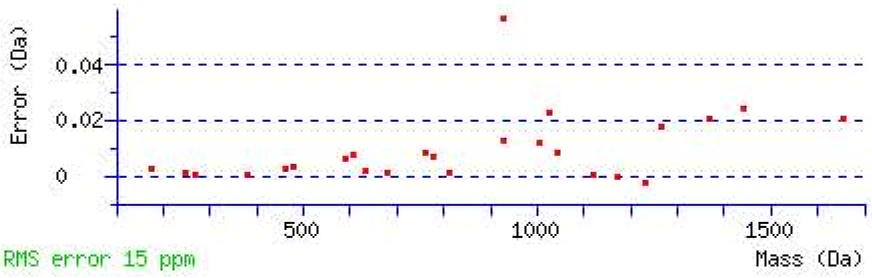
Match to Query 48259: 2045.046702 from(682.689510,3+) rtinseconds(1777) index(51354)
Title: Locus:1.1.1.1234.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

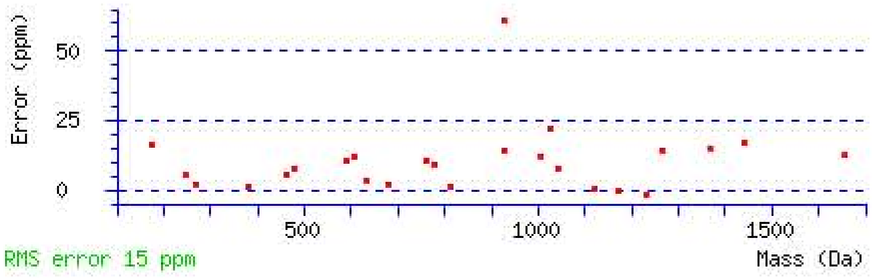
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2045.036377
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 73  Expect: 3.9e-007
Matches : 25/156 fragment ions using 30 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 15 |
| 2 | ***267.108781*** | 134.058028 | | | 249.098216 | 125.052746 | H | 1917.001094 | 959.004185 | 1899.974545 | 950.490911 | 1898.990529 | 949.998903 | 14 |
| 3 | ***380.192845*** | 190.600060 | | | 362.182280 | 181.594778 | L | 1779.942182 | 890.474729 | 1762.915633 | 881.961455 | 1761.931617 | 881.469447 | 13 |
| 4 | ***479.261259*** | 240.134267 | | | 461.250694 | 231.128985 | V | 1666.858118 | 833.932697 | 1649.831569 | 825.419423 | 1648.847553 | 824.927415 | 12 |
| 5 | ***607.319837*** | 304.163557 | 590.293288 | 295.650282 | 589.309272 | 295.158274 | Q | 1567.789704 | 784.398490 | 1550.763155 | 775.885216 | 1549.779139 | 775.393208 | 11 |
| 6 | ***678.356951*** | 339.682114 | 661.330402 | 331.168839 | 660.346386 | 330.676831 | A | ***1439.731126*** | 720.369201 | 1422.704577 | 711.855927 | 1421.720561 | 711.363919 | 10 |
| 7 | ***779.404630*** | 390.205953 | 762.378081 | 381.692679 | 761.394065 | 381.200671 | T | ***1368.694012*** | 684.850644 | 1351.667463 | 676.337370 | 1350.683447 | 675.845362 | 9 |
| 8 | 876.457394 | 438.732335 | 859.430845 | 430.219061 | 858.446829 | 429.727053 | P | ***1267.646333*** | 634.326805 | 1250.619784 | 625.813530 | 1249.635768 | 625.321522 | 8 |
| 9 | ***1005.499987*** | 503.253632 | 988.473438 | 494.740357 | 987.489422 | 494.248349 | E | ***1170.593569*** | 585.800423 | 1153.567020 | 577.287148 | 1152.583004 | 576.795140 | 7 |
| 10 | ***1119.542914*** | 560.275095 | 1102.516365 | 551.761821 | 1101.532349 | 551.269813 | N | ***1041.550976*** | 521.279126 | 1024.524427 | 512.765852 | 1023.540411 | 512.273844 | 6 |
| 11 | ***1232.626978*** | 616.817127 | 1215.600429 | 608.303853 | 1214.616413 | 607.811845 | L | ***927.508049*** | 464.257663 | 910.481500 | 455.744388 | 909.497484 | 455.252380 | 5 |
| 12 | 1671.852304 | 836.429790 | 1654.825755 | 827.916516 | 1653.841739 | 827.424508 | Q | ***814.423985*** | 407.715631 | 797.397436 | 399.202356 | 796.413420 | 398.710348 | 4 |
| 13 | 1800.894897 | 900.951087 | 1783.868348 | 892.437812 | 1782.884332 | 891.945804 | E | 375.198659 | 188.102968 | 358.172110 | 179.589693 | 357.188094 | 179.097685 | 3 |
| 14 | 1871.932011 | 936.469644 | 1854.905462 | 927.956369 | 1853.921446 | 927.464361 | A | 246.156066 | 123.581671 | 229.129517 | 115.068396 | | | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EHLVQATPENLQEAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 73.4 | 2045.036377 | 0.010325 | EHLVQATPENLQEAR |
| 4.9 | 2045.022446 | 0.024256 | EHNENMLRNILPSHVAR |
| 2.8 | 2045.051193 | -0.004491 | VVGGYLLMLAYACVTMLR |

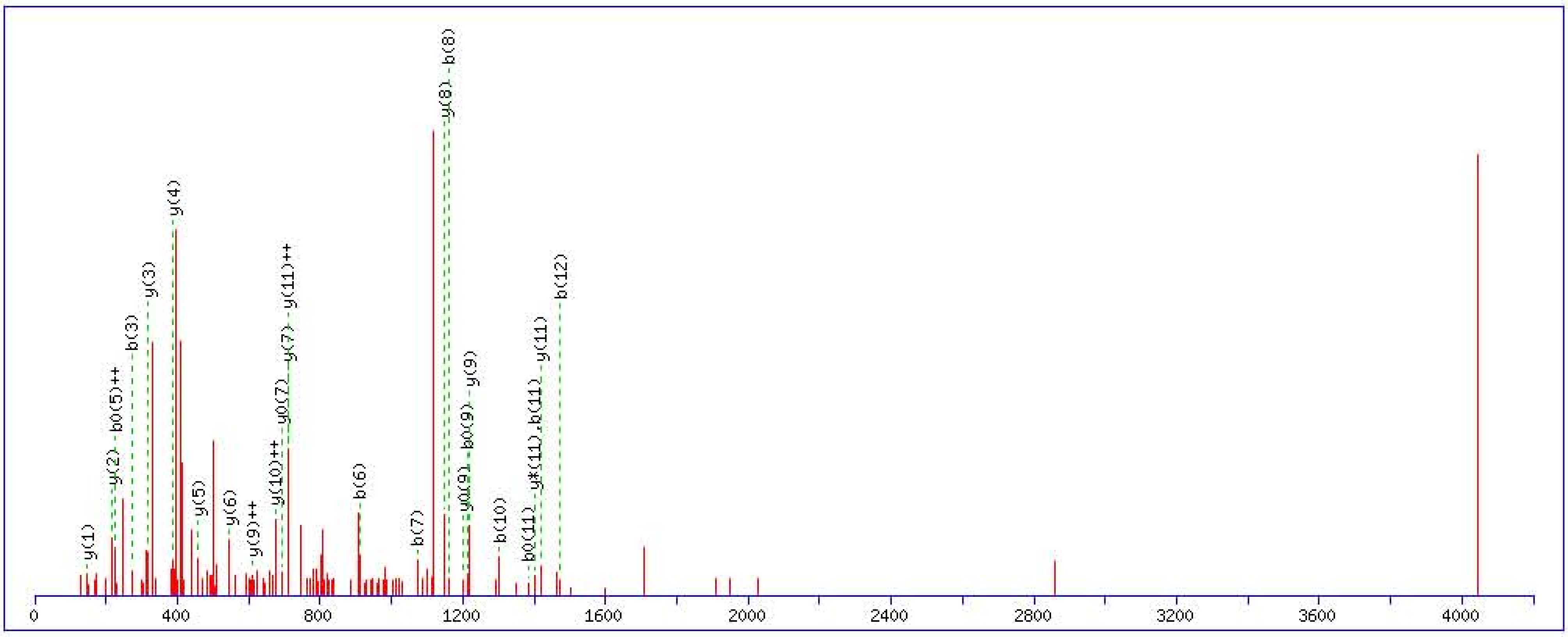
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **AEAQAQYSAAVAK**
Found in **ITIH4_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H4 OS=Homo sapiens GN=ITIH4 PE=1 SV=4

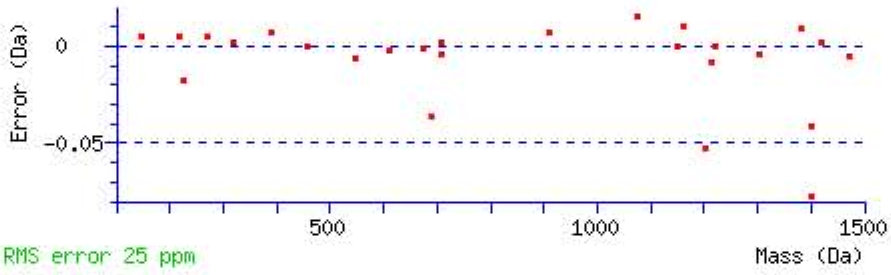
Match to Query 37884: 1617.820728 from(809.917640,2+) rtinseconds(1559) index(18889)
Title: Locus:1.1.1.545.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

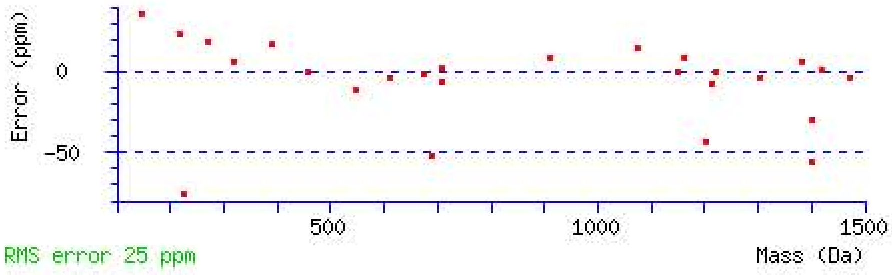
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 4200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1617.818436
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 44 **Expect:** 0.00011
**Matches :** 26/126 fragment ions using 65 most intense peaks (help)

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 13 |
| 2 | 201.086983 | 101.047130 | | | 183.076418 | 92.041847 | E | 1547.788642 | 774.397959 | 1530.762093 | 765.884685 | 1529.778077 | 765.392677 | 12 |
| 3 | **272.124097** | 136.565687 | | | 254.113532 | 127.560404 | A | ***1418.746049*** | 709.876663 | 1401.719500 | 701.363388 | 1400.735484 | 700.871380 | 11 |
| 4 | 400.182675 | 200.594976 | 383.156126 | 192.081701 | 382.172110 | 191.589693 | Q | 1347.708935 | 674.358106 | 1330.682386 | 665.844831 | 1329.698370 | 665.352823 | 10 |
| 5 | 471.219789 | 236.113533 | 454.193240 | 227.600258 | 453.209224 | 227.108250 | A | ***1219.650357*** | 610.328817 | 1202.623808 | 601.815542 | 1201.639792 | 601.323534 | 9 |
| 6 | **910.445115** | 455.726196 | 893.418566 | 447.212921 | 892.434550 | 446.720913 | Q | ***1148.613243*** | 574.810260 | 1131.586694 | 566.296985 | 1130.602678 | 565.804977 | 8 |
| 7 | **1073.508444** | 537.257860 | 1056.481895 | 528.744586 | 1055.497879 | 528.252578 | Y | ***709.387917*** | 355.197597 | 692.361368 | 346.684322 | 691.377352 | 346.192314 | 7 |
| 8 | **1160.540472** | 580.773874 | 1143.513923 | 572.260600 | 1142.529907 | 571.768592 | S | ***546.324588*** | 273.665932 | 529.298039 | 265.152658 | 528.314023 | 264.660650 | 6 |
| 9 | 1231.577586 | 616.292431 | 1214.551037 | 607.779157 | 1213.567021 | 607.287149 | A | ***459.292560*** | 230.149918 | 442.266011 | 221.636643 | | | 5 |
| 10 | **1302.614700** | 651.810988 | 1285.588151 | 643.297714 | 1284.604135 | 642.805706 | A | ***388.255446*** | 194.631361 | 371.228897 | 186.118087 | | | 4 |
| 11 | **1401.683114** | 701.345195 | 1384.656565 | 692.831921 | 1383.672549 | 692.339913 | V | ***317.218332*** | 159.112804 | 300.191783 | 150.599530 | | | 3 |
| 12 | **1472.720228** | 736.863752 | 1455.693679 | 728.350478 | 1454.709663 | 727.858470 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065322 | | | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



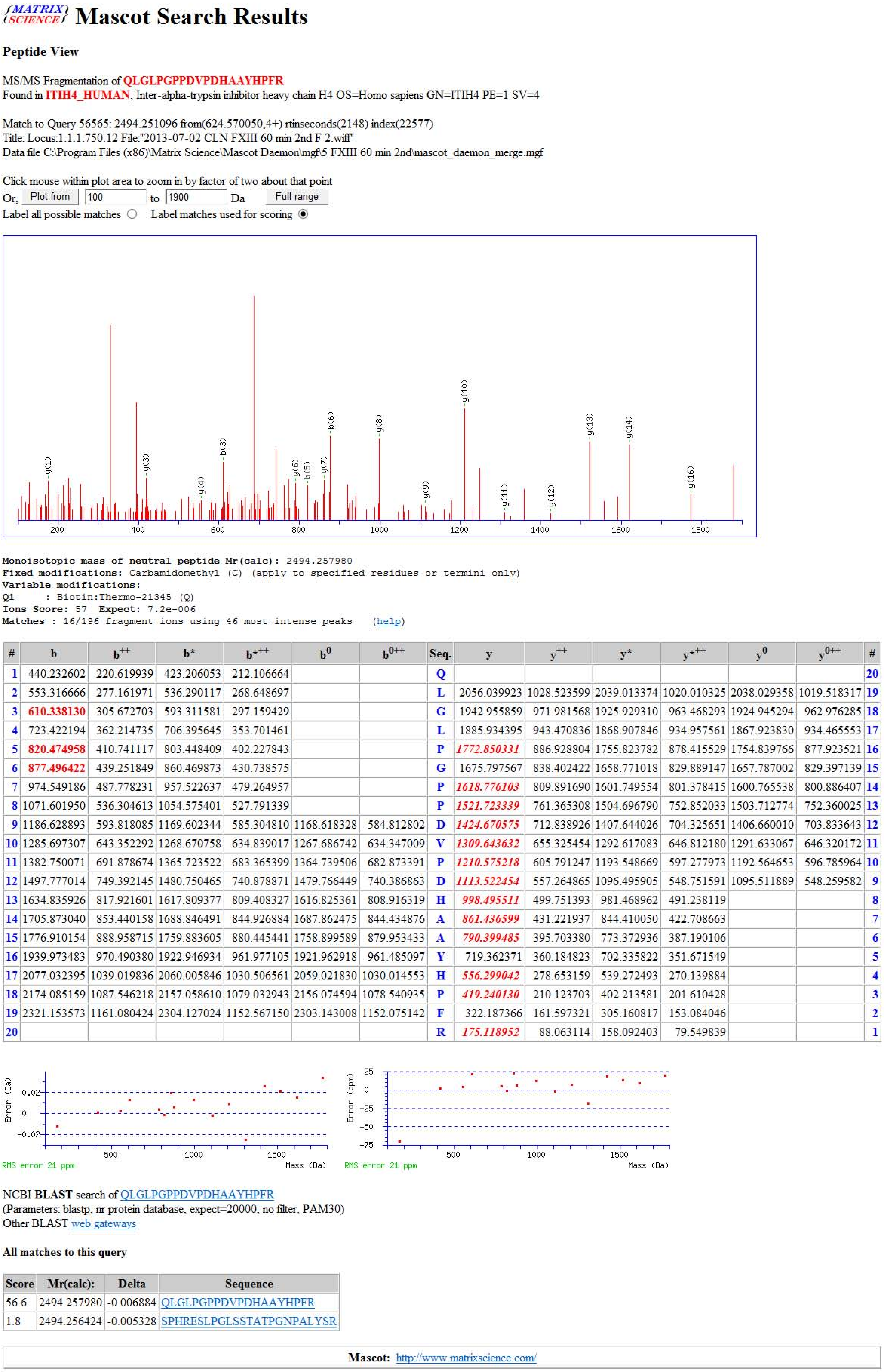


NCBI **BLAST** search of AEAQAQYSAAVAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.0 | 1617.818436 | 0.002292 | AEAQAQYSAAVAK |
| 41.2 | 1617.818436 | 0.002292 | AEAQAQYSAAVAK |
| 1.7 | 1617.800690 | 0.020038 | EAAQAIFPSMAR |
| 1.0 | 1617.829681 | -0.008953 | NDVMIRKEAYVHK |

**Mascot:** http://www.matrixscience.com/



# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **QLGLPGPPDVPDHAAYHPFR**
Found in **ITIH4_HUMAN**, Inter-alpha-trypsin inhibitor heavy chain H4 OS=Homo sapiens GN=ITIH4 PE=1 SV=4

Match to Query 56565: 2494.251096 from(624.570050,4+) rtinseconds(2148) index(22577)
Title: Locus:1.1.1.750.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 2494.257980
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 7.2e-006
Matches : 16/196 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 20 |
| 2 | 553.316666 | 277.161971 | 536.290117 | 268.648697 | | | L | 2056.039923 | 1028.523599 | 2039.013374 | 1020.010325 | 2038.029358 | 1019.518317 | 19 |
| 3 | **610.338130** | 305.672703 | 593.311581 | 297.159429 | | | G | 1942.955859 | 971.981568 | 1925.929310 | 963.468293 | 1924.945294 | 962.976285 | 18 |
| 4 | 723.422194 | 362.214735 | 706.395645 | 353.701461 | | | L | 1885.934395 | 943.470836 | 1868.907846 | 934.957561 | 1867.923830 | 934.465553 | 17 |
| 5 | **820.474958** | 410.741117 | 803.448409 | 402.227843 | | | P | ***1772.850331*** | 886.928804 | 1755.823782 | 878.415529 | 1754.839766 | 877.923521 | 16 |
| 6 | **877.496422** | 439.251849 | 860.469873 | 430.738575 | | | G | 1675.797567 | 838.402422 | 1658.771018 | 829.889147 | 1657.787002 | 829.397139 | 15 |
| 7 | 974.549186 | 487.778231 | 957.522637 | 479.264957 | | | P | ***1618.776103*** | 809.891690 | 1601.749554 | 801.378415 | 1600.765538 | 800.886407 | 14 |
| 8 | 1071.601950 | 536.304613 | 1054.575401 | 527.791339 | | | P | ***1521.723339*** | 761.365308 | 1504.696790 | 752.852033 | 1503.712774 | 752.360025 | 13 |
| 9 | 1186.628893 | 593.818085 | 1169.602344 | 585.304810 | 1168.618328 | 584.812802 | D | ***1424.670575*** | 712.838926 | 1407.644026 | 704.325651 | 1406.660010 | 703.833643 | 12 |
| 10 | 1285.697307 | 643.352292 | 1268.670758 | 634.839017 | 1267.686742 | 634.347009 | V | ***1309.643632*** | 655.325454 | 1292.617083 | 646.812180 | 1291.633067 | 646.320172 | 11 |
| 11 | 1382.750071 | 691.878674 | 1365.723522 | 683.365399 | 1364.739506 | 682.873391 | P | ***1210.575218*** | 605.791247 | 1193.548669 | 597.277973 | 1192.564653 | 596.785964 | 10 |
| 12 | 1497.777014 | 749.392145 | 1480.750465 | 740.878871 | 1479.766449 | 740.386863 | D | ***1113.522454*** | 557.264865 | 1096.495905 | 548.751591 | 1095.511889 | 548.259582 | 9 |
| 13 | 1634.835926 | 817.921601 | 1617.809377 | 809.408327 | 1616.825361 | 808.916319 | H | ***998.495511*** | 499.751393 | 981.468962 | 491.238119 | | | 8 |
| 14 | 1705.873040 | 853.440158 | 1688.846491 | 844.926884 | 1687.862475 | 844.434876 | A | ***861.436599*** | 431.221937 | 844.410050 | 422.708663 | | | 7 |
| 15 | 1776.910154 | 888.958715 | 1759.883605 | 880.445441 | 1758.899589 | 879.953433 | A | ***790.399485*** | 395.703380 | 773.372936 | 387.190106 | | | 6 |
| 16 | 1939.973483 | 970.490380 | 1922.946934 | 961.977105 | 1921.962918 | 961.485097 | Y | 719.362371 | 360.184823 | 702.335822 | 351.671549 | | | 5 |
| 17 | 2077.032395 | 1039.019836 | 2060.005846 | 1030.506561 | 2059.021830 | 1030.014553 | H | ***556.299042*** | 278.653159 | 539.272493 | 270.139884 | | | 4 |
| 18 | 2174.085159 | 1087.546218 | 2157.058610 | 1079.032943 | 2156.074594 | 1078.540935 | P | ***419.240130*** | 210.123703 | 402.213581 | 201.610428 | | | 3 |
| 19 | 2321.153573 | 1161.080424 | 2304.127024 | 1152.567150 | 2303.143008 | 1152.075142 | F | 322.187366 | 161.597321 | 305.160817 | 153.084046 | | | 2 |
| 20 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |

NCBI **BLAST** search of QLGLPGPPDVPDHAAYHPFR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 56.6 | 2494.257980 | -0.006884 | QLGLPGPPDVPDHAAYHPFR |
| 1.8 | 2494.256424 | -0.005328 | SPHRESLPGLSSTATPGNPALYSR |

**Mascot:** http://www.matrixscience.com/

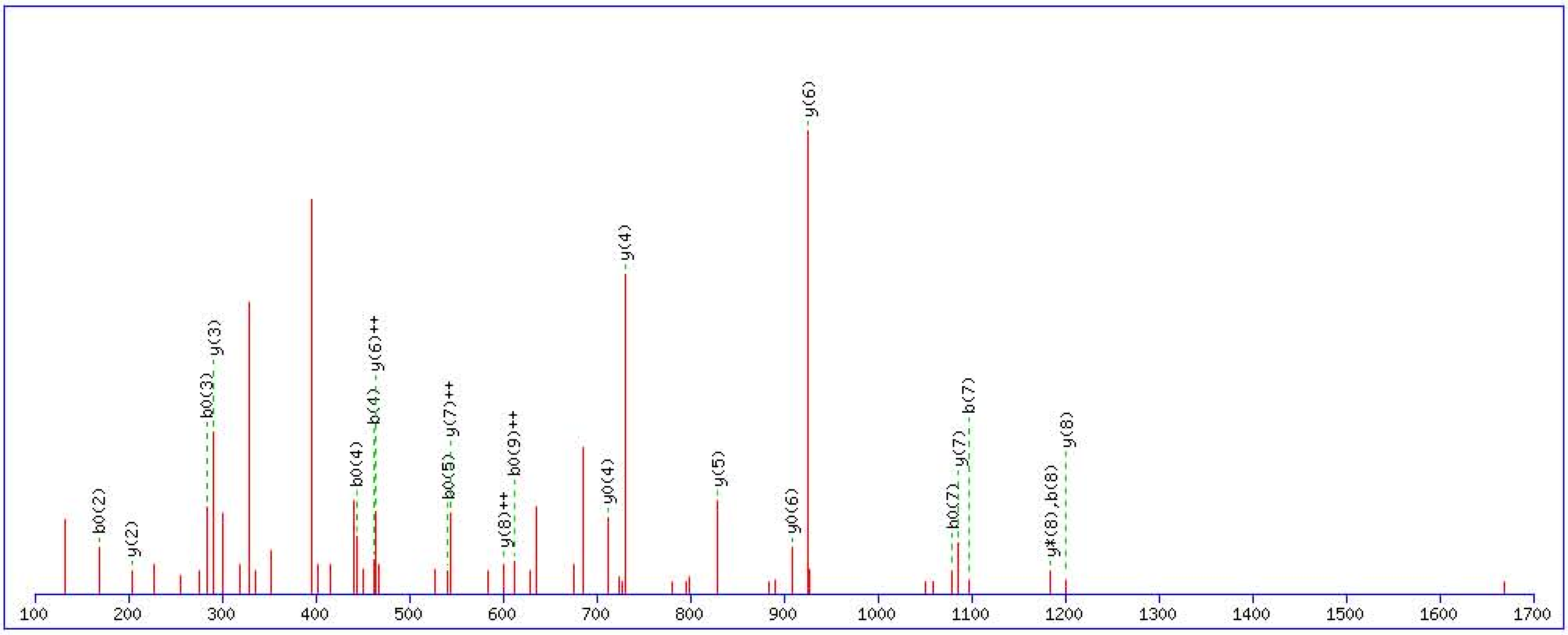
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EGDCPVQSGK**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

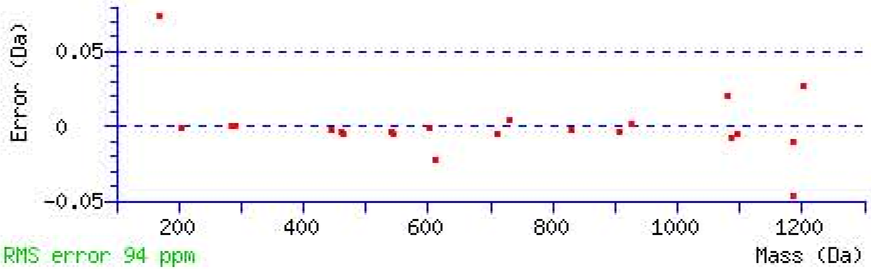
Match to Query 29572: 1386.624508 from(694.319530,2+) rtinseconds(1360) index(32269)
Title: Locus:1.1.1.2892.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

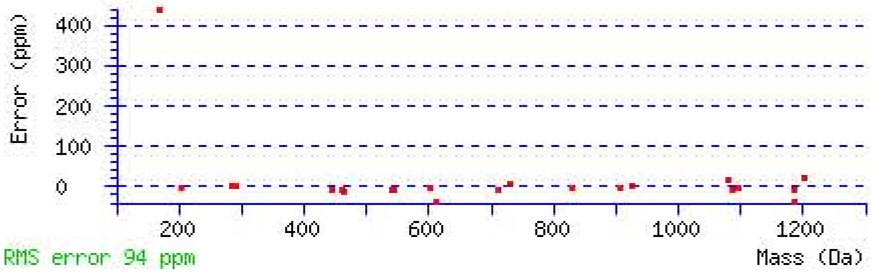
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1386.627182
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.00067
Matches : 22/92 fragment ions using 38 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 10 |
| 2 | 187.071333 | 94.039305 | | | 169.060768 | 85.034022 | G | 1258.591856 | 629.799566 | 1241.565307 | 621.286292 | 1240.581291 | 620.794284 | 9 |
| 3 | 302.098276 | 151.552776 | | | 284.087711 | 142.547494 | D | ***1201.570392*** | 601.288834 | 1184.543843 | 592.775560 | 1183.559827 | 592.283552 | 8 |
| 4 | **462.128925** | 231.568101 | | | 444.118360 | 222.562818 | C | ***1086.543449*** | 543.775363 | 1069.516900 | 535.262088 | 1068.532884 | 534.770080 | 7 |
| 5 | 559.181689 | 280.094483 | | | 541.171124 | 271.089200 | P | ***926.512800*** | 463.760038 | 909.486251 | 455.246764 | 908.502235 | 454.754756 | 6 |
| 6 | 658.250103 | 329.628690 | | | 640.239538 | 320.623407 | V | ***829.460036*** | 415.233656 | 812.433487 | 406.720382 | 811.449471 | 406.228374 | 5 |
| 7 | **1097.475429** | 549.241353 | 1080.448880 | 540.728078 | 1079.464864 | 540.236070 | Q | ***730.391622*** | 365.699449 | 713.365073 | 357.186175 | 712.381057 | 356.694167 | 4 |
| 8 | **1184.507457** | 592.757367 | 1167.480908 | 584.244092 | 1166.496892 | 583.752084 | S | ***291.166296*** | 146.086786 | 274.139747 | 137.573512 | 273.155731 | 137.081504 | 3 |
| 9 | 1241.528921 | 621.268099 | 1224.502372 | 612.754824 | 1223.518356 | 612.262816 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 10 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EGDCPVQSGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 40.0 | 1386.627182 | -0.002674 | EGDCPVQSGK |

**Mascot:** http://www.matrixscience.com/

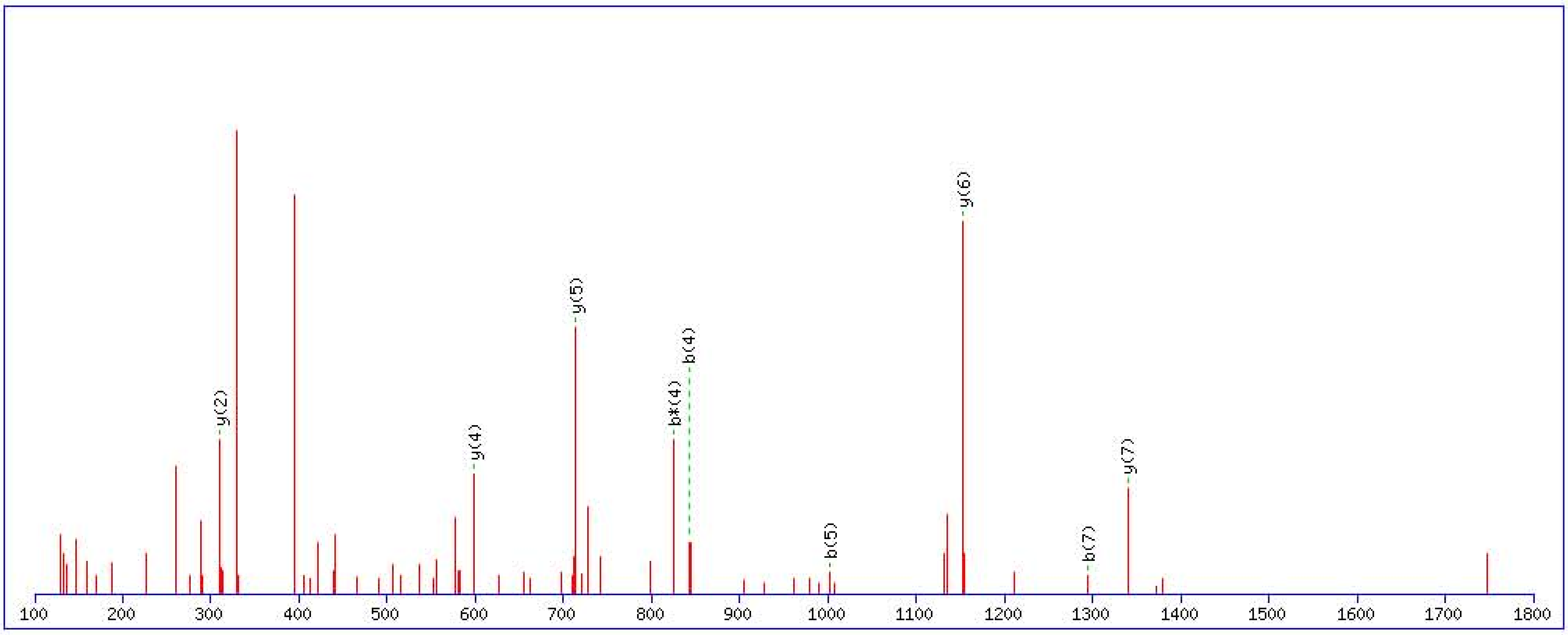
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TWQDCEYK**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

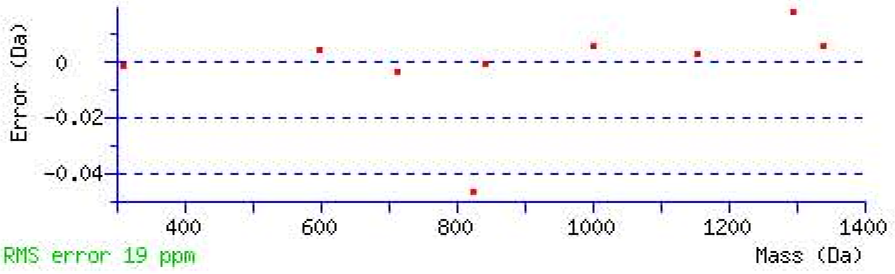
Match to Query 32165: 1439.620668 from(720.817610,2+) rtinseconds(1778) index(34934)
Title: Locus:1.1.1.3038.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

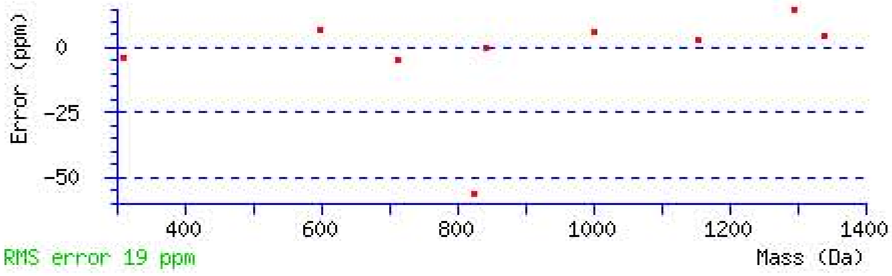
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1439.621353
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 37 **Expect:** 0.00073
**Matches :** 9/76 fragment ions using 12 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 8 |
| 2 | 288.134268 | 144.570772 | | | 270.123703 | 135.565490 | W | ***1339.580957*** | 670.294117 | 1322.554408 | 661.780842 | 1321.570392 | 661.288834 | 7 |
| 3 | 727.359594 | 364.183435 | 710.333045 | 355.670161 | 709.349029 | 355.178153 | Q | ***1153.501644*** | 577.254460 | 1136.475095 | 568.741186 | 1135.491079 | 568.249178 | 6 |
| 4 | ***842.386537*** | 421.696907 | 825.359988 | 413.183632 | 824.375972 | 412.691624 | D | ***714.276318*** | 357.641797 | 697.249769 | 349.128523 | 696.265753 | 348.636515 | 5 |
| 5 | ***1002.417186*** | 501.712231 | 985.390637 | 493.198957 | 984.406621 | 492.706949 | C | ***599.249375*** | 300.128326 | 582.222826 | 291.615051 | 581.238810 | 291.123043 | 4 |
| 6 | 1131.459779 | 566.233528 | 1114.433230 | 557.720253 | 1113.449214 | 557.228245 | E | 439.218726 | 220.113001 | 422.192177 | 211.599727 | 421.208161 | 211.107719 | 3 |
| 7 | ***1294.523108*** | 647.765192 | 1277.496559 | 639.251918 | 1276.512543 | 638.759910 | Y | ***310.176133*** | 155.591705 | 293.149584 | 147.078430 | | | 2 |
| 8 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TWQDCEYK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.3 | 1439.621353 | -0.000685 | TWQDCEYK |
| 0.8 | 1439.602036 | 0.018632 | EQMEEEQKAMR |
| 0.3 | 1439.635056 | -0.014388 | MRAEDGENYDIK |

**Mascot:** http://www.matrixscience.com/

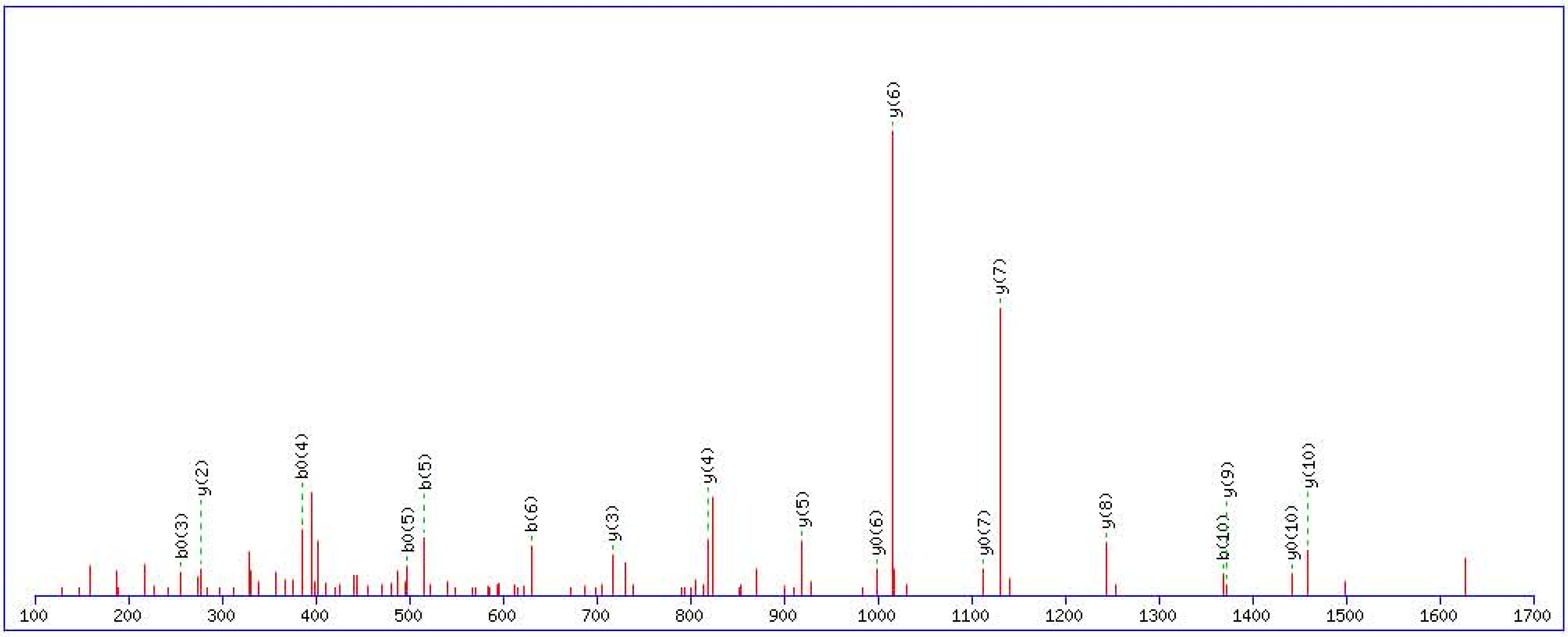
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SVSEINPTTQMK**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

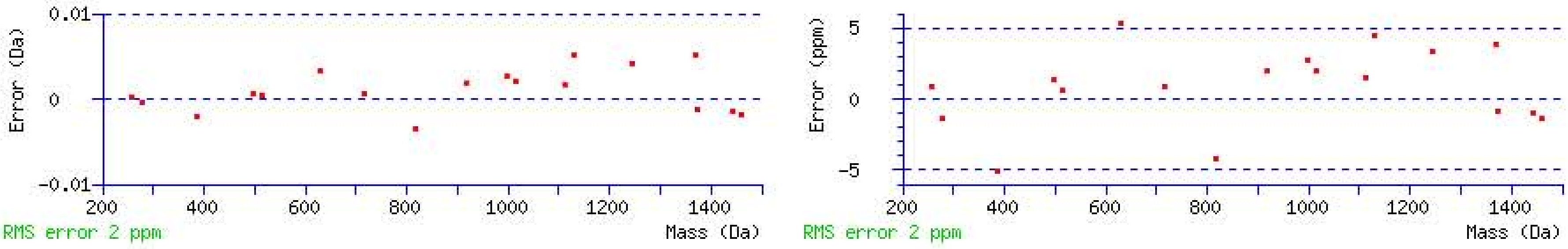
Match to Query 39291: 1644.825528 from(823.420040,2+) rtinseconds(1826) index(35184)
Title: Locus:1.1.1.3055.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1644.821503
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 65  Expect: 2.3e-006
Matches : 18/116 fragment ions using 29 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 12 |
| 2 | 187.107718 | 94.057497 | | | 169.097153 | 85.052214 | V | 1558.796763 | 779.902020 | 1541.770214 | 771.388745 | 1540.786198 | 770.896737 | 11 |
| 3 | 274.139746 | 137.573511 | | | 256.129181 | 128.568229 | S | ***1459.728349*** | 730.367813 | 1442.701800 | 721.854538 | 1441.717784 | 721.362530 | 10 |
| 4 | 403.182339 | 202.094808 | | | 385.171774 | 193.089525 | E | ***1372.696321*** | 686.851799 | 1355.669772 | 678.338524 | 1354.685756 | 677.846516 | 9 |
| 5 | **516.266403** | 258.636840 | | | 498.255838 | 249.631557 | I | ***1243.653728*** | 622.330502 | 1226.627179 | 613.817228 | 1225.643163 | 613.325220 | 8 |
| 6 | **630.309330** | 315.658303 | 613.282781 | 307.145029 | 612.298765 | 306.653021 | N | ***1130.569664*** | 565.788470 | 1113.543115 | 557.275196 | 1112.559099 | 556.783188 | 7 |
| 7 | 727.362094 | 364.184685 | 710.335545 | 355.671411 | 709.351529 | 355.179403 | P | ***1016.526737*** | 508.767007 | 999.500188 | 500.253732 | 998.516172 | 499.761724 | 6 |
| 8 | 828.409773 | 414.708525 | 811.383224 | 406.195250 | 810.399208 | 405.703242 | T | ***919.473973*** | 460.240625 | 902.447424 | 451.727350 | 901.463408 | 451.235342 | 5 |
| 9 | 929.457452 | 465.232364 | 912.430903 | 456.719090 | 911.446887 | 456.227082 | T | ***818.426294*** | 409.716785 | 801.399745 | 401.203511 | 800.415729 | 400.711503 | 4 |
| 10 | **1368.682778** | 684.845027 | 1351.656229 | 676.331753 | 1350.672213 | 675.839745 | Q | ***717.378615*** | 359.192946 | 700.352066 | 350.679671 | | | 3 |
| 11 | 1499.723263 | 750.365270 | 1482.696714 | 741.851995 | 1481.712698 | 741.359987 | M | ***278.153289*** | 139.580282 | 261.126740 | 131.067008 | | | 2 |
| 12 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of SVSEINPTTQMK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.1 | 1644.821503 | 0.004025 | SVSEINPTTQMK |
| 4.7 | 1644.840607 | -0.015079 | ESGRQFCIAVTHLK |
| 3.4 | 1644.814133 | 0.011395 | VTDQGSPPMSATAIVR |
| 1.3 | 1644.803757 | 0.021771 | TISTMKVMQFQGMK |
| 0.5 | 1644.826889 | -0.001361 | VPHFFCDIRPVMK |

**Mascot:** http://www.matrixscience.com/

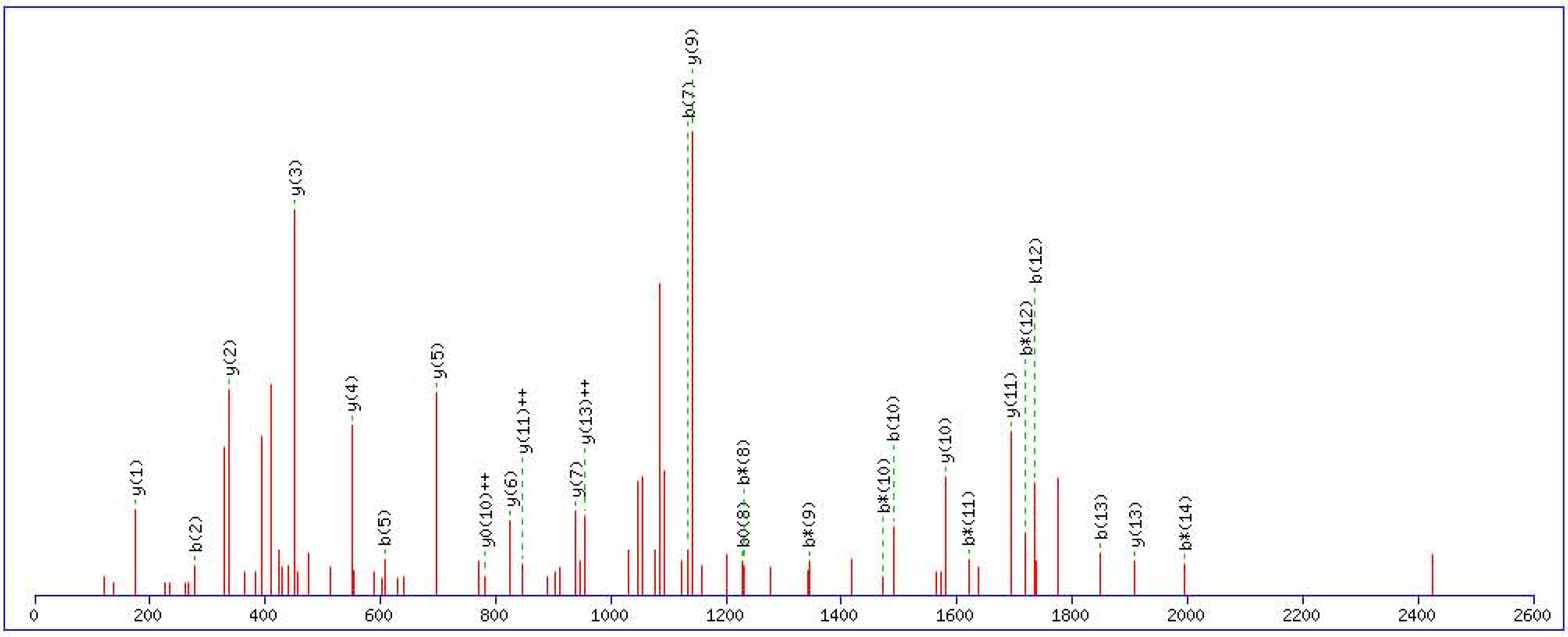
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YNSQNQSNNQFVLYR**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

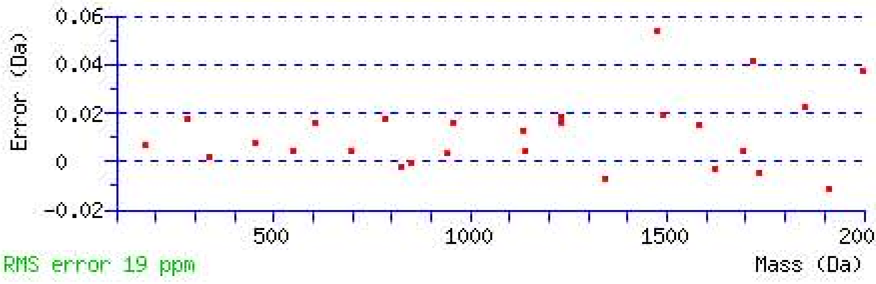
Match to Query 50804: 2185.047408 from(1093.530980,2+) rtinseconds(2026) index(21850)
Title: Locus:1.1.1.707.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

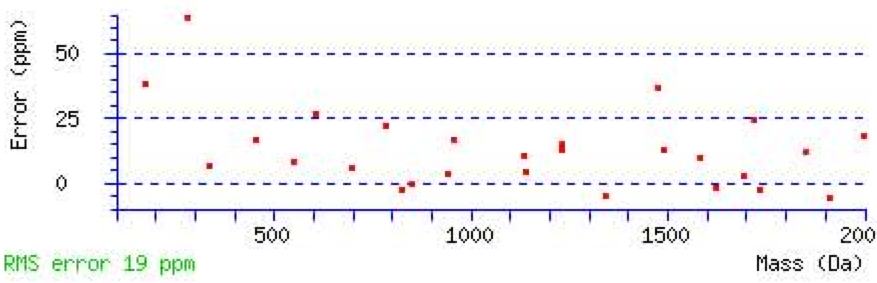
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2185.037445
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 84  Expect: 1.7e-008
Matches : 27/146 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 15 |
| 2 | **278.113532** | 139.560404 | 261.086983 | 131.047130 | | | N | 2022.981419 | 1011.994348 | 2005.954870 | 1003.481073 | 2004.970854 | 1002.989065 | 14 |
| 3 | 365.145560 | 183.076418 | 348.119011 | 174.563144 | 347.134995 | 174.071136 | S | ***1908.938492*** | 954.972884 | 1891.911943 | 946.459610 | 1890.927927 | 945.967602 | 13 |
| 4 | 493.204138 | 247.105707 | 476.177589 | 238.592433 | 475.193573 | 238.100425 | Q | 1821.906464 | 911.456870 | 1804.879915 | 902.943596 | 1803.895899 | 902.451588 | 12 |
| 5 | **607.247065** | 304.127171 | 590.220516 | 295.613896 | 589.236500 | 295.121888 | N | ***1693.847886*** | 847.427581 | 1676.821337 | 838.914307 | 1675.837321 | 838.422299 | 11 |
| 6 | 1046.472391 | 523.739834 | 1029.445842 | 515.226559 | 1028.461826 | 514.734551 | Q | ***1579.804959*** | 790.406118 | 1562.778410 | 781.892843 | 1561.794394 | 781.400835 | 10 |
| 7 | **1133.504419** | 567.255848 | 1116.477870 | 558.742573 | 1115.493854 | 558.250565 | S | ***1140.579633*** | 570.793455 | 1123.553084 | 562.280180 | 1122.569068 | 561.788172 | 9 |
| 8 | 1247.547346 | 624.277311 | 1230.520797 | 615.764037 | 1229.536781 | 615.272029 | N | 1053.547605 | 527.277441 | 1036.521056 | 518.764166 | | | 8 |
| 9 | 1361.590273 | 681.298775 | 1344.563724 | 672.785500 | 1343.579708 | 672.293492 | N | ***939.504678*** | 470.255977 | 922.478129 | 461.742703 | | | 7 |
| 10 | **1489.648851** | 745.328064 | 1472.622302 | 736.814789 | 1471.638286 | 736.322781 | Q | ***825.461751*** | 413.234514 | 808.435202 | 404.721239 | | | 6 |
| 11 | 1636.717265 | 818.862271 | 1619.690716 | 810.348996 | 1618.706700 | 809.856988 | F | ***697.403173*** | 349.205225 | 680.376624 | 340.691950 | | | 5 |
| 12 | **1735.785679** | 868.396478 | 1718.759130 | 859.883203 | 1717.775114 | 859.391195 | V | ***550.334759*** | 275.671018 | 533.308210 | 267.157743 | | | 4 |
| 13 | **1848.869743** | 924.938510 | 1831.843194 | 916.425235 | 1830.859178 | 915.933227 | L | ***451.266345*** | 226.136811 | 434.239796 | 217.623536 | | | 3 |
| 14 | 2011.933072 | 1006.470174 | 1994.906523 | 997.956900 | 1993.922507 | 997.464892 | Y | ***338.182281*** | 169.594779 | 321.155732 | 161.081504 | | | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of YNSQNQSNNQFVLYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 83.8 | 2185.037445 | 0.009963 | YNSQNQSNNQFVLYR |
| 50.8 | 2185.037445 | 0.009963 | YNSQNQSNNQFVLYR |
| 39.6 | 2185.037445 | 0.009963 | YNSQNQSNNQFVLYR |
| 0.9 | 2185.040604 | 0.006804 | ERAAAAAAAAQMHAKNGGGSSSR |
| 0.1 | 2185.047348 | 0.000060 | HLSSLTDNEQADIFER |

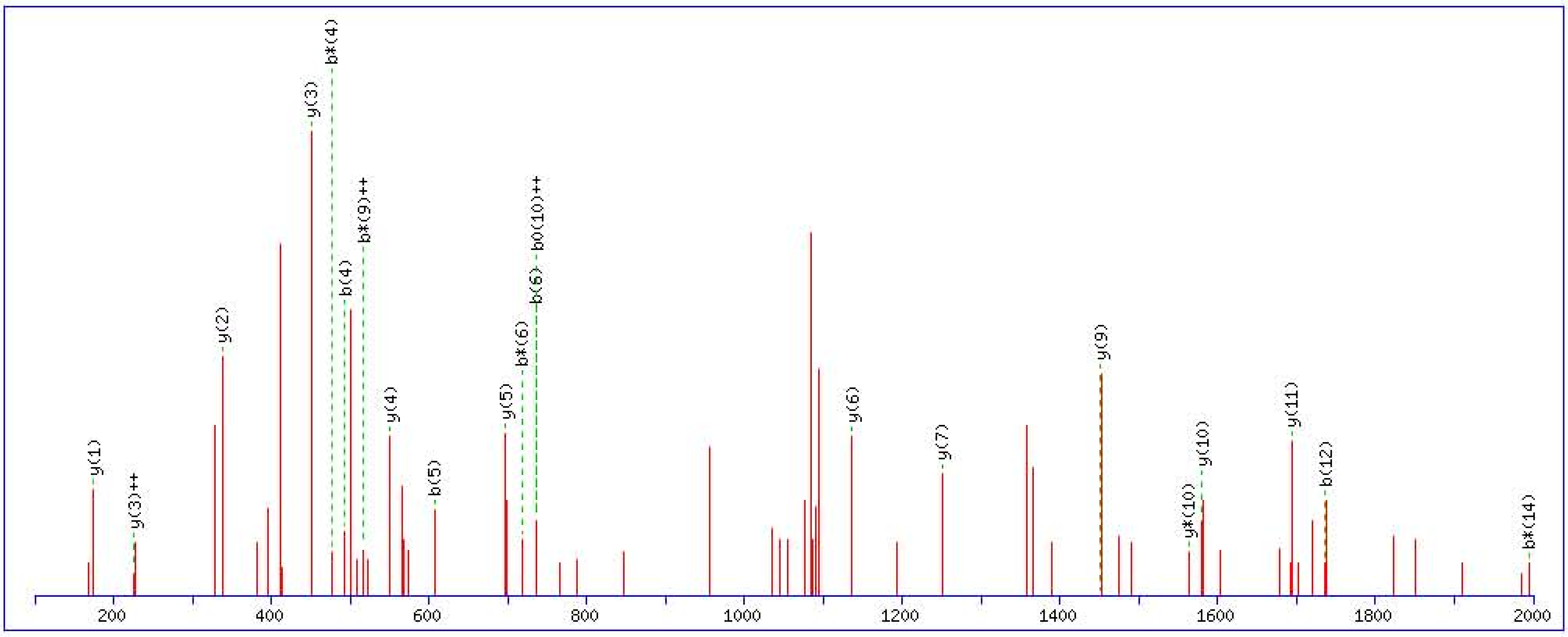
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **YNSQNQSNNQFVLYR**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

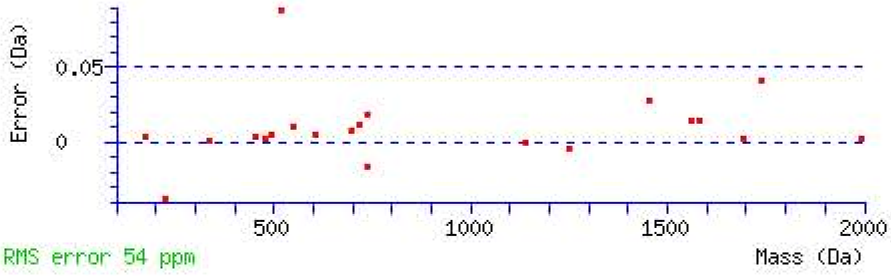
Match to Query 50808: 2185.051028 from(1093.532790,2+) rtinseconds(2123) index(22434)
Title: Locus:1.1.1.741.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

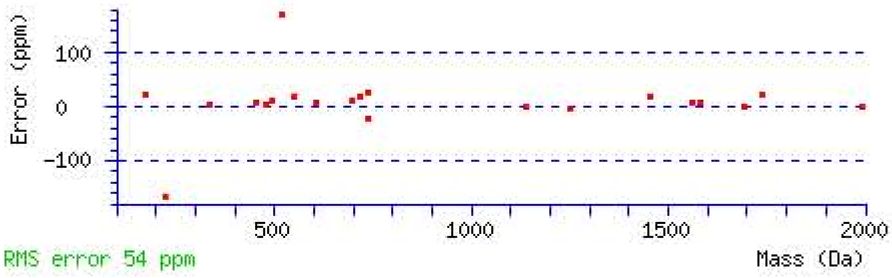
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2185.037445
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.036
Matches : 21/146 fragment ions using 69 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 164.070605 | 82.538940 | | | | | Y | | | | | | | 15 |
| 2 | 278.113532 | 139.560404 | 261.086983 | 131.047130 | | | N | 2022.981419 | 1011.994348 | 2005.954870 | 1003.481073 | 2004.970854 | 1002.989065 | 14 |
| 3 | 365.145560 | 183.076418 | 348.119011 | 174.563144 | 347.134995 | 174.071136 | S | 1908.938492 | 954.972884 | 1891.911943 | 946.459610 | 1890.927927 | 945.967602 | 13 |
| 4 | **493.204138** | 247.105707 | 476.177589 | 238.592433 | 475.193573 | 238.100425 | Q | 1821.906464 | 911.456870 | 1804.879915 | 902.943596 | 1803.895899 | 902.451588 | 12 |
| 5 | **607.247065** | 304.127171 | 590.220516 | 295.613896 | 589.236500 | 295.121888 | N | ***1693.847886*** | 847.427581 | 1676.821337 | 838.914307 | 1675.837321 | 838.422299 | 11 |
| 6 | **735.305643** | 368.156460 | 718.279094 | 359.643185 | 717.295078 | 359.151177 | Q | ***1579.804959*** | 790.406118 | 1562.778410 | 781.892843 | 1561.794394 | 781.400835 | 10 |
| 7 | 822.337671 | 411.672474 | 805.311122 | 403.159199 | 804.327106 | 402.667191 | S | ***1451.746381*** | 726.376829 | 1434.719832 | 717.863554 | 1433.735816 | 717.371546 | 9 |
| 8 | 936.380598 | 468.693937 | 919.354049 | 460.180662 | 918.370033 | 459.688654 | N | 1364.714353 | 682.860815 | 1347.687804 | 674.347540 | | | 8 |
| 9 | 1050.423525 | 525.715400 | 1033.396976 | 517.202126 | 1032.412960 | 516.710118 | N | ***1250.671426*** | 625.839351 | 1233.644877 | 617.326077 | | | 7 |
| 10 | 1489.648851 | 745.328064 | 1472.622302 | 736.814789 | 1471.638286 | 736.322781 | Q | ***1136.628499*** | 568.817888 | 1119.601950 | 560.304613 | | | 6 |
| 11 | 1636.717265 | 818.862271 | 1619.690716 | 810.348996 | 1618.706700 | 809.856988 | F | ***697.403173*** | 349.205225 | 680.376624 | 340.691950 | | | 5 |
| 12 | **1735.785679** | 868.396478 | 1718.759130 | 859.883203 | 1717.775114 | 859.391195 | V | ***550.334759*** | 275.671018 | 533.308210 | 267.157743 | | | 4 |
| 13 | 1848.869743 | 924.938510 | 1831.843194 | 916.425235 | 1830.859178 | 915.933227 | L | ***451.266345*** | 226.136811 | 434.239796 | 217.623536 | | | 3 |
| 14 | 2011.933072 | 1006.470174 | 1994.906523 | 997.956900 | 1993.922507 | 997.464892 | Y | ***338.182281*** | 169.594779 | 321.155732 | 161.081504 | | | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of YNSQNQSNNQFVLYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.4 | 2185.037445 | 0.013583 | YNSQNQSNNQFVLYR |
| 7.9 | 2185.037445 | 0.013583 | YNSQNQSNNQFVLYR |
| 2.1 | 2185.037445 | 0.013583 | YNSQNQSNNQFVLYR |

**Mascot:** http://www.matrixscience.com/

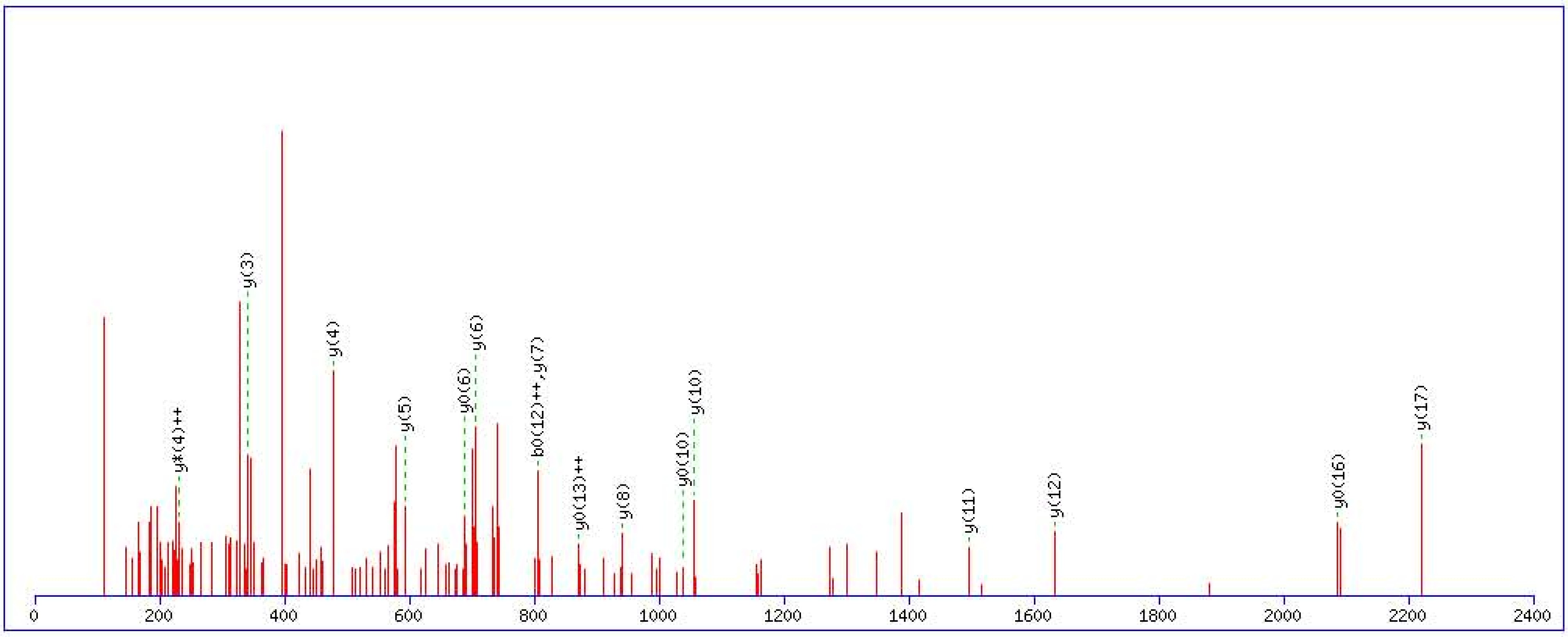
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LDDDLEHQGGHVLDHGHK**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

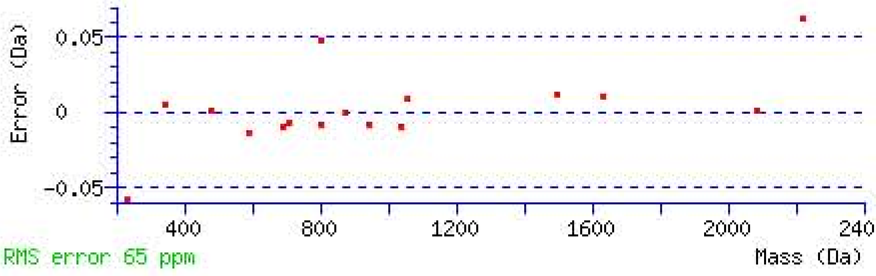
Match to Query 53579: 2332.097296 from(584.031600,4+) rtinseconds(1493) index(33236)
Title: Locus:1.1.1.2939.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

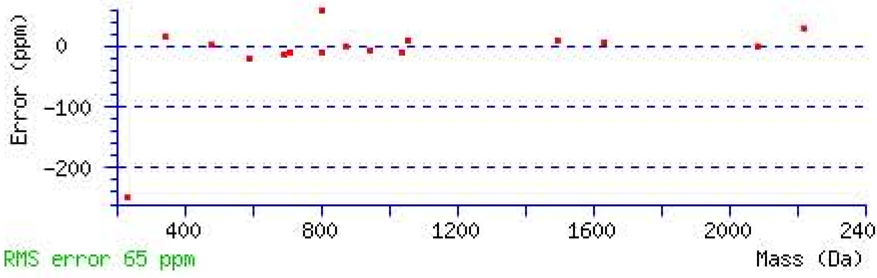
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] 0 to 2400 Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2332.101883
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q8** : Biotin:Thermo-21345 (Q)
**Ions Score:** 32 **Expect:** 0.01
**Matches :** 16/180 fragment ions using 46 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 18 |
| 2 | 229.118283 | 115.062779 | | | 211.107718 | 106.057497 | D | ***2220.025077*** | 1110.516176 | 2202.998528 | 1102.002902 | 2202.014512 | 1101.510894 | 17 |
| 3 | 344.145226 | 172.576251 | | | 326.134661 | 163.570968 | D | 2104.998134 | 1053.002705 | 2087.971585 | 1044.489430 | 2086.987569 | 1043.997422 | 16 |
| 4 | 459.172169 | 230.089722 | | | 441.161604 | 221.084440 | D | 1989.971191 | 995.489234 | 1972.944642 | 986.975959 | 1971.960626 | 986.483951 | 15 |
| 5 | 572.256233 | 286.631755 | | | 554.245668 | 277.626472 | L | 1874.944248 | 937.975762 | 1857.917699 | 929.462488 | 1856.933683 | 928.970480 | 14 |
| 6 | 701.298826 | 351.153051 | | | 683.288261 | 342.147769 | E | 1761.860184 | 881.433730 | 1744.833635 | 872.920456 | 1743.849619 | 872.428448 | 13 |
| 7 | 838.357738 | 419.682507 | | | 820.347173 | 410.677225 | H | ***1632.817591*** | 816.912434 | 1615.791042 | 808.399159 | 1614.807026 | 807.907151 | 12 |
| 8 | 1277.583064 | 639.295170 | 1260.556515 | 630.781896 | 1259.572499 | 630.289888 | Q | ***1495.758679*** | 748.382978 | 1478.732130 | 739.869703 | 1477.748114 | 739.377695 | 11 |
| 9 | 1334.604528 | 667.805902 | 1317.577979 | 659.292628 | 1316.593963 | 658.800620 | G | ***1056.533353*** | 528.770315 | 1039.506804 | 520.257040 | 1038.522788 | 519.765032 | 10 |
| 10 | 1391.625992 | 696.316634 | 1374.599443 | 687.803360 | 1373.615427 | 687.311352 | G | 999.511889 | 500.259583 | 982.485340 | 491.746308 | 981.501324 | 491.254300 | 9 |
| 11 | 1528.684904 | 764.846090 | 1511.658355 | 756.332816 | 1510.674339 | 755.840807 | H | ***942.490425*** | 471.748851 | 925.463876 | 463.235576 | 924.479860 | 462.743568 | 8 |
| 12 | 1627.753318 | 814.380297 | 1610.726769 | 805.867023 | 1609.742753 | 805.375015 | V | ***805.431513*** | 403.219395 | 788.404964 | 394.706120 | 787.420948 | 394.214112 | 7 |
| 13 | 1740.837382 | 870.922329 | 1723.810833 | 862.409055 | 1722.826817 | 861.917046 | L | ***706.363099*** | 353.685188 | 689.336550 | 345.171913 | 688.352534 | 344.679905 | 6 |
| 14 | 1855.864325 | 928.435801 | 1838.837776 | 919.922526 | 1837.853760 | 919.430518 | D | ***593.279035*** | 297.143156 | 576.252486 | 288.629881 | 575.268470 | 288.137873 | 5 |
| 15 | 1992.923237 | 996.965257 | 1975.896688 | 988.451982 | 1974.912672 | 987.959974 | H | ***478.252092*** | 239.629684 | 461.225543 | 231.116410 | | | 4 |
| 16 | 2049.944701 | 1025.475988 | 2032.918152 | 1016.962714 | 2031.934136 | 1016.470706 | G | ***341.193180*** | 171.100228 | 324.166631 | 162.586954 | | | 3 |
| 17 | 2187.003613 | 1094.005444 | 2169.977064 | 1085.492170 | 2168.993048 | 1085.000162 | H | 284.171716 | 142.589496 | 267.145167 | 134.076221 | | | 2 |
| 18 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LDDDLEHQGGHVLDHGHK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.5 | 2332.101883 | -0.004587 | LDDDLEHQGGHVLDHGHK |

**Mascot:** http://www.matrixscience.com/

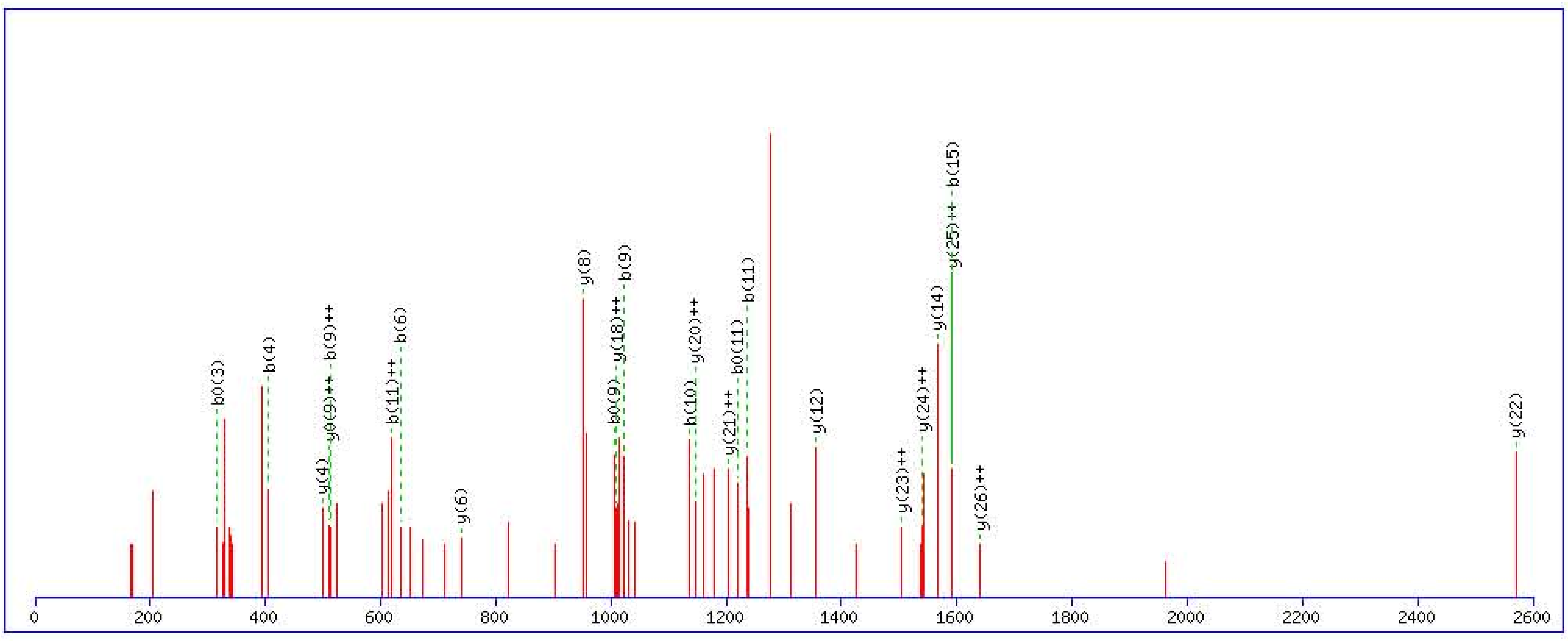
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **FSVATQTCQITPAEGPVVTAQYDCLGCVHPISTQSPDLEPILR**
Found in **KNG1_HUMAN**, Kininogen-1 OS=Homo sapiens GN=KNG1 PE=1 SV=2

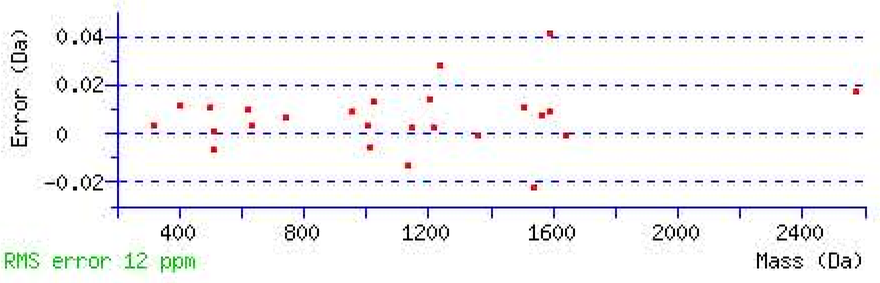
Match to Query 75585: 5066.501220 from(1014.307520,5+) rtinseconds(2667) index(25496)
Title: Locus:1.1.1.930.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

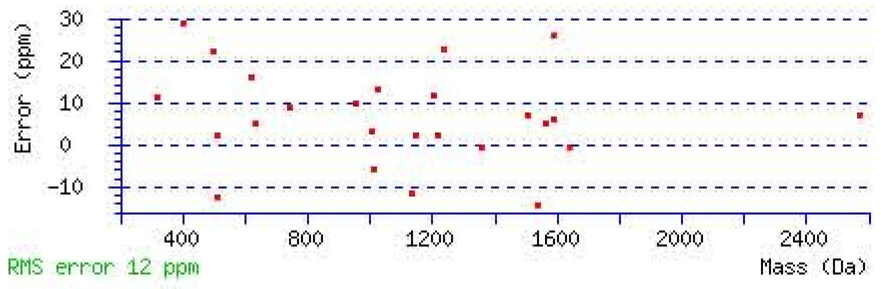
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 5066.465057
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q21    : Biotin:Thermo-21345 (Q)
Ions Score: 31  Expect: 0.017
Matches : 25/484 fragment ions using 56 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 43 |
| 2 | 235.107718 | 118.057497 | | | 217.097153 | 109.052214 | S | 4920.403881 | 2460.705578 | 4903.377332 | 2452.192304 | 4902.393316 | 2451.700296 | 42 |
| 3 | 334.176132 | 167.591704 | | | 316.165567 | 158.586422 | V | 4833.371853 | 2417.189565 | 4816.345304 | 2408.676290 | 4815.361288 | 2408.184282 | 41 |
| 4 | ***405.213246*** | 203.110261 | | | 387.202681 | 194.104978 | A | 4734.303439 | 2367.655357 | 4717.276890 | 2359.142083 | 4716.292874 | 2358.650075 | 40 |
| 5 | 506.260925 | 253.634100 | | | 488.250360 | 244.628818 | T | 4663.266325 | 2332.136800 | 4646.239776 | 2323.623526 | 4645.255760 | 2323.131518 | 39 |
| 6 | ***634.319503*** | 317.663390 | 617.292954 | 309.150115 | 616.308938 | 308.658107 | Q | 4562.218646 | 2281.612961 | 4545.192097 | 2273.099686 | 4544.208081 | 2272.607679 | 38 |
| 7 | 735.367182 | 368.187229 | 718.340633 | 359.673955 | 717.356617 | 359.181947 | T | 4434.160068 | 2217.583672 | 4417.133519 | 2209.070397 | 4416.149503 | 2208.578390 | 37 |
| 8 | 895.397831 | 448.202554 | 878.371282 | 439.689279 | 877.387266 | 439.197271 | C | 4333.112389 | 2167.059833 | 4316.085840 | 2158.546558 | 4315.101824 | 2158.054550 | 36 |
| 9 | ***1023.456409*** | **512.231843** | 1006.429860 | 503.718568 | 1005.445844 | 503.226560 | Q | 4173.081740 | 2087.044508 | 4156.055191 | 2078.531233 | 4155.071175 | 2078.039226 | 35 |
| 10 | ***1136.540473*** | 568.773875 | 1119.513924 | 560.260600 | 1118.529908 | 559.768592 | I | 4045.023162 | 2023.015219 | 4027.996613 | 2014.501944 | 4027.012597 | 2014.009936 | 34 |
| 11 | ***1237.588152*** | **619.297714** | 1220.561603 | 610.784440 | 1219.577587 | 610.292432 | T | 3931.939098 | 1966.473187 | 3914.912549 | 1957.959912 | 3913.928533 | 1957.467904 | 33 |
| 12 | 1334.640916 | 667.824096 | 1317.614367 | 659.310822 | 1316.630351 | 658.818814 | P | 3830.891419 | 1915.949347 | 3813.864870 | 1907.436073 | 3812.880854 | 1906.944065 | 32 |
| 13 | 1405.678030 | 703.342653 | 1388.651481 | 694.829379 | 1387.667465 | 694.337371 | A | 3733.838655 | 1867.422965 | 3716.812106 | 1858.909691 | 3715.828090 | 1858.417683 | 31 |
| 14 | 1534.720623 | 767.863949 | 1517.694074 | 759.350675 | 1516.710058 | 758.858667 | E | 3662.801541 | 1831.904408 | 3645.774992 | 1823.391134 | 3644.790976 | 1822.899126 | 30 |
| 15 | ***1591.742087*** | 796.374681 | 1574.715538 | 787.861407 | 1573.731522 | 787.369399 | G | 3533.758948 | 1767.383112 | 3516.732399 | 1758.869837 | 3515.748383 | 1758.377829 | 29 |
| 16 | 1688.794851 | 844.901063 | 1671.768302 | 836.387789 | 1670.784286 | 835.895781 | P | 3476.737484 | 1738.872380 | 3459.710935 | 1730.359105 | 3458.726919 | 1729.867097 | 28 |
| 17 | 1787.863265 | 894.435271 | 1770.836716 | 885.921996 | 1769.852700 | 885.429988 | V | 3379.684720 | 1690.345998 | 3362.658171 | 1681.832723 | 3361.674155 | 1681.340715 | 27 |
| 18 | 1886.931679 | 943.969478 | 1869.905130 | 935.456203 | 1868.921114 | 934.964195 | V | 3280.616306 | 1640.811791 | 3263.589757 | 1632.298516 | 3262.605741 | 1631.806508 | 26 |
| 19 | 1987.979358 | 994.493317 | 1970.952809 | 985.980043 | 1969.968793 | 985.488035 | T | 3181.547892 | 1591.277584 | 3164.521343 | 1582.764309 | 3163.537327 | 1582.272301 | 25 |
| 20 | 2059.016472 | 1030.011874 | 2041.989923 | 1021.498600 | 2041.005907 | 1021.006591 | A | 3080.500213 | 1540.753744 | 3063.473664 | 1532.240470 | 3062.489648 | 1531.748462 | 24 |
| 21 | 2498.241798 | 1249.624537 | 2481.215249 | 1241.111262 | 2480.231233 | 1240.619254 | Q | 3009.463099 | 1505.235187 | 2992.436550 | 1496.721913 | 2991.452534 | 1496.229905 | 23 |
| 22 | 2661.305127 | 1331.156202 | 2644.278578 | 1322.642927 | 2643.294562 | 1322.150919 | Y | ***2570.237773*** | 1285.622524 | 2553.211224 | 1277.109250 | 2552.227208 | 1276.617242 | 22 |
| 23 | 2776.332070 | 1388.669673 | 2759.305521 | 1380.156398 | 2758.321505 | 1379.664390 | D | 2407.174444 | 1204.090860 | 2390.147895 | 1195.577585 | 2389.163879 | 1195.085577 | 21 |
| 24 | 2936.362719 | 1468.684997 | 2919.336170 | 1460.171723 | 2918.352154 | 1459.679715 | C | 2292.147501 | 1146.577388 | 2275.120952 | 1138.064114 | 2274.136936 | 1137.572106 | 20 |
| 25 | 3049.446783 | 1525.227029 | 3032.420234 | 1516.713755 | 3031.436218 | 1516.221747 | L | 2132.116852 | 1066.562064 | 2115.090303 | 1058.048789 | 2114.106287 | 1057.556781 | 19 |
| 26 | 3106.468247 | 1553.737761 | 3089.441698 | 1545.224487 | 3088.457682 | 1544.732479 | G | 2019.032788 | 1010.020032 | 2002.006239 | 1001.506757 | 2001.022223 | 1001.014749 | 18 |
| 27 | 3266.498896 | 1633.753086 | 3249.472347 | 1625.239811 | 3248.488331 | 1624.747803 | C | 1962.011324 | 981.509300 | 1944.984775 | 972.996025 | 1944.000759 | 972.504017 | 17 |
| 28 | 3365.567310 | 1683.287293 | 3348.540761 | 1674.774018 | 3347.556745 | 1674.282010 | V | 1801.980675 | 901.493975 | 1784.954126 | 892.980701 | 1783.970110 | 892.488693 | 16 |
| 29 | 3502.626222 | 1751.816749 | 3485.599673 | 1743.303474 | 3484.615657 | 1742.811466 | H | 1702.912261 | 851.959768 | 1685.885712 | 843.446494 | 1684.901696 | 842.954486 | 15 |
| 30 | 3599.678986 | 1800.343131 | 3582.652437 | 1791.829856 | 3581.668421 | 1791.337848 | P | ***1565.853349*** | 783.430312 | 1548.826800 | 774.917038 | 1547.842784 | 774.425030 | 14 |
| 31 | 3712.763050 | 1856.885163 | 3695.736501 | 1848.371888 | 3694.752485 | 1847.879880 | I | 1468.800585 | 734.903930 | 1451.774036 | 726.390656 | 1450.790020 | 725.898648 | 13 |
| 32 | 3799.795078 | 1900.401177 | 3782.768529 | 1891.887902 | 3781.784513 | 1891.395894 | S | ***1355.716521*** | 678.361898 | 1338.689972 | 669.848624 | 1337.705956 | 669.356616 | 12 |
| 33 | 3900.842757 | 1950.925016 | 3883.816208 | 1942.411742 | 3882.832192 | 1941.919734 | T | 1268.684493 | 634.845884 | 1251.657944 | 626.332610 | 1250.673928 | 625.840602 | 11 |
| 34 | 4028.901335 | 2014.954305 | 4011.874786 | 2006.441031 | 4010.890770 | 2005.949023 | Q | 1167.636814 | 584.322045 | 1150.610265 | 575.808770 | 1149.626249 | 575.316762 | 10 |
| 35 | 4115.933363 | 2058.470320 | 4098.906814 | 2049.957045 | 4097.922798 | 2049.465037 | S | 1039.578236 | 520.292756 | 1022.551687 | 511.779481 | 1021.567671 | 511.287473 | 9 |
| 36 | 4212.986127 | 2106.996702 | 4195.959578 | 2098.483427 | 4194.975562 | 2097.991419 | P | ***952.546208*** | 476.776742 | 935.519659 | 468.263467 | 934.535643 | 467.771459 | 8 |
| 37 | 4328.013070 | 2164.510173 | 4310.986521 | 2155.996899 | 4310.002505 | 2155.504891 | D | 855.493444 | 428.250360 | 838.466895 | 419.737085 | 837.482879 | 419.245077 | 7 |
| 38 | 4441.097134 | 2221.052205 | 4424.070585 | 2212.538930 | 4423.086569 | 2212.046923 | L | ***740.466501*** | 370.736888 | 723.439952 | 362.223614 | 722.455936 | 361.731606 | 6 |
| 39 | 4570.139727 | 2285.573502 | 4553.113178 | 2277.060227 | 4552.129162 | 2276.568219 | E | 627.382437 | 314.194856 | 610.355888 | 305.681582 | 609.371872 | 305.189574 | 5 |
| 40 | 4667.192491 | 2334.099884 | 4650.165942 | 2325.586609 | 4649.181926 | 2325.094601 | P | ***498.339844*** | 249.673560 | 481.313295 | 241.160285 | | | 4 |
| 41 | 4780.276555 | 2390.641915 | 4763.250006 | 2382.128641 | 4762.265990 | 2381.636633 | I | 401.287080 | 201.147178 | 384.260531 | 192.633903 | | | 3 |
| 42 | 4893.360619 | 2447.183947 | 4876.334070 | 2438.670673 | 4875.350054 | 2438.178665 | L | 288.203016 | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 43 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of FSVATQTCQITPAEGPVVTAQYDCLGCVHPISTQSPDLEPILR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.5 | 5066.465057 | 0.036163 | FSVATQTCQITPAEGPVVTAQYDCLGCVHPISTQSPDLEPILR |
| 8.1 | 5066.465057 | 0.036163 | FSVATQTCQITPAEGPVVTAQYDCLGCVHPISTQSPDLEPILR |
| 1.6 | 5066.465057 | 0.036163 | FSVATQTCQITPAEGPVVTAQYDCLGCVHPISTQSPDLEPILR |
| 1.3 | 5066.465057 | 0.036163 | FSVATQTCQITPAEGPVVTAQYDCLGCVHPISTQSPDLEPILR |

**Mascot:** http://www.matrixscience.com/

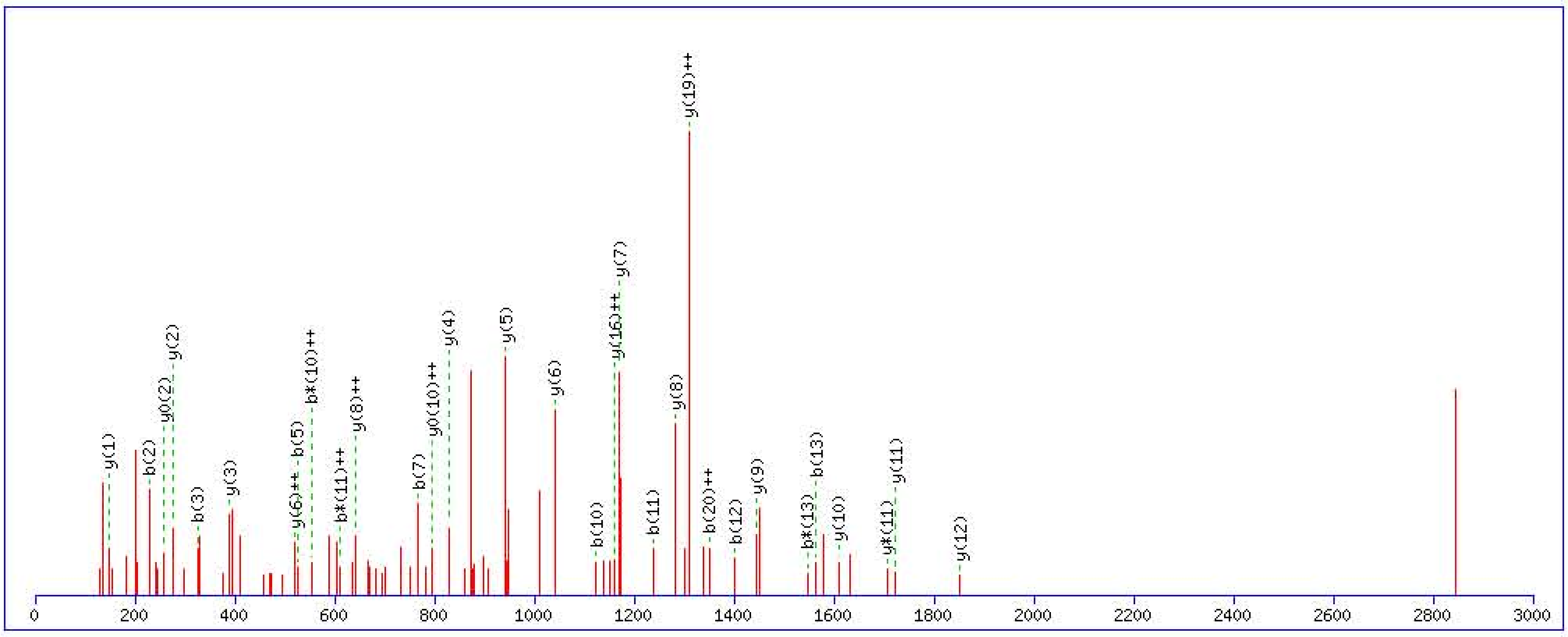
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NIPTVNENLENYYLEVNQLEK**
Found in **LUM_HUMAN**, Lumican OS=Homo sapiens GN=LUM PE=1 SV=2

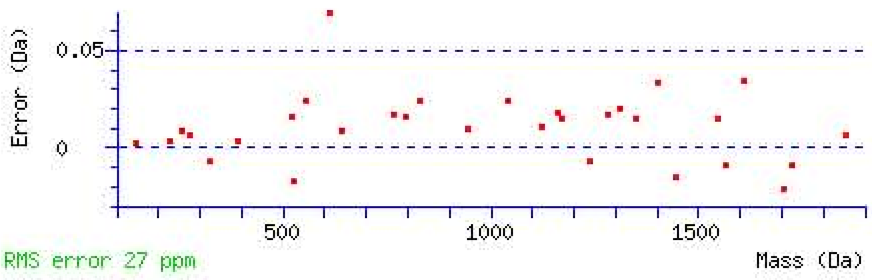
Match to Query 60037: 2846.446572 from(949.822800,3+) rtinseconds(2710) index(57093)
Title: Locus:1.1.1.1558.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

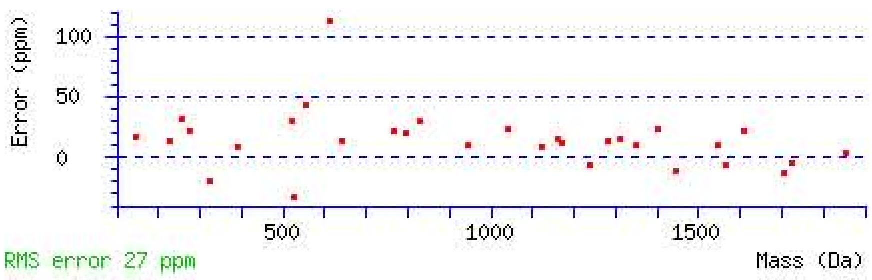
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2846.415985
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18     : Biotin:Thermo-21345 (Q)
Ions Score: 59  Expect: 3.1e-006
Matches : 31/232 fragment ions using 62 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 21 |
| 2 | ***228.134267*** | 114.570771 | 211.107718 | 106.057497 | | | I | 2733.380395 | 1367.193835 | 2716.353846 | 1358.680561 | 2715.369830 | 1358.188553 | 20 |
| 3 | ***325.187031*** | 163.097153 | 308.160482 | 154.583879 | | | P | 2620.296331 | 1310.651803 | 2603.269782 | 1302.138529 | 2602.285766 | 1301.646521 | 19 |
| 4 | 426.234710 | 213.620993 | 409.208161 | 205.107719 | 408.224145 | 204.615711 | T | 2523.243567 | 1262.125421 | 2506.217018 | 1253.612147 | 2505.233002 | 1253.120139 | 18 |
| 5 | ***525.303124*** | 263.155200 | 508.276575 | 254.641926 | 507.292559 | 254.149918 | V | 2422.195888 | 1211.601582 | 2405.169339 | 1203.088307 | 2404.185323 | 1202.596299 | 17 |
| 6 | 639.346051 | 320.176664 | 622.319502 | 311.663389 | 621.335486 | 311.171381 | N | 2323.127474 | 1162.067375 | 2306.100925 | 1153.554100 | 2305.116909 | 1153.062092 | 16 |
| 7 | ***768.388644*** | 384.697960 | 751.362095 | 376.184686 | 750.378079 | 375.692678 | E | 2209.084547 | 1105.045911 | 2192.057998 | 1096.532637 | 2191.073982 | 1096.040629 | 15 |
| 8 | 882.431571 | 441.719424 | 865.405022 | 433.206149 | 864.421006 | 432.714141 | N | 2080.041954 | 1040.524615 | 2063.015405 | 1032.011340 | 2062.031389 | 1031.519332 | 14 |
| 9 | 995.515635 | 498.261456 | 978.489086 | 489.748181 | 977.505070 | 489.256173 | L | 1965.999027 | 983.503152 | 1948.972478 | 974.989877 | 1947.988462 | 974.497869 | 13 |
| 10 | ***1124.558228*** | 562.782752 | 1107.531679 | 554.269478 | 1106.547663 | 553.777470 | E | ***1852.914963*** | 926.961120 | 1835.888414 | 918.447845 | 1834.904398 | 917.955837 | 12 |
| 11 | ***1238.601155*** | 619.804216 | 1221.574606 | 611.290941 | 1220.590590 | 610.798933 | N | ***1723.872370*** | 862.439823 | 1706.845821 | 853.926549 | 1705.861805 | 853.434541 | 11 |
| 12 | ***1401.664484*** | 701.335880 | 1384.637935 | 692.822606 | 1383.653919 | 692.330598 | Y | ***1609.829443*** | 805.418360 | 1592.802894 | 796.905085 | 1591.818878 | 796.413077 | 10 |
| 13 | ***1564.727813*** | 782.867545 | 1547.701264 | 774.354270 | 1546.717248 | 773.862262 | Y | ***1446.766114*** | 723.886695 | 1429.739565 | 715.373421 | 1428.755549 | 714.881413 | 9 |
| 14 | 1677.811877 | 839.409577 | 1660.785328 | 830.896302 | 1659.801312 | 830.404294 | L | ***1283.702785*** | 642.355031 | 1266.676236 | 633.841756 | 1265.692220 | 633.349748 | 8 |
| 15 | 1806.854470 | 903.930873 | 1789.827921 | 895.417599 | 1788.843905 | 894.925591 | E | ***1170.618721*** | 585.812999 | 1153.592172 | 577.299724 | 1152.608156 | 576.807716 | 7 |
| 16 | 1905.922884 | 953.465080 | 1888.896335 | 944.951806 | 1887.912319 | 944.459798 | V | ***1041.576128*** | 521.291702 | 1024.549579 | 512.778428 | 1023.565563 | 512.286420 | 6 |
| 17 | 2019.965811 | 1010.486544 | 2002.939262 | 1001.973269 | 2001.955246 | 1001.481261 | N | ***942.507714*** | 471.757495 | 925.481165 | 463.244221 | 924.497149 | 462.752213 | 5 |
| 18 | 2459.191137 | 1230.099206 | 2442.164588 | 1221.585932 | 2441.180572 | 1221.093924 | Q | ***828.464787*** | 414.736032 | 811.438238 | 406.222757 | 810.454222 | 405.730749 | 4 |
| 19 | 2572.275201 | 1286.641238 | 2555.248652 | 1278.127964 | 2554.264636 | 1277.635956 | L | ***389.239461*** | 195.123369 | 372.212912 | 186.610094 | 371.228896 | 186.118086 | 3 |
| 20 | 2701.317794 | 1351.162535 | 2684.291245 | 1342.649260 | 2683.307229 | 1342.157252 | E | ***276.155397*** | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 21 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of NIPTVNENLENYYLEVNQLEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 58.9 | 2846.415985 | 0.030587 | NIPTVNENLENYYLEVNQLEK |
| 0.2 | 2846.417358 | 0.029214 | NLLALDKDSFSDPYAHICFLHRSK |

**Mascot:** http://www.matrixscience.com/

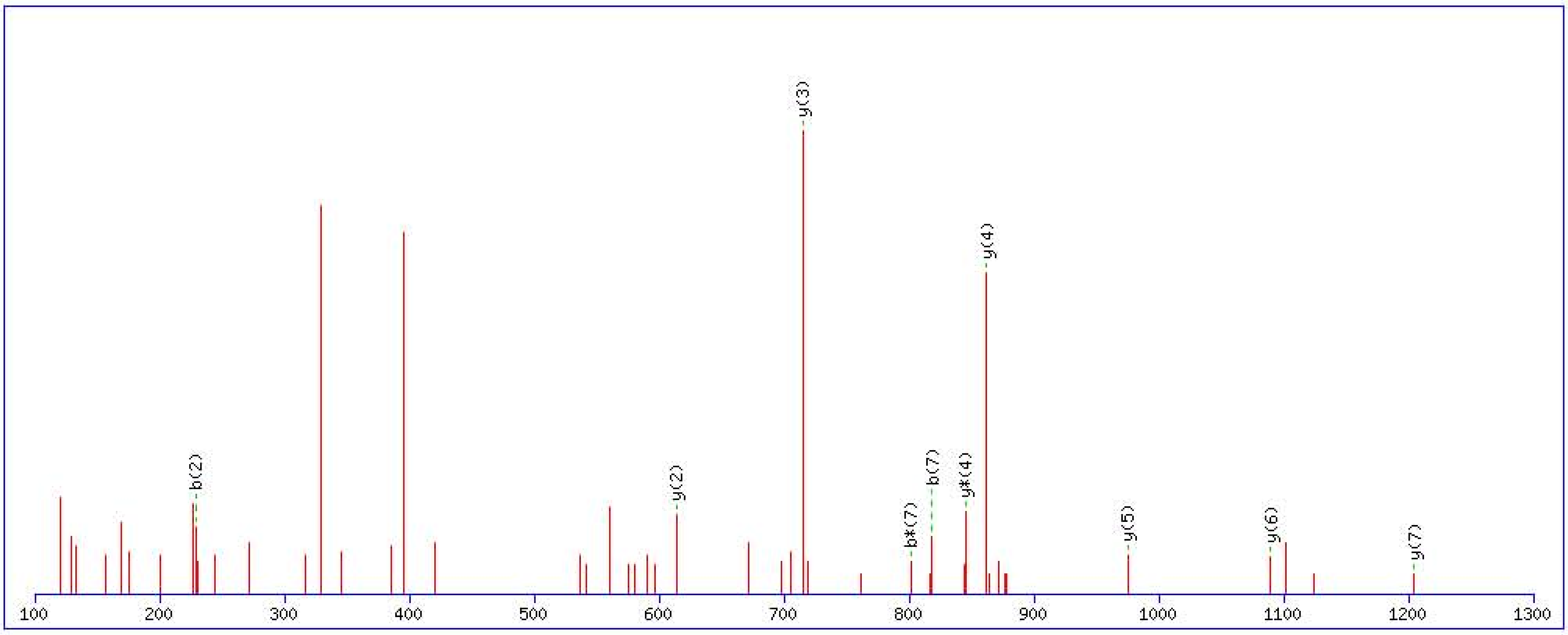
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VECSDNLFTQR**
Found in **MASP1_HUMAN**, Mannan-binding lectin serine protease 1 OS=Homo sapiens GN=MASP1 PE=1 SV=3

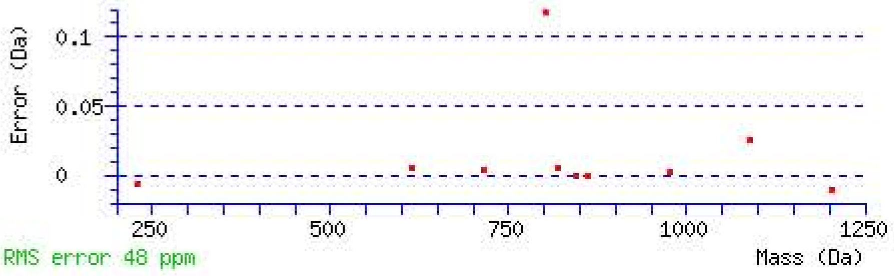
Match to Query 40024: 1678.784532 from(560.602120,3+) rtinseconds(2136) index(53793)
Title: Locus:1.1.1.1359.2 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

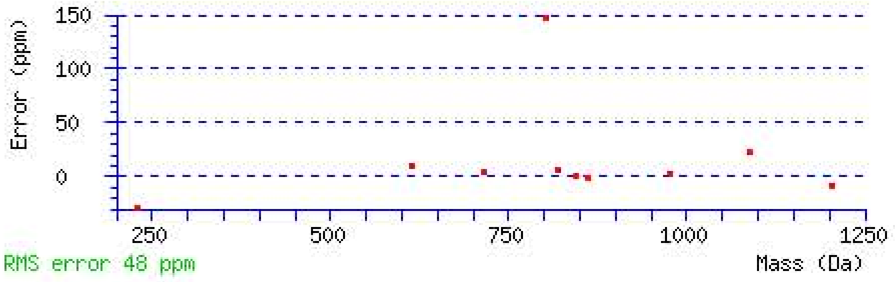
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1678.780716
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.019
Matches : 10/104 fragment ions using 20 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 11 |
| 2 | **229.118283** | 115.062780 | | | 211.107718 | 106.057497 | E | 1580.719575 | 790.863426 | 1563.693026 | 782.350151 | 1562.709010 | 781.858143 | 10 |
| 3 | 389.148932 | 195.078104 | | | 371.138367 | 186.072822 | C | 1451.676982 | 726.342129 | 1434.650433 | 717.828855 | 1433.666417 | 717.336847 | 9 |
| 4 | 476.180960 | 238.594118 | | | 458.170395 | 229.588835 | S | 1291.646333 | 646.326805 | 1274.619784 | 637.813530 | 1273.635768 | 637.321522 | 8 |
| 5 | 591.207903 | 296.107590 | | | 573.197338 | 287.102307 | D | ***1204.614305*** | 602.810791 | 1187.587756 | 594.297516 | 1186.603740 | 593.805508 | 7 |
| 6 | 705.250830 | 353.129053 | 688.224281 | 344.615778 | 687.240265 | 344.123770 | N | ***1089.587362*** | 545.297319 | 1072.560813 | 536.784045 | 1071.576797 | 536.292037 | 6 |
| 7 | **818.334894** | 409.671085 | 801.308345 | 401.157810 | 800.324329 | 400.665802 | L | ***975.544435*** | 488.275856 | 958.517886 | 479.762581 | 957.533870 | 479.270573 | 5 |
| 8 | 965.403308 | 483.205292 | 948.376759 | 474.692017 | 947.392743 | 474.200009 | F | ***862.460371*** | 431.733824 | 845.433822 | 423.220549 | 844.449806 | 422.728541 | 4 |
| 9 | 1066.450987 | 533.729131 | 1049.424438 | 525.215857 | 1048.440422 | 524.723849 | T | ***715.391957*** | 358.199617 | 698.365408 | 349.686342 | 697.381392 | 349.194334 | 3 |
| 10 | 1505.676313 | 753.341795 | 1488.649764 | 744.828520 | 1487.665748 | 744.336512 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VECSDNLFTQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 28.8 | 1678.780716 | 0.003816 | VECSDNLFTQR |

**Mascot:** http://www.matrixscience.com/

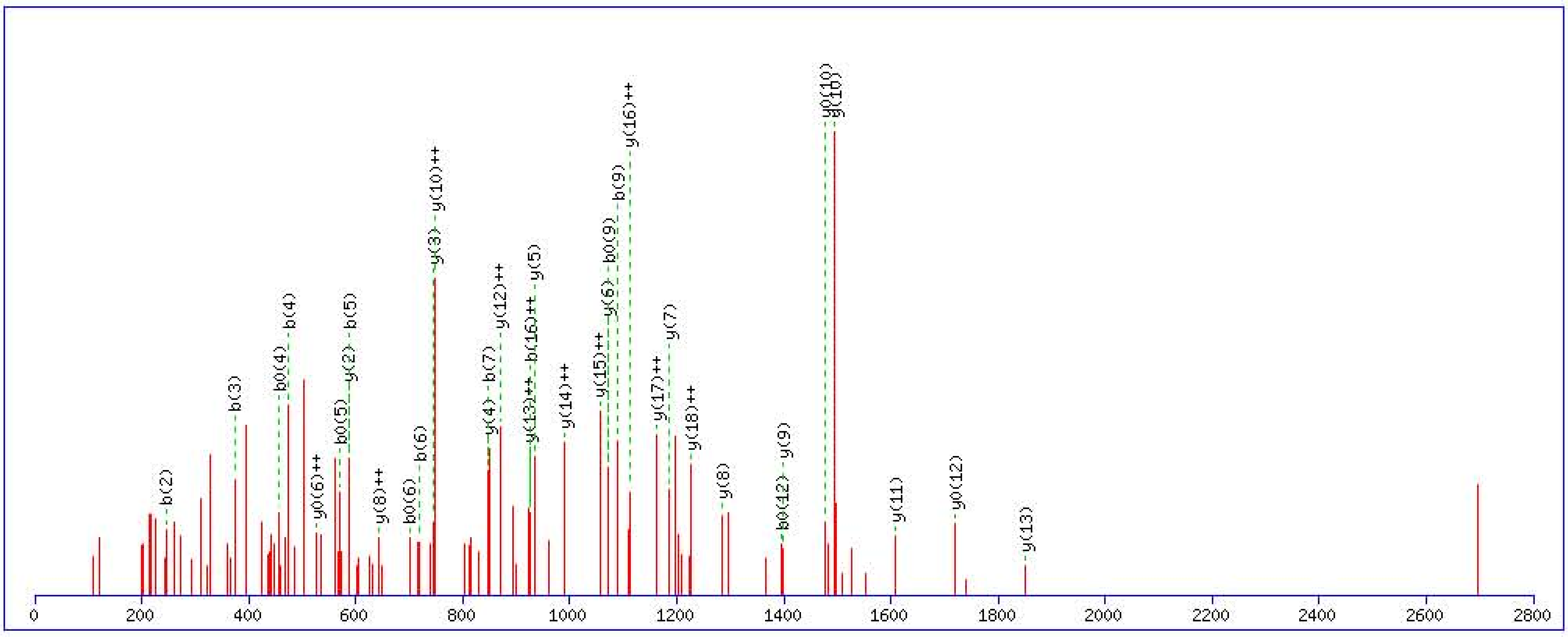
# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **FPETLMEIEIPIVDHSTCQK**
Found in **MASP1_HUMAN**, Mannan-binding lectin serine protease 1 OS=Homo sapiens GN=MASP1 PE=1 SV=3

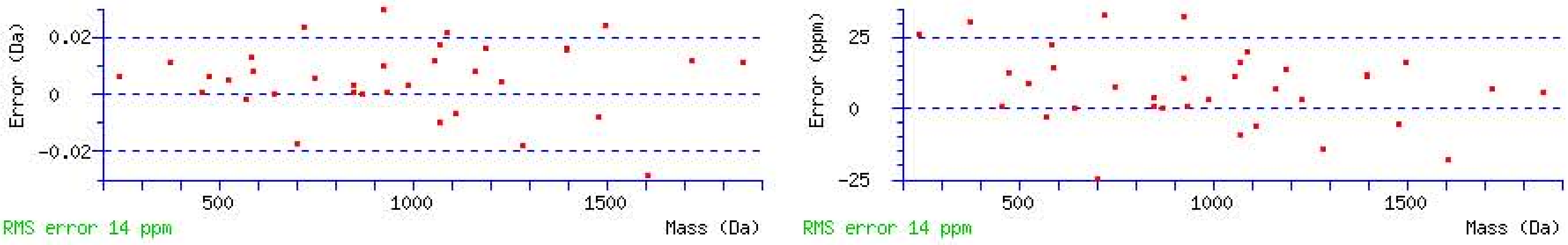
Match to Query 58324: 2697.347022 from(900.122950,3+) rtinseconds(2789) index(57762)
Title: Locus:1.1.1.1585.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2697.321609
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q19     : Biotin:Thermo-21345 (Q)
Ions Score: 60  Expect: 2.7e-006
Matches : 36/182 fragment ions using 74 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | | | F | | | | | | | 20 |
| 2 | **245.128454** | 123.067865 | | | | | P | 2551.260482 | 1276.133879 | 2534.233933 | 1267.620604 | 2533.249917 | 1267.128596 | 19 |
| 3 | **374.171047** | 187.589161 | | | 356.160482 | 178.583879 | E | 2454.207718 | 1227.607497 | 2437.181169 | 1219.094222 | 2436.197153 | 1218.602214 | 18 |
| 4 | **475.218726** | 238.113001 | | | 457.208161 | 229.107719 | T | 2325.165125 | 1163.086200 | 2308.138576 | 1154.572926 | 2307.154560 | 1154.080918 | 17 |
| 5 | **588.302790** | 294.655033 | | | 570.292225 | 285.649751 | L | 2224.117446 | 1112.562361 | 2207.090897 | 1104.049086 | 2206.106881 | 1103.557078 | 16 |
| 6 | **719.343275** | 360.175276 | | | 701.332710 | 351.169993 | M | 2111.033382 | 1056.020329 | 2094.006833 | 1047.507054 | 2093.022817 | 1047.015046 | 15 |
| 7 | **848.385868** | 424.696572 | | | 830.375303 | 415.691290 | E | 1979.992897 | 990.500087 | 1962.966348 | 981.986812 | 1961.982332 | 981.494804 | 14 |
| 8 | 961.469932 | 481.238604 | | | 943.459367 | 472.233322 | I | ***1850.950304*** | 925.978790 | 1833.923755 | 917.465516 | 1832.939739 | 916.973508 | 13 |
| 9 | **1090.512525** | 545.759901 | | | 1072.501960 | 536.754618 | E | 1737.866240 | 869.436758 | 1720.839691 | 860.923484 | 1719.855675 | 860.431476 | 12 |
| 10 | 1203.596589 | 602.301933 | | | 1185.586024 | 593.296650 | I | ***1608.823647*** | 804.915462 | 1591.797098 | 796.402187 | 1590.813082 | 795.910179 | 11 |
| 11 | 1300.649353 | 650.828315 | | | 1282.638788 | 641.823032 | P | ***1495.739583*** | 748.373430 | 1478.713034 | 739.860155 | 1477.729018 | 739.368147 | 10 |
| 12 | 1413.733417 | 707.370346 | | | 1395.722852 | 698.365064 | I | ***1398.686819*** | 699.847048 | 1381.660270 | 691.333773 | 1380.676254 | 690.841765 | 9 |
| 13 | 1512.801831 | 756.904554 | | | 1494.791266 | 747.899271 | V | ***1285.602755*** | 643.305016 | 1268.576206 | 634.791741 | 1267.592190 | 634.299733 | 8 |
| 14 | 1627.828774 | 814.418025 | | | 1609.818209 | 805.412743 | D | ***1186.534341*** | 593.770809 | 1169.507792 | 585.257534 | 1168.523776 | 584.765526 | 7 |
| 15 | 1764.887686 | 882.947481 | | | 1746.877121 | 873.942199 | H | ***1071.507398*** | 536.257337 | 1054.480849 | 527.744063 | 1053.496833 | 527.252055 | 6 |
| 16 | 1851.919714 | 926.463495 | | | 1833.909149 | 917.458213 | S | ***934.448486*** | 467.727881 | 917.421937 | 459.214607 | 916.437921 | 458.722599 | 5 |
| 17 | 1952.967393 | 976.987335 | | | 1934.956828 | 967.982052 | T | ***847.416458*** | 424.211867 | 830.389909 | 415.698593 | 829.405893 | 415.206585 | 4 |
| 18 | 2112.998042 | 1057.002659 | | | 2094.987477 | 1047.997376 | C | ***746.368779*** | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 19 | 2552.223368 | 1276.615322 | 2535.196819 | 1268.102047 | 2534.212803 | 1267.610039 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 20 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of FPETLMEIEIPIVDHSTCQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 59.6 | 2697.321609 | 0.025413 | FPETLMEIEIPIVDHSTCQK |
| 0.3 | 2697.379593 | -0.032571 | LVVLFSQMRLANFQTDSQESIQK |

**Mascot:** http://www.matrixscience.com/

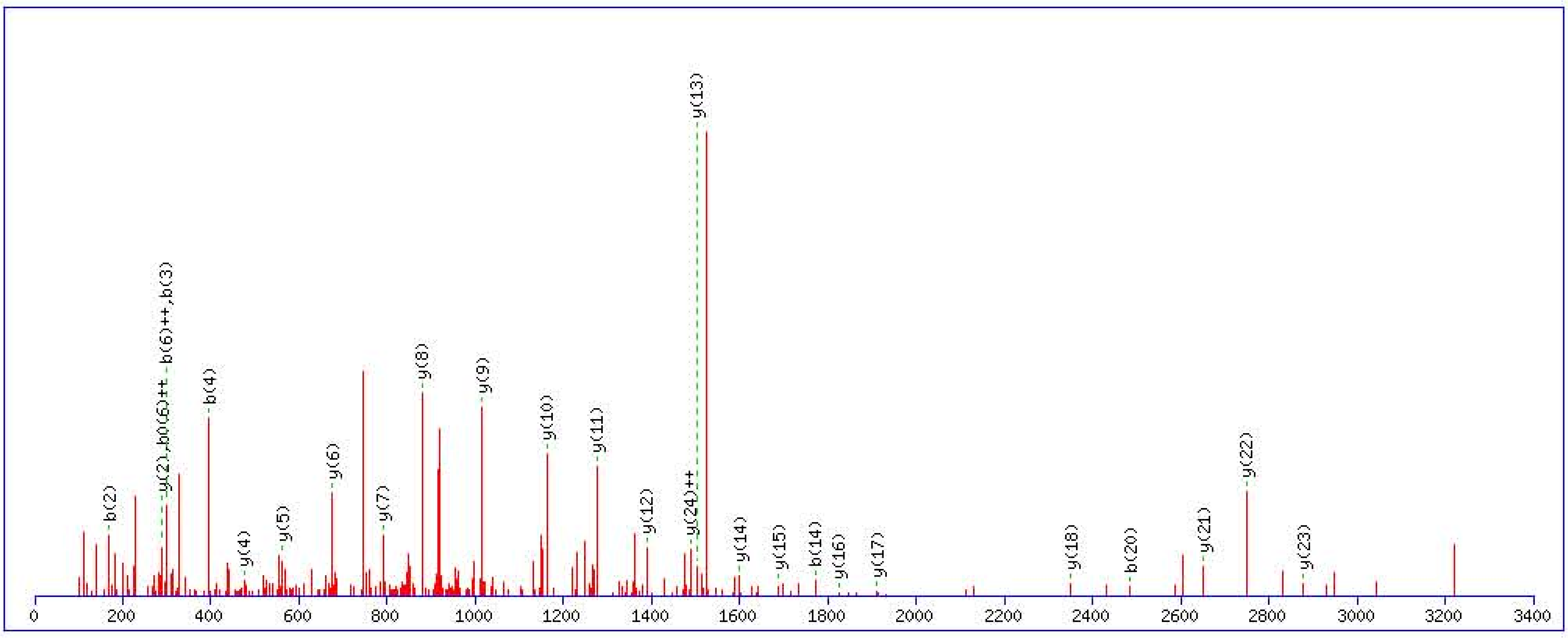
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **APEPISTQSHSVLILFHSDNSGENR**
Found in **MASP1_HUMAN**, Mannan-binding lectin serine protease 1 OS=Homo sapiens GN=MASP1 PE=1 SV=3

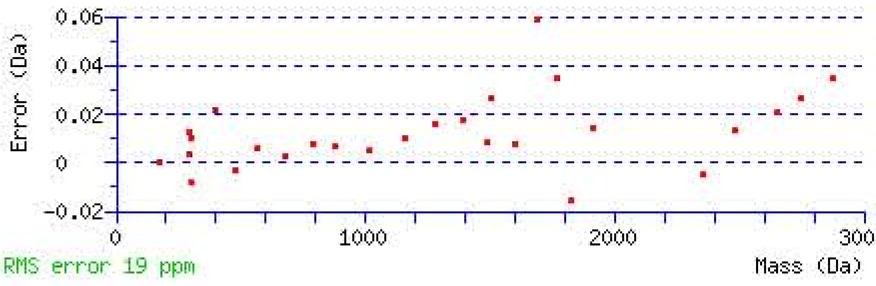
Match to Query 62047: 3045.518216 from(762.386830,4+) rtinseconds(2270) index(54676)
Title: Locus:1.1.1.1405.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

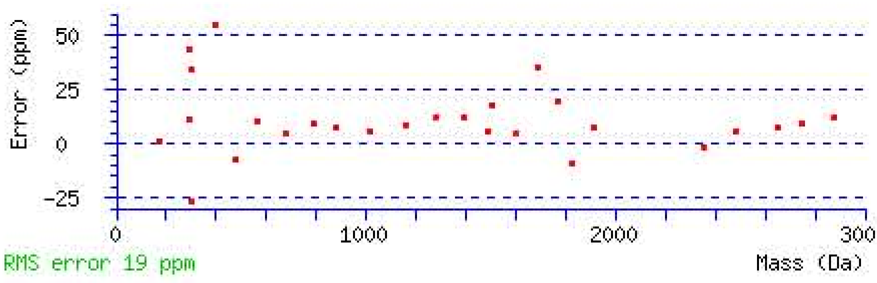
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3045.497803
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 93  Expect: 1.3e-008
Matches : 27/266 fragment ions using 71 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 25 |
| 2 | **169.097154** | 85.052215 | | | | | P | 2975.467980 | 1488.237628 | 2958.441431 | 1479.724353 | 2957.457415 | 1479.232345 | 24 |
| 3 | **298.139747** | 149.573512 | | | 280.129182 | 140.568229 | E | ***2878.415216*** | 1439.711246 | 2861.388667 | 1431.197971 | 2860.404651 | 1430.705963 | 23 |
| 4 | **395.192511** | 198.099894 | | | 377.181946 | 189.094611 | P | ***2749.372623*** | 1375.189949 | 2732.346074 | 1366.676675 | 2731.362058 | 1366.184667 | 22 |
| 5 | 508.276575 | 254.641926 | | | 490.266010 | 245.636643 | I | ***2652.319859*** | 1326.663567 | 2635.293310 | 1318.150293 | 2634.309294 | 1317.658285 | 21 |
| 6 | 595.308603 | 298.157940 | | | 577.298038 | 289.152657 | S | 2539.235795 | 1270.121535 | 2522.209246 | 1261.608261 | 2521.225230 | 1261.116253 | 20 |
| 7 | 696.356282 | 348.681779 | | | 678.345717 | 339.676497 | T | 2452.203767 | 1226.605521 | 2435.177218 | 1218.092247 | 2434.193202 | 1217.600239 | 19 |
| 8 | 1135.581608 | 568.294442 | 1118.555059 | 559.781168 | 1117.571043 | 559.289160 | Q | ***2351.156088*** | 1176.081682 | 2334.129539 | 1167.568407 | 2333.145523 | 1167.076399 | 18 |
| 9 | 1222.613636 | 611.810456 | 1205.587087 | 603.297182 | 1204.603071 | 602.805174 | S | ***1911.930762*** | 956.469019 | 1894.904213 | 947.955745 | 1893.920197 | 947.463737 | 17 |
| 10 | 1359.672548 | 680.339912 | 1342.645999 | 671.826638 | 1341.661983 | 671.334630 | H | ***1824.898734*** | 912.953005 | 1807.872185 | 904.439731 | 1806.888169 | 903.947723 | 16 |
| 11 | 1446.704576 | 723.855926 | 1429.678027 | 715.342652 | 1428.694011 | 714.850644 | S | ***1687.839822*** | 844.423549 | 1670.813273 | 835.910275 | 1669.829257 | 835.418267 | 15 |
| 12 | 1545.772990 | 773.390133 | 1528.746441 | 764.876859 | 1527.762425 | 764.384851 | V | ***1600.807794*** | 800.907535 | 1583.781245 | 792.394261 | 1582.797229 | 791.902253 | 14 |
| 13 | 1658.857054 | 829.932165 | 1641.830505 | 821.418891 | 1640.846489 | 820.926883 | L | ***1501.739380*** | 751.373328 | 1484.712831 | 742.860054 | 1483.728815 | 742.368045 | 13 |
| 14 | **1771.941118** | 886.474197 | 1754.914569 | 877.960923 | 1753.930553 | 877.468915 | I | ***1388.655316*** | 694.831296 | 1371.628767 | 686.318022 | 1370.644751 | 685.826014 | 12 |
| 15 | 1885.025182 | 943.016229 | 1867.998633 | 934.502955 | 1867.014617 | 934.010947 | L | ***1275.571252*** | 638.289264 | 1258.544703 | 629.775990 | 1257.560687 | 629.283982 | 11 |
| 16 | 2032.093596 | 1016.550436 | 2015.067047 | 1008.037162 | 2014.083031 | 1007.545154 | F | ***1162.487188*** | 581.747232 | 1145.460639 | 573.233958 | 1144.476623 | 572.741950 | 10 |
| 17 | 2169.152508 | 1085.079892 | 2152.125959 | 1076.566617 | 2151.141943 | 1076.074610 | H | ***1015.418774*** | 508.213025 | 998.392225 | 499.699751 | 997.408209 | 499.207743 | 9 |
| 18 | 2256.184536 | 1128.595906 | 2239.157987 | 1120.082631 | 2238.173971 | 1119.590624 | S | ***878.359862*** | 439.683569 | 861.333313 | 431.170295 | 860.349297 | 430.678287 | 8 |
| 19 | 2371.211479 | 1186.109377 | 2354.184930 | 1177.596103 | 2353.200914 | 1177.104095 | D | ***791.327834*** | 396.167555 | 774.301285 | 387.654280 | 773.317269 | 387.162272 | 7 |
| 20 | **2485.254406** | 1243.130841 | 2468.227857 | 1234.617566 | 2467.243841 | 1234.125558 | N | ***676.300891*** | 338.654084 | 659.274342 | 330.140809 | 658.290326 | 329.648801 | 6 |
| 21 | 2572.286434 | 1286.646855 | 2555.259885 | 1278.133580 | 2554.275869 | 1277.641572 | S | ***562.257964*** | 281.632620 | 545.231415 | 273.119346 | 544.247399 | 272.627338 | 5 |
| 22 | 2629.307898 | 1315.157587 | 2612.281349 | 1306.644312 | 2611.297333 | 1306.152304 | G | ***475.225936*** | 238.116606 | 458.199387 | 229.603331 | 457.215371 | 229.111323 | 4 |
| 23 | 2758.350491 | 1379.678884 | 2741.323942 | 1371.165609 | 2740.339926 | 1370.673601 | E | 418.204472 | 209.605874 | 401.177923 | 201.092600 | 400.193907 | 200.600592 | 3 |
| 24 | 2872.393418 | 1436.700347 | 2855.366869 | 1428.187072 | 2854.382853 | 1427.695064 | N | ***289.161879*** | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 25 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of APEPISTQSHSVLILFHSDNSGENR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 93.3 | 3045.497803 | 0.020413 | APEPISTQSHSVLILFHSDNSGENR |

**Mascot:** http://www.matrixscience.com/

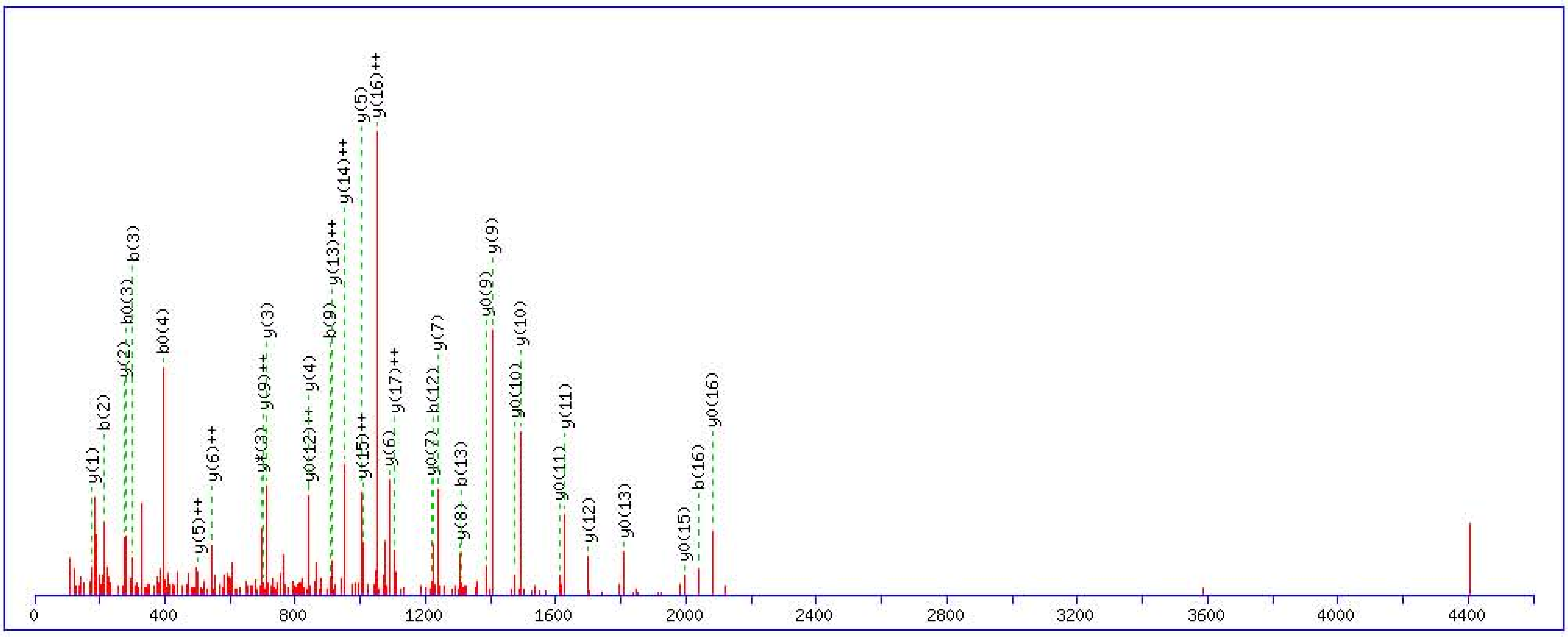
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VLSIAQAHSPAFSCEQVR**
Found in **CD14_HUMAN**, Monocyte differentiation antigen CD14 OS=Homo sapiens GN=CD14 PE=1 SV=2

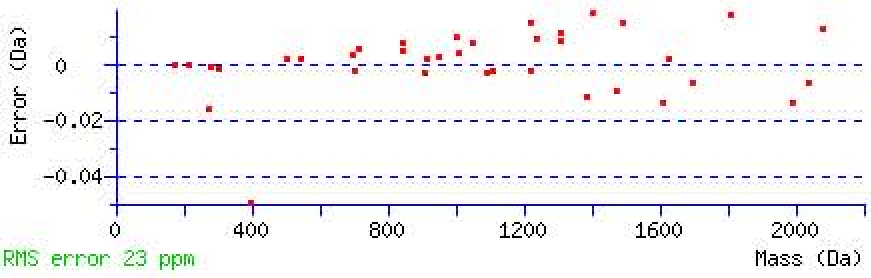
Match to Query 53176: 2310.166692 from(771.062840,3+) rtinseconds(1984) index(36314)
Title: Locus:1.1.1.3110.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

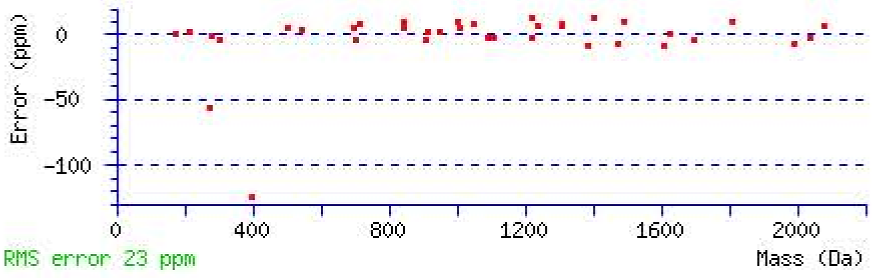
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 4600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2310.161285
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 6.2e-005
Matches : 37/184 fragment ions using 93 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 18 |
| 2 | **213.159754** | 107.083515 | | | | | L | 2212.100156 | 1106.553716 | 2195.073607 | 1098.040441 | 2194.089591 | 1097.548433 | 17 |
| 3 | **300.191782** | 150.599529 | | | 282.181217 | 141.594247 | S | 2099.016092 | 1050.011684 | 2081.989543 | 1041.498409 | 2081.005527 | 1041.006401 | 16 |
| 4 | 413.275846 | 207.141561 | | | 395.265281 | 198.136279 | I | 2011.984064 | 1006.495670 | 1994.957515 | 997.982396 | 1993.973499 | 997.490388 | 15 |
| 5 | 484.312960 | 242.660118 | | | 466.302395 | 233.654836 | A | 1898.900000 | 949.953638 | 1881.873451 | 941.440364 | 1880.889435 | 940.948356 | 14 |
| 6 | 612.371538 | 306.689407 | 595.344989 | 298.176133 | 594.360973 | 297.684125 | Q | 1827.862886 | 914.435081 | 1810.836337 | 905.921807 | 1809.852321 | 905.429799 | 13 |
| 7 | 683.408652 | 342.207964 | 666.382103 | 333.694690 | 665.398087 | 333.202682 | A | ***1699.804308*** | 850.405792 | 1682.777759 | 841.892518 | 1681.793743 | 841.400510 | 12 |
| 8 | 820.467564 | 410.737420 | 803.441015 | 402.224146 | 802.456999 | 401.732138 | H | ***1628.767194*** | 814.887235 | 1611.740645 | 806.373961 | 1610.756629 | 805.881953 | 11 |
| 9 | **907.499592** | 454.253434 | 890.473043 | 445.740160 | 889.489027 | 445.248152 | S | ***1491.708282*** | 746.357779 | 1474.681733 | 737.844505 | 1473.697717 | 737.352497 | 10 |
| 10 | 1004.552356 | 502.779816 | 987.525807 | 494.266542 | 986.541791 | 493.774534 | P | ***1404.676254*** | 702.841765 | 1387.649705 | 694.328491 | 1386.665689 | 693.836483 | 9 |
| 11 | 1075.589470 | 538.298373 | 1058.562921 | 529.785099 | 1057.578905 | 529.293091 | A | ***1307.623490*** | 654.315383 | 1290.596941 | 645.802109 | 1289.612925 | 645.310101 | 8 |
| 12 | **1222.657884** | 611.832580 | 1205.631335 | 603.319306 | 1204.647319 | 602.827298 | F | ***1236.586376*** | 618.796826 | 1219.559827 | 610.283552 | 1218.575811 | 609.791544 | 7 |
| 13 | **1309.689912** | 655.348594 | 1292.663363 | 646.835320 | 1291.679347 | 646.343312 | S | ***1089.517962*** | 545.262619 | 1072.491413 | 536.749345 | 1071.507397 | 536.257337 | 6 |
| 14 | 1469.720561 | 735.363919 | 1452.694012 | 726.850644 | 1451.709996 | 726.358636 | C | ***1002.485934*** | 501.746605 | 985.459385 | 493.233331 | 984.475369 | 492.741323 | 5 |
| 15 | 1598.763154 | 799.885215 | 1581.736605 | 791.371941 | 1580.752589 | 790.879933 | E | ***842.455285*** | 421.731281 | 825.428736 | 413.218006 | 824.444720 | 412.725998 | 4 |
| 16 | **2037.988480** | 1019.497878 | 2020.961931 | 1010.984604 | 2019.977915 | 1010.492596 | Q | ***713.412692*** | 357.209984 | 696.386143 | 348.696710 | | | 3 |
| 17 | 2137.056894 | 1069.032085 | 2120.030345 | 1060.518811 | 2119.046329 | 1060.026803 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084046 | | | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VLSIAQAHSPAFSCEQVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 56.6 | 2310.161285 | 0.005407 | VLSIAQAHSPAFSCEQVR |
| 7.0 | 2310.161285 | 0.005407 | VLSIAQAHSPAFSCEQVR |

**Mascot:** http://www.matrixscience.com/

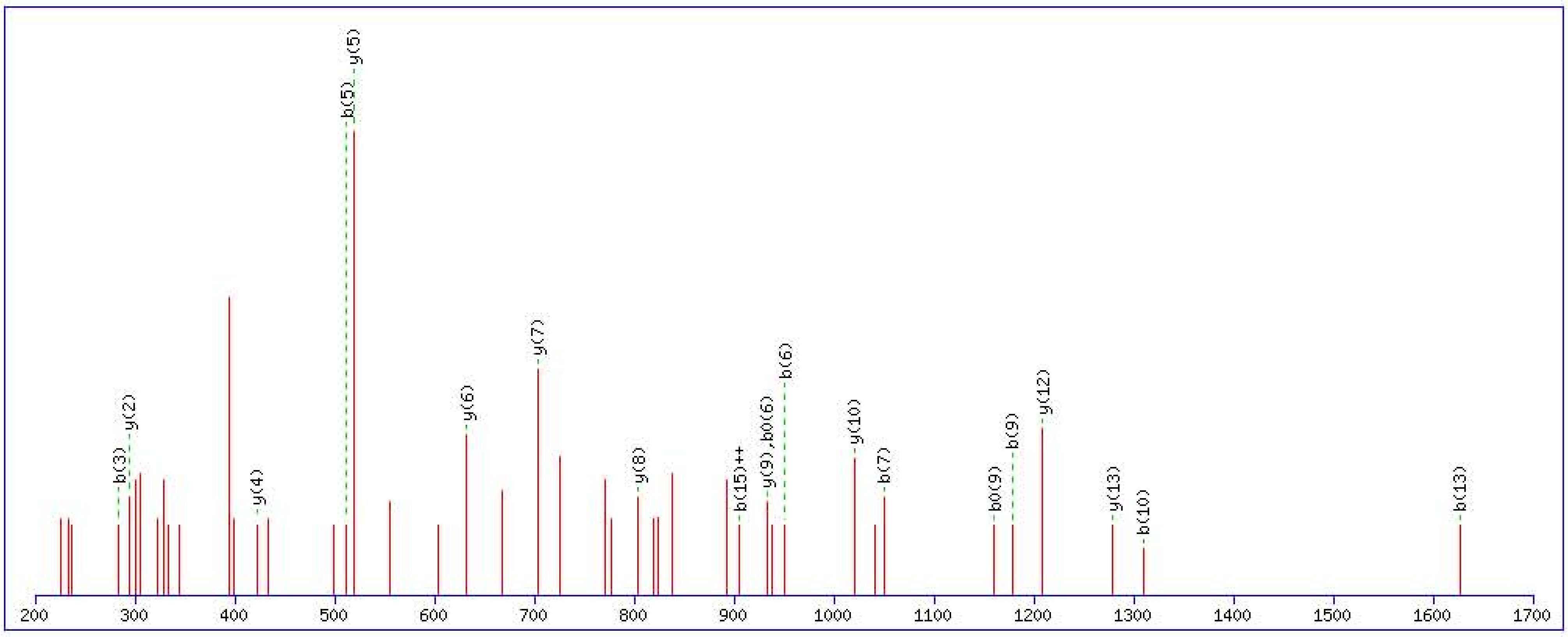
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **IIGLDQVAGMSETALPGAFK**
Found in **MYH9_HUMAN**, Myosin-9 OS=Homo sapiens GN=MYH9 PE=1 SV=4

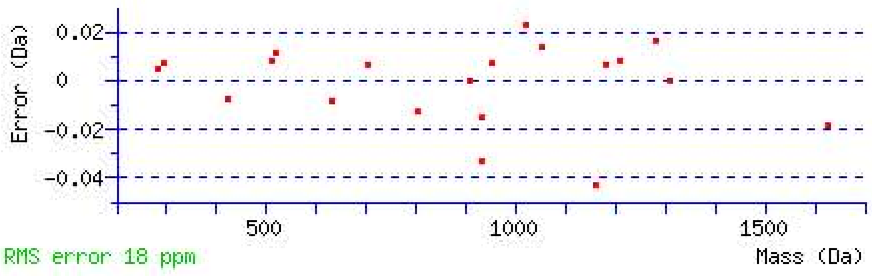
Match to Query 53495: 2328.229452 from(777.083760,3+) rtinseconds(2872) index(58462)
Title: Locus:1.1.1.1613.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

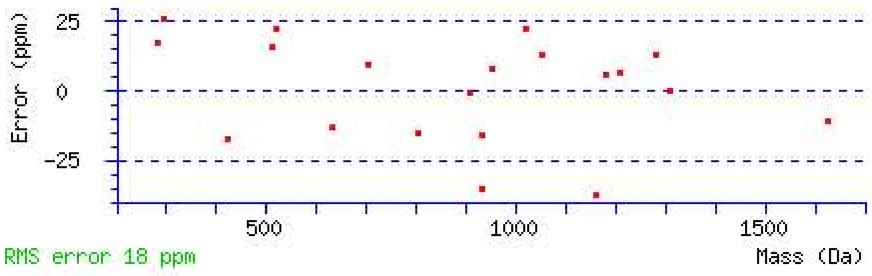
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 200 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2328.222153
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 0.00018
Matches : 20/196 fragment ions using 44 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 20 |
| 2 | 227.175404 | 114.091340 | | | | | I | 2216.145376 | 1108.576326 | 2199.118827 | 1100.063051 | 2198.134811 | 1099.571043 | 19 |
| 3 | ***284.196868*** | 142.602072 | | | | | G | 2103.061312 | 1052.034294 | 2086.034763 | 1043.521019 | 2085.050747 | 1043.029011 | 18 |
| 4 | 397.280932 | 199.144104 | | | | | L | 2046.039848 | 1023.523562 | 2029.013299 | 1015.010288 | 2028.029283 | 1014.518279 | 17 |
| 5 | ***512.307875*** | 256.657576 | | | 494.297310 | 247.652293 | D | 1932.955784 | 966.981530 | 1915.929235 | 958.468255 | 1914.945219 | 957.976247 | 16 |
| 6 | ***951.533201*** | 476.270239 | 934.506652 | 467.756964 | 933.522636 | 467.264956 | Q | 1817.928841 | 909.468058 | 1800.902292 | 900.954784 | 1799.918276 | 900.462776 | 15 |
| 7 | ***1050.601615*** | 525.804446 | 1033.575066 | 517.291171 | 1032.591050 | 516.799163 | V | 1378.703515 | 689.855395 | 1361.676966 | 681.342121 | 1360.692950 | 680.850113 | 14 |
| 8 | 1121.638729 | 561.323003 | 1104.612180 | 552.809728 | 1103.628164 | 552.317720 | A | ***1279.635101*** | 640.321188 | 1262.608552 | 631.807914 | 1261.624536 | 631.315906 | 13 |
| 9 | ***1178.660193*** | 589.833734 | 1161.633644 | 581.320460 | 1160.649628 | 580.828452 | G | ***1208.597987*** | 604.802631 | 1191.571438 | 596.289357 | 1190.587422 | 595.797349 | 12 |
| 10 | ***1309.700678*** | 655.353977 | 1292.674129 | 646.840703 | 1291.690113 | 646.348694 | M | 1151.576523 | 576.291900 | 1134.549974 | 567.778625 | 1133.565958 | 567.286617 | 11 |
| 11 | 1396.732706 | 698.869991 | 1379.706157 | 690.356717 | 1378.722141 | 689.864709 | S | ***1020.536038*** | 510.771657 | 1003.509489 | 502.258382 | 1002.525473 | 501.766374 | 10 |
| 12 | 1525.775299 | 763.391288 | 1508.748750 | 754.878013 | 1507.764734 | 754.386005 | E | ***933.504010*** | 467.255643 | 916.477461 | 458.742368 | 915.493445 | 458.250360 | 9 |
| 13 | ***1626.822978*** | 813.915127 | 1609.796429 | 805.401853 | 1608.812413 | 804.909845 | T | ***804.461417*** | 402.734346 | 787.434868 | 394.221072 | 786.450852 | 393.729064 | 8 |
| 14 | 1697.860092 | 849.433684 | 1680.833543 | 840.920410 | 1679.849527 | 840.428402 | A | ***703.413738*** | 352.210507 | 686.387189 | 343.697232 | | | 7 |
| 15 | 1810.944156 | 905.975716 | 1793.917607 | 897.462442 | 1792.933591 | 896.970434 | L | ***632.376624*** | 316.691950 | 615.350075 | 308.178675 | | | 6 |
| 16 | 1907.996920 | 954.502098 | 1890.970371 | 945.988824 | 1889.986355 | 945.496816 | P | ***519.292560*** | 260.149918 | 502.266011 | 251.636643 | | | 5 |
| 17 | 1965.018384 | 983.012830 | 1947.991835 | 974.499556 | 1947.007819 | 974.007547 | G | ***422.239796*** | 211.623536 | 405.213247 | 203.110261 | | | 4 |
| 18 | 2036.055498 | 1018.531387 | 2019.028949 | 1010.018113 | 2018.044933 | 1009.526105 | A | 365.218332 | 183.112804 | 348.191783 | 174.599529 | | | 3 |
| 19 | 2183.123912 | 1092.065594 | 2166.097363 | 1083.552319 | 2165.113347 | 1083.060311 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080972 | | | 2 |
| 20 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IIGLDQVAGMSETALPGAFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.2 | 2328.222153 | 0.007299 | IIGLDQVAGMSETALPGAFK |

**Mascot:** http://www.matrixscience.com/

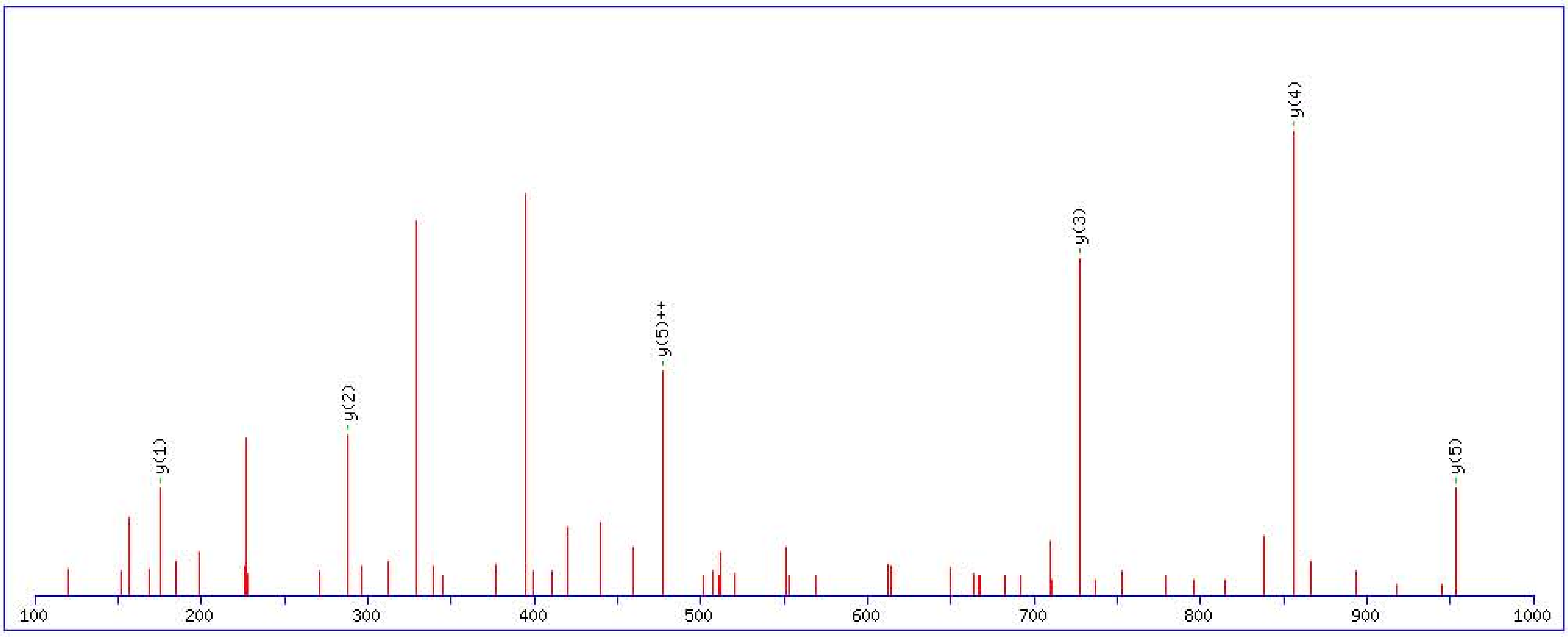
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SPEQLR**
Found in **GNPTG_HUMAN**, N-acetylglucosamine-1-phosphotransferase subunit gamma OS=Homo sapiens GN=GNPTG PE=1 SV=1

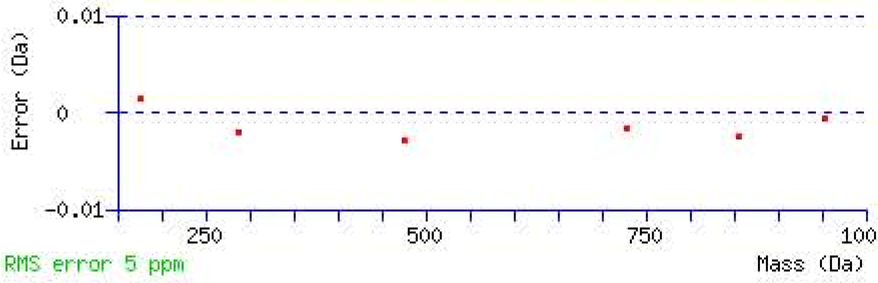
Match to Query 17290: 1039.544788 from(520.779670,2+) rtinseconds(1465) index(33054)
Title: Locus:1.1.1.2929.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

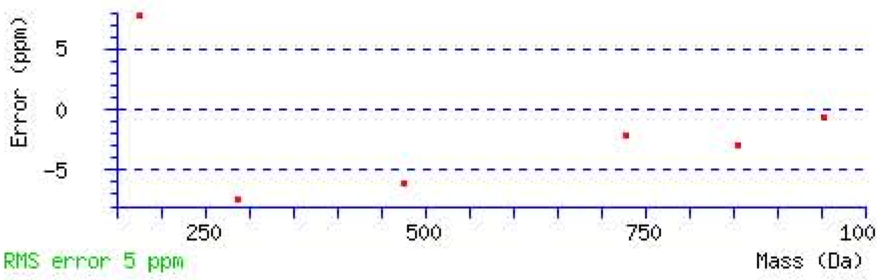
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1039.548431
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 37  Expect: 0.0035
Matches : 6/48 fragment ions using 9 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 6 |
| 2 | 185.092068 | 93.049672 | | | 167.081503 | 84.044389 | P | *953.523699* | 477.265488 | 936.497150 | 468.752213 | 935.513134 | 468.260205 | 5 |
| 3 | 314.134661 | 157.570968 | | | 296.124096 | 148.565686 | E | *856.470935* | 428.739106 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 4 | 753.359987 | 377.183632 | 736.333438 | 368.670357 | 735.349422 | 368.178349 | Q | *727.428342* | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 5 | 866.444051 | 433.725664 | 849.417502 | 425.212389 | 848.433486 | 424.720381 | L | *288.203016* | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 6 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of SPEQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.8 | 1039.548431 | -0.003643 | SPEQLR |
| 23.0 | 1039.548431 | -0.003643 | SPEIQR |
| 22.6 | 1039.541031 | 0.003757 | ALESNHTLR |
| 9.5 | 1039.533813 | 0.010975 | EALFYELR |
| 3.8 | 1039.541046 | 0.003742 | ALQSGPPQSR |
| 3.5 | 1039.556290 | -0.011502 | FPERAPAPR |
| 1.9 | 1039.529831 | 0.014957 | TTFVSKDSR |
| 0.8 | 1039.548447 | -0.003659 | MATATPVPPR |
| 0.2 | 1039.541046 | 0.003742 | NLPADGQGLR |
| 0.0 | 1039.552261 | -0.007473 | LRSDEKHR |

**Mascot:** http://www.matrixscience.com/

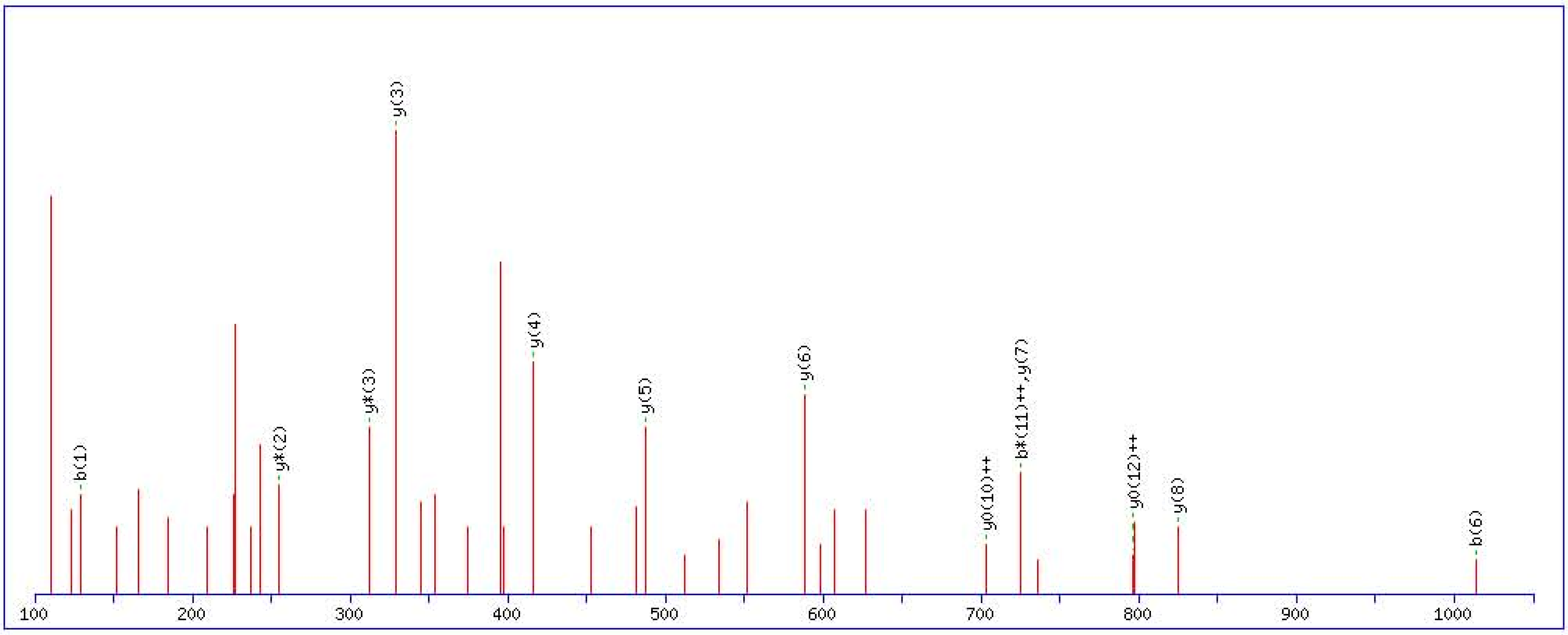
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KGEQCVHTASGPR**
Found in **NOTC2_HUMAN**, Neurogenic locus notch homolog protein 2 OS=Homo sapiens GN=NOTCH2 PE=1 SV=3

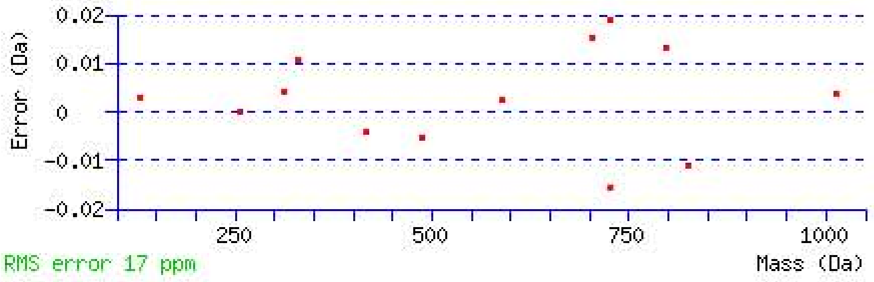
Match to Query 41213: 1736.838496 from(435.216900,4+) rtinseconds(1070) index(30850)
Title: Locus:1.1.1.2792.2 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

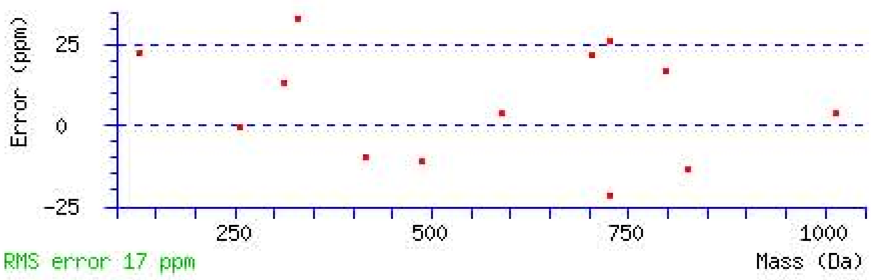
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1736.845047
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.018
Matches : 13/134 fragment ions using 22 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 13 |
| 2 | 186.123703 | 93.565489 | 169.097154 | 85.052215 | | | G | 1609.757359 | 805.382318 | 1592.730810 | 796.869043 | 1591.746794 | 796.377035 | 12 |
| 3 | 315.166296 | 158.086786 | 298.139747 | 149.573512 | 297.155731 | 149.081504 | E | 1552.735895 | 776.871586 | 1535.709346 | 768.358311 | 1534.725330 | 767.866303 | 11 |
| 4 | 754.391622 | 377.699449 | 737.365073 | 369.186175 | 736.381057 | 368.694167 | Q | 1423.693302 | 712.350289 | 1406.666753 | 703.837015 | 1405.682737 | 703.345007 | 10 |
| 5 | 914.422271 | 457.714774 | 897.395722 | 449.201499 | 896.411706 | 448.709491 | C | 984.467976 | 492.737626 | 967.441427 | 484.224352 | 966.457411 | 483.732344 | 9 |
| 6 | **1013.490685** | 507.248981 | 996.464136 | 498.735706 | 995.480120 | 498.243698 | V | ***824.437327*** | 412.722302 | 807.410778 | 404.209027 | 806.426762 | 403.717019 | 8 |
| 7 | 1150.549597 | 575.778437 | 1133.523048 | 567.265162 | 1132.539032 | 566.773154 | H | ***725.368913*** | 363.188095 | 708.342364 | 354.674820 | 707.358348 | 354.182812 | 7 |
| 8 | 1251.597276 | 626.302276 | 1234.570727 | 617.789002 | 1233.586711 | 617.296994 | T | ***588.310001*** | 294.658639 | 571.283452 | 286.145364 | 570.299436 | 285.653356 | 6 |
| 9 | 1322.634390 | 661.820833 | 1305.607841 | 653.307559 | 1304.623825 | 652.815551 | A | ***487.262322*** | 244.134799 | 470.235773 | 235.621524 | 469.251757 | 235.129516 | 5 |
| 10 | 1409.666418 | 705.336847 | 1392.639869 | 696.823573 | 1391.655853 | 696.331565 | S | ***416.225208*** | 208.616242 | 399.198659 | 200.102967 | 398.214643 | 199.610959 | 4 |
| 11 | 1466.687882 | 733.847579 | 1449.661333 | 725.334305 | 1448.677317 | 724.842297 | G | ***329.193180*** | 165.100228 | 312.166631 | 156.586953 | | | 3 |
| 12 | 1563.740646 | 782.373961 | 1546.714097 | 773.860687 | 1545.730081 | 773.368679 | P | 272.171716 | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 13 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KGEQCVHTASGPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.2 | 1736.845047 | -0.006551 | KGEQCVHTASGPR |

**Mascot:** http://www.matrixscience.com/

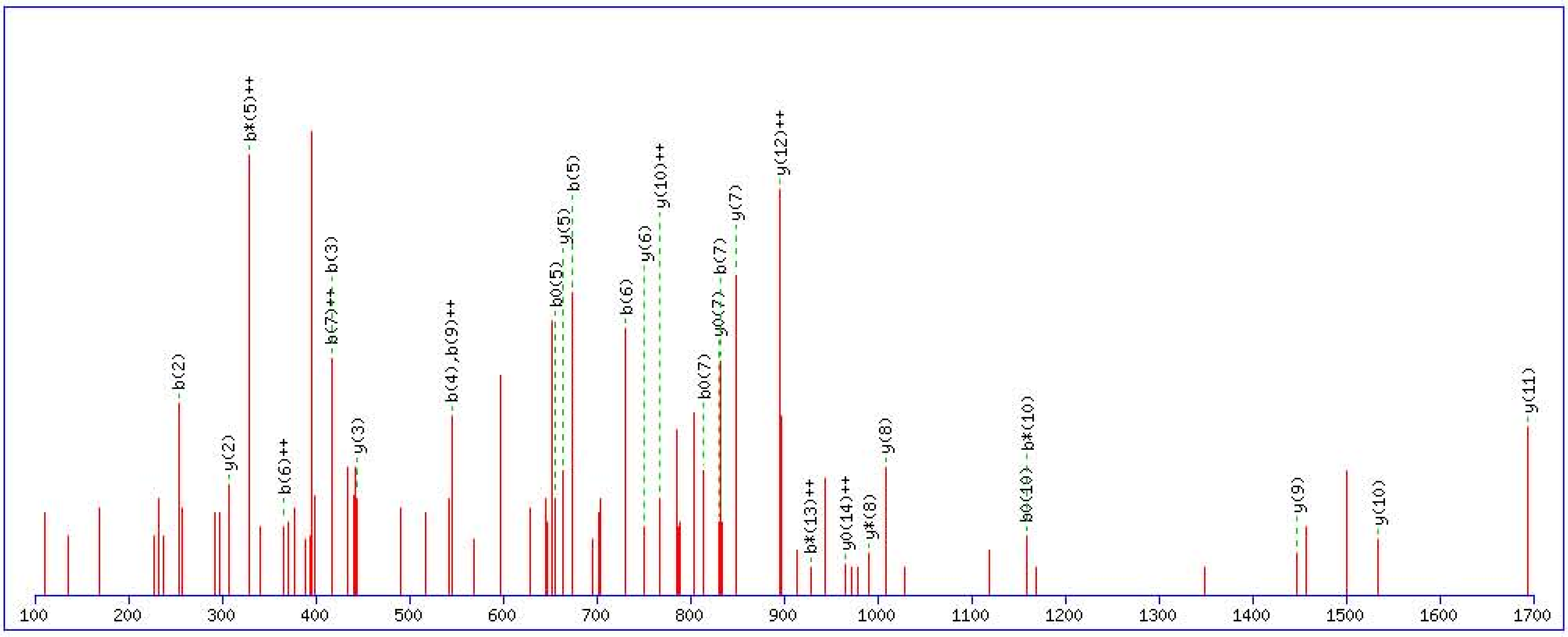
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RPYQEGTPCSQCPSGYHCK**
Found in **PI16_HUMAN**, Peptidase inhibitor 16 OS=Homo sapiens GN=PI16 PE=1 SV=1

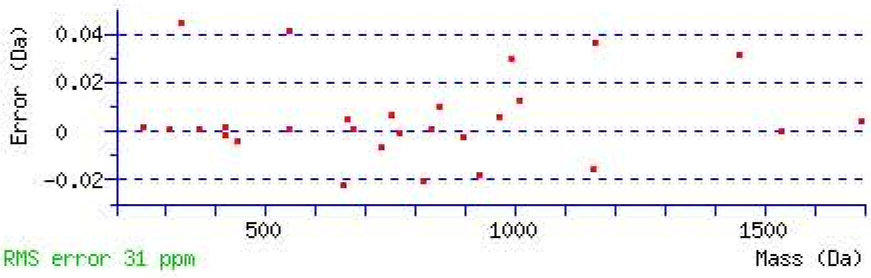
Match to Query 57801: 2622.117336 from(656.536610,4+) rtinseconds(1287) index(31822)
Title: Locus:1.1.1.2867.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●

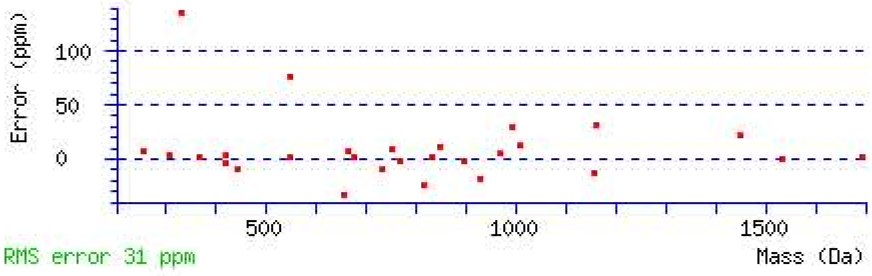


**Monoisotopic mass of neutral peptide Mr(calc):** 2622.123611
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q11** : Biotin:Thermo-21345 (Q)
**Ions Score:** 36 **Expect:** 0.00074
**Matches** : 29/198 fragment ions using 69 most intense peaks (help)

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 19 |
| 2 | ***254.161151*** | 127.584213 | 237.134602 | 119.070939 | | | P | 2467.029773 | 1234.018524 | 2450.003224 | 1225.505250 | 2449.019208 | 1225.013242 | 18 |
| 3 | ***417.224480*** | 209.115878 | 400.197931 | 200.602604 | | | Y | 2369.977009 | 1185.492142 | 2352.950460 | 1176.978868 | 2351.966444 | 1176.486860 | 17 |
| 4 | ***545.283058*** | 273.145167 | 528.256509 | 264.631893 | | | Q | 2206.913680 | 1103.960478 | 2189.887131 | 1095.447203 | 2188.903115 | 1094.955195 | 16 |
| 5 | ***674.325651*** | 337.666464 | 657.299102 | 329.153189 | 656.315086 | 328.661181 | E | 2078.855102 | 1039.931189 | 2061.828553 | 1031.417914 | 2060.844537 | 1030.925906 | 15 |
| 6 | ***731.347115*** | **366.177196** | 714.320566 | 357.663921 | 713.336550 | 357.171913 | G | 1949.812509 | 975.409892 | 1932.785960 | 966.896618 | 1931.801944 | 966.404610 | 14 |
| 7 | ***832.394794*** | **416.701035** | 815.368245 | 408.187761 | 814.384229 | 407.695753 | T | 1892.791045 | 946.899160 | 1875.764496 | 938.385886 | 1874.780480 | 937.893878 | 13 |
| 8 | 929.447558 | 465.227417 | 912.421009 | 456.714143 | 911.436993 | 456.222135 | P | 1791.743366 | 896.375321 | 1774.716817 | 887.862047 | 1773.732801 | 887.370038 | 12 |
| 9 | 1089.478207 | **545.242742** | 1072.451658 | 536.729467 | 1071.467642 | 536.237459 | C | ***1694.690602*** | 847.848939 | 1677.664053 | 839.335665 | 1676.680037 | 838.843656 | 11 |
| 10 | 1176.510235 | 588.758756 | 1159.483686 | 580.245481 | 1158.499670 | 579.753473 | S | ***1534.659953*** | 767.833614 | 1517.633404 | 759.320340 | 1516.649388 | 758.828332 | 10 |
| 11 | 1615.735561 | 808.371419 | 1598.709012 | 799.858144 | 1597.724996 | 799.366136 | Q | ***1447.627925*** | 724.317600 | 1430.601376 | 715.804326 | 1429.617360 | 715.312318 | 9 |
| 12 | 1775.766210 | 888.386743 | 1758.739661 | 879.873469 | 1757.755645 | 879.381461 | C | ***1008.402599*** | 504.704937 | 991.376050 | 496.191663 | 990.392034 | 495.699655 | 8 |
| 13 | 1872.818974 | 936.913125 | 1855.792425 | 928.399851 | 1854.808409 | 927.907843 | P | ***848.371950*** | 424.689613 | 831.345401 | 416.176338 | 830.361385 | 415.684330 | 7 |
| 14 | 1959.851002 | 980.429139 | 1942.824453 | 971.915865 | 1941.840437 | 971.423857 | S | ***751.319186*** | 376.163231 | 734.292637 | 367.649956 | 733.308621 | 367.157948 | 6 |
| 15 | 2016.872466 | 1008.939871 | 1999.845917 | 1000.426597 | 1998.861901 | 999.934589 | G | ***664.287158*** | 332.647217 | 647.260609 | 324.133942 | | | 5 |
| 16 | 2179.935795 | 1090.471535 | 2162.909246 | 1081.958261 | 2161.925230 | 1081.466253 | Y | 607.265694 | 304.136485 | 590.239145 | 295.623210 | | | 4 |
| 17 | 2316.994707 | 1159.000991 | 2299.968158 | 1150.487717 | 2298.984142 | 1149.995709 | H | ***444.202365*** | 222.604820 | 427.175816 | 214.091546 | | | 3 |
| 18 | 2477.025356 | 1239.016316 | 2459.998807 | 1230.503041 | 2459.014791 | 1230.011033 | C | ***307.143453*** | 154.075364 | 290.116904 | 145.562090 | | | 2 |
| 19 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 31 ppm



RMS error 31 ppm

NCBI **BLAST** search of RPYQEGTPCSQCPSGYHCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.3 | 2622.123611 | -0.006275 | RPYQEGTPCSQCPSGYHCK |

**Mascot:** http://www.matrixscience.com/

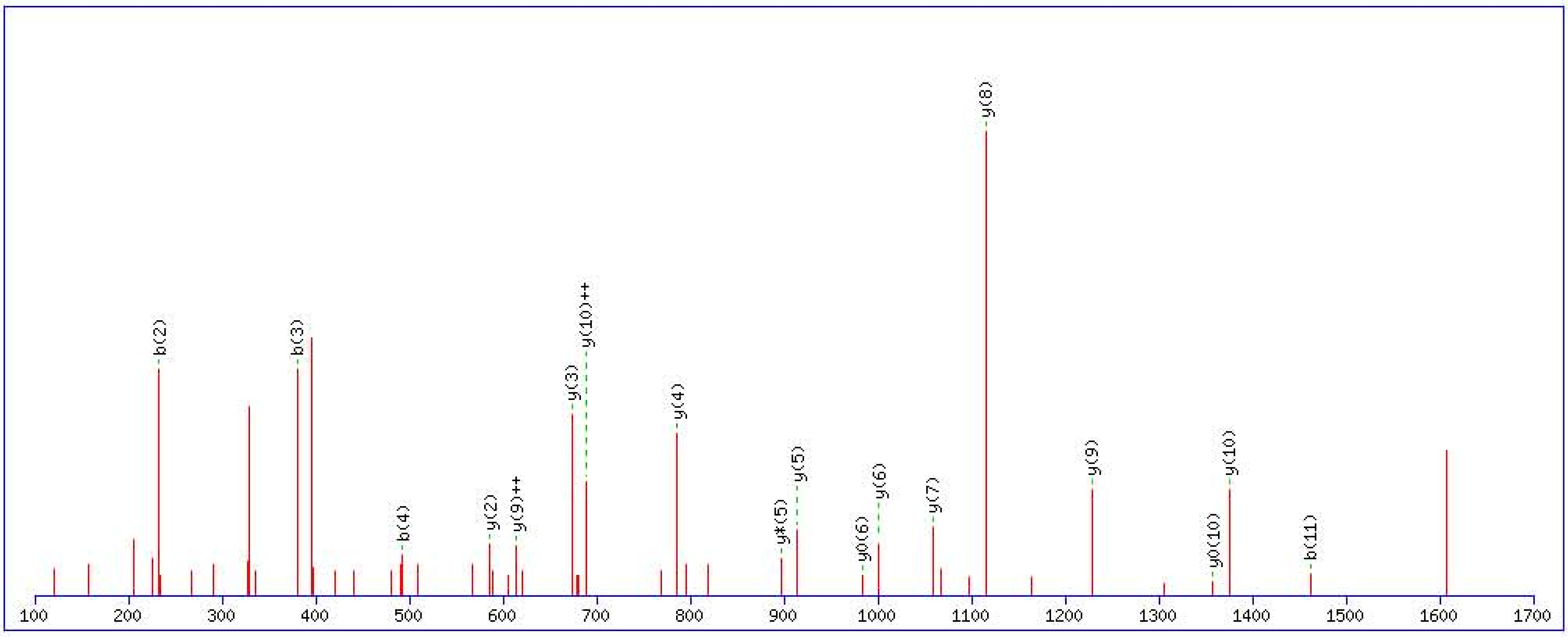
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TMFIGGSQLSQK**
Found in **PHLD_HUMAN**, Phosphatidylinositol-glycan-specific phospholipase D OS=Homo sapiens GN=GPLD1 PE=1 SV=3

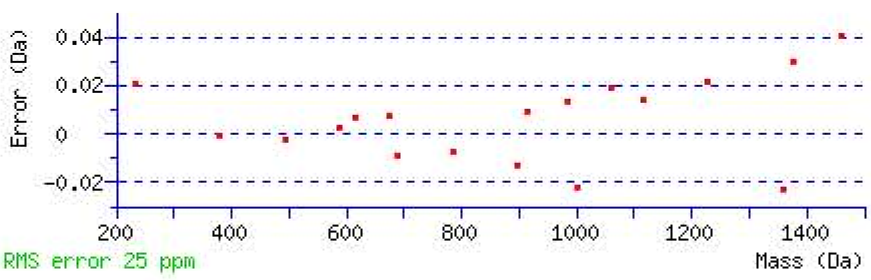
Match to Query 37370: 1606.840608 from(804.427580,2+) rtinseconds(2155) index(53932)
Title: Locus:1.1.1.1365.17 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

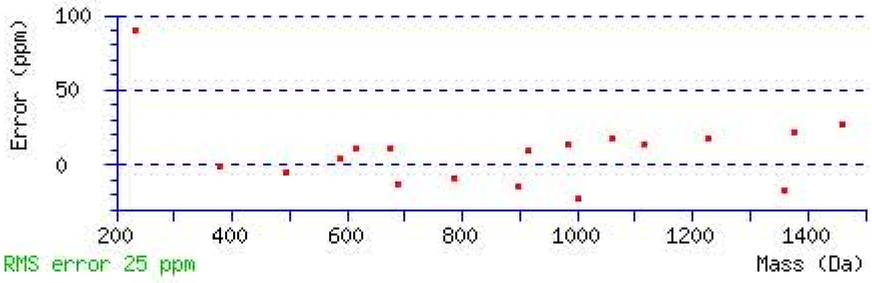
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1606.821121
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Ions Score: 72  Expect: 2.6e-007
Matches : 18/114 fragment ions using 26 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 12 |
| 2 | **233.095440** | 117.051358 | | | 215.084875 | 108.046076 | M | 1506.780719 | 753.893998 | 1489.754170 | 745.380723 | 1488.770154 | 744.888715 | 11 |
| 3 | **380.163854** | 190.585565 | | | 362.153289 | 181.580282 | F | ***1375.740234*** | 688.373755 | 1358.713685 | 679.860481 | 1357.729669 | 679.368473 | 10 |
| 4 | **493.247918** | 247.127597 | | | 475.237353 | 238.122314 | I | ***1228.671820*** | 614.839548 | 1211.645271 | 606.326274 | 1210.661255 | 605.834266 | 9 |
| 5 | 550.269382 | 275.638329 | | | 532.258817 | 266.633047 | G | ***1115.587756*** | 558.297516 | 1098.561207 | 549.784242 | 1097.577191 | 549.292234 | 8 |
| 6 | 607.290846 | 304.149061 | | | 589.280281 | 295.143779 | G | ***1058.566292*** | 529.786784 | 1041.539743 | 521.273510 | 1040.555727 | 520.781502 | 7 |
| 7 | 694.322874 | 347.665075 | | | 676.312309 | 338.659793 | S | ***1001.544828*** | 501.276052 | 984.518279 | 492.762778 | 983.534263 | 492.270770 | 6 |
| 8 | 822.381452 | 411.694364 | 805.354903 | 403.181090 | 804.370887 | 402.689082 | Q | ***914.512800*** | 457.760038 | 897.486251 | 449.246764 | 896.502235 | 448.754756 | 5 |
| 9 | 935.465516 | 468.236396 | 918.438967 | 459.723122 | 917.454951 | 459.231114 | L | ***786.454222*** | 393.730749 | 769.427673 | 385.217475 | 768.443657 | 384.725467 | 4 |
| 10 | 1022.497544 | 511.752410 | 1005.470995 | 503.239136 | 1004.486979 | 502.747128 | S | ***673.370158*** | 337.188717 | 656.343609 | 328.675443 | 655.359593 | 328.183435 | 3 |
| 11 | **1461.722870** | 731.365073 | 1444.696321 | 722.851799 | 1443.712305 | 722.359791 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 12 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TMFIGGSQLSQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 71.8 | 1606.821121 | 0.019487 | TMFIGGSQLSQK |
| 35.5 | 1606.821121 | 0.019487 | TMFIGGSQLSQK |
| 1.5 | 1606.859970 | -0.019362 | TMLESLIADKSGSKK |
| 1.2 | 1606.863998 | -0.023390 | SVLLMELEVNYGLK |

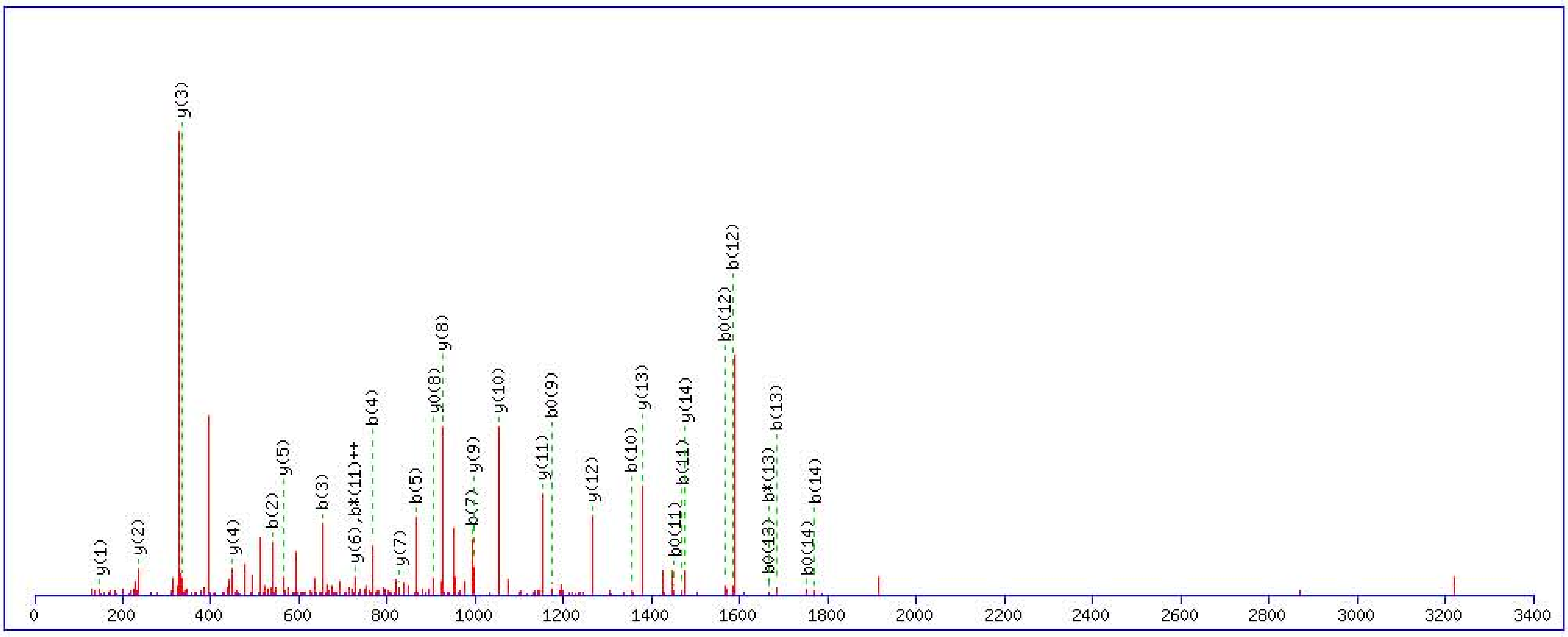
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QVLLVGAPTYDDVSK**
Found in **PHLD_HUMAN**, Phosphatidylinositol-glycan-specific phospholipase D OS=Homo sapiens GN=GPLD1 PE=1 SV=3

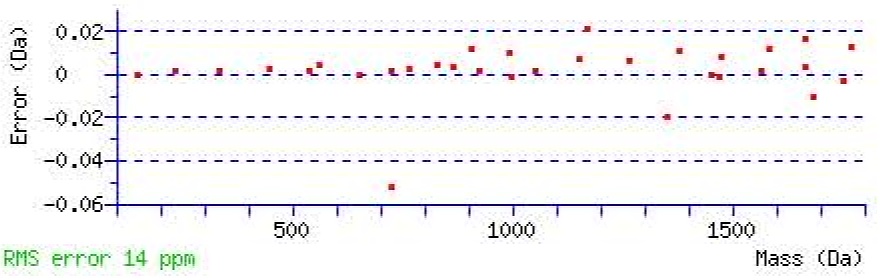
Match to Query 44870: 1915.022688 from(958.518620,2+) rtinseconds(2300) index(38236)
Title: Locus:1.1.1.3220.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

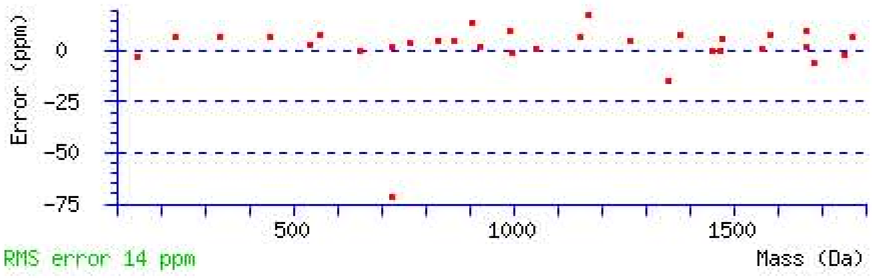
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [0] to [3400] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1915.012497
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 87  Expect: 5e-008
Matches : 32/150 fragment ions using 66 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 15 |
| 2 | **539.301016** | 270.154146 | 522.274467 | 261.640872 | | | V | ***1476.794438*** | 738.900857 | 1459.767889 | 730.387583 | 1458.783873 | 729.895575 | 14 |
| 3 | **652.385080** | 326.696178 | 635.358531 | 318.182904 | | | L | ***1377.726024*** | 689.366650 | 1360.699475 | 680.853376 | 1359.715459 | 680.361368 | 13 |
| 4 | **765.469144** | 383.238210 | 748.442595 | 374.724936 | | | L | ***1264.641960*** | 632.824618 | 1247.615411 | 624.311344 | 1246.631395 | 623.819336 | 12 |
| 5 | **864.537558** | 432.772417 | 847.511009 | 424.259143 | | | V | ***1151.557896*** | 576.282586 | 1134.531347 | 567.769312 | 1133.547331 | 567.277304 | 11 |
| 6 | 921.559022 | 461.283149 | 904.532473 | 452.769875 | | | G | ***1052.489482*** | 526.748379 | 1035.462933 | 518.235105 | 1034.478917 | 517.743097 | 10 |
| 7 | **992.596136** | 496.801706 | 975.569587 | 488.288432 | | | A | ***995.468018*** | 498.237647 | 978.441469 | 489.724373 | 977.457453 | 489.232365 | 9 |
| 8 | 1089.648900 | 545.328088 | 1072.622351 | 536.814814 | | | P | ***924.430904*** | 462.719090 | 907.404355 | 454.205816 | 906.420339 | 453.713808 | 8 |
| 9 | 1190.696579 | 595.851927 | 1173.670030 | 587.338653 | 1172.686014 | 586.846645 | T | ***827.378140*** | 414.192708 | 810.351591 | 405.679434 | 809.367575 | 405.187426 | 7 |
| 10 | **1353.759908** | 677.383592 | 1336.733359 | 668.870318 | 1335.749343 | 668.378310 | Y | ***726.330461*** | 363.668869 | 709.303912 | 355.155594 | 708.319896 | 354.663586 | 6 |
| 11 | **1468.786851** | 734.897064 | 1451.760302 | 726.383789 | 1450.776286 | 725.891781 | D | ***563.267132*** | 282.137204 | 546.240583 | 273.623930 | 545.256567 | 273.131922 | 5 |
| 12 | **1583.813794** | 792.410535 | 1566.787245 | 783.897261 | 1565.803229 | 783.405253 | D | ***448.240189*** | 224.623733 | 431.213640 | 216.110458 | 430.229624 | 215.618450 | 4 |
| 13 | **1682.882208** | 841.944742 | 1665.855659 | 833.431468 | 1664.871643 | 832.939460 | V | ***333.213246*** | 167.110261 | 316.186697 | 158.596987 | 315.202681 | 158.104979 | 3 |
| 14 | **1769.914236** | 885.460756 | 1752.887687 | 876.947482 | 1751.903671 | 876.455474 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 15 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of QVLLVGAPTYDDVSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 86.6 | 1915.012497 | 0.010191 | QVLLVGAPTYDDVSK |
| 10.8 | 1915.027710 | -0.005022 | DYPIYLLKFKQCLSK |
| 9.6 | 1915.008438 | 0.014250 | VIQKNQEETTSISK |
| 6.3 | 1915.008438 | 0.014250 | VIQKNQEETTSISK |

**Mascot:** http://www.matrixscience.com/

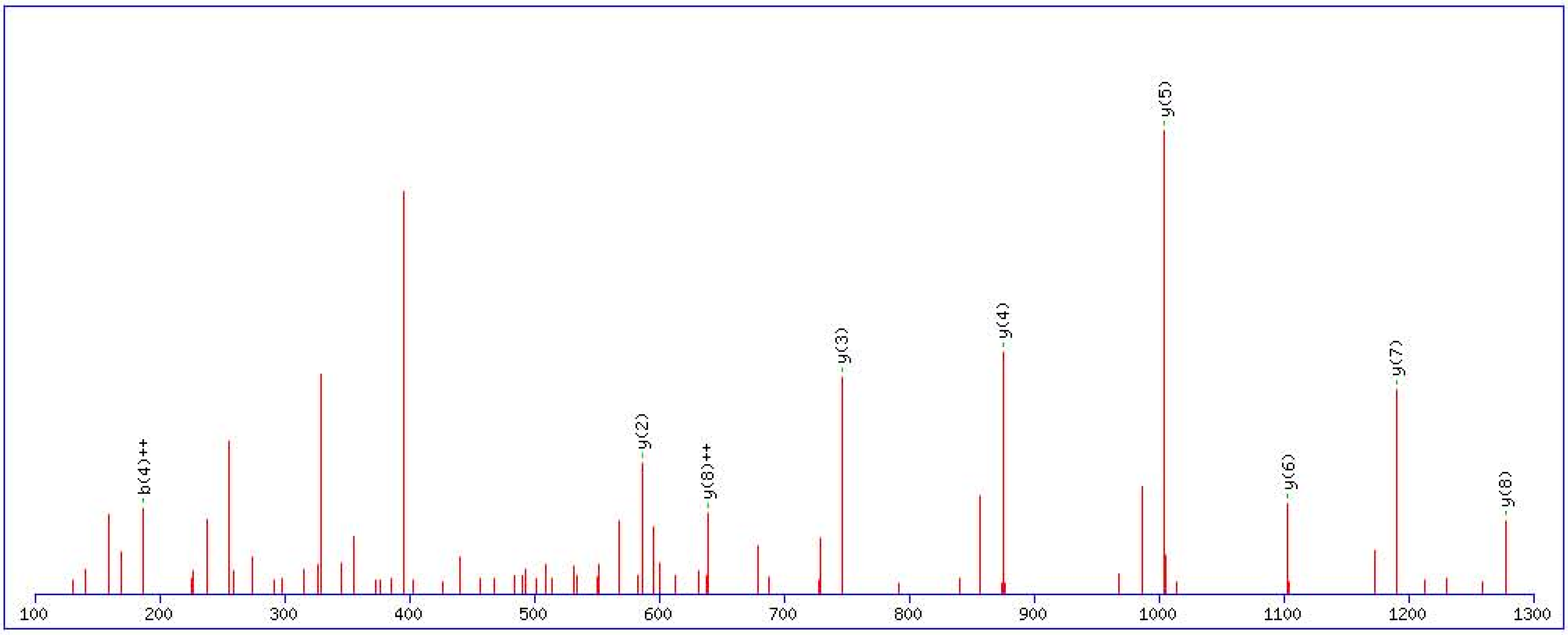
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VSSVEECQK**
Found in **KLKB1_HUMAN**, Plasma kallikrein OS=Homo sapiens GN=KLKB1 PE=1 SV=1

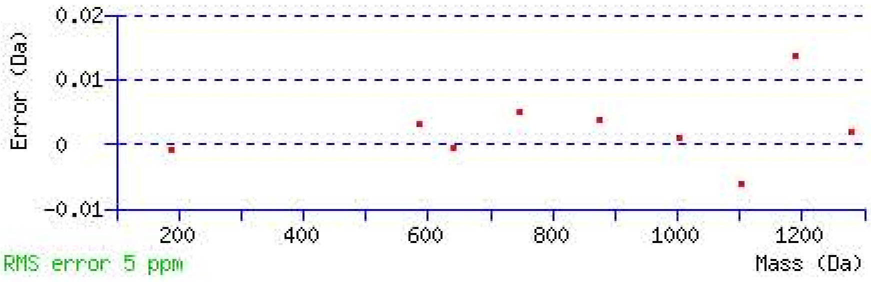
Match to Query 29350: 1375.647068 from(688.830810,2+) rtinseconds(1373) index(32383)
Title: Locus:1.1.1.2897.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

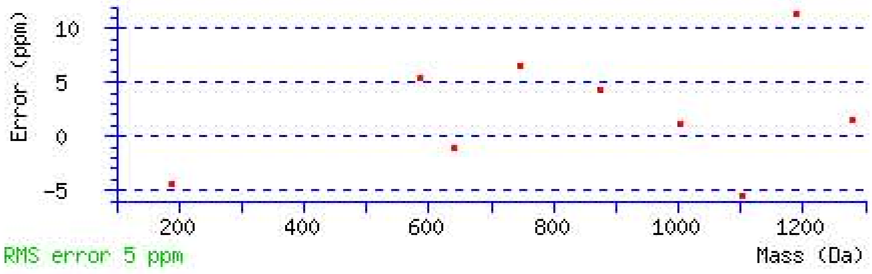
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1375.647568
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q8 : Biotin:Thermo-21345 (Q)
**Ions Score:** 57 **Expect:** 1.9e-005
**Matches :** 10/74 fragment ions using 12 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 9 |
| 2 | **187.107718** | 94.057497 | | | 169.097153 | 85.052214 | S | ***1277.586435*** | 639.296856 | 1260.559886 | 630.783581 | 1259.575870 | 630.291573 | 8 |
| 3 | 274.139746 | 137.573511 | | | 256.129181 | 128.568229 | S | ***1190.554407*** | 595.780842 | 1173.527858 | 587.267567 | 1172.543842 | 586.775559 | 7 |
| 4 | 373.208160 | **187.107718** | | | 355.197595 | 178.102436 | V | ***1103.522379*** | 552.264828 | 1086.495830 | 543.751553 | 1085.511814 | 543.259545 | 6 |
| 5 | 502.250753 | 251.629015 | | | 484.240188 | 242.623732 | E | ***1004.453965*** | 502.730621 | 987.427416 | 494.217346 | 986.443400 | 493.725338 | 5 |
| 6 | 631.293346 | 316.150311 | | | 613.282781 | 307.145029 | E | ***875.411372*** | 438.209324 | 858.384823 | 429.696050 | 857.400807 | 429.204042 | 4 |
| 7 | 791.323995 | 396.165636 | | | 773.313430 | 387.160353 | C | ***746.368779*** | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 8 | 1230.549321 | 615.778299 | 1213.522772 | 607.265024 | 1212.538756 | 606.773016 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 9 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VSSVEECQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.2 | 1375.647568 | -0.000500 | VSSVEECQK |
| 6.8 | 1375.662827 | -0.015759 | GFSIPECQK |

**Mascot:** http://www.matrixscience.com/

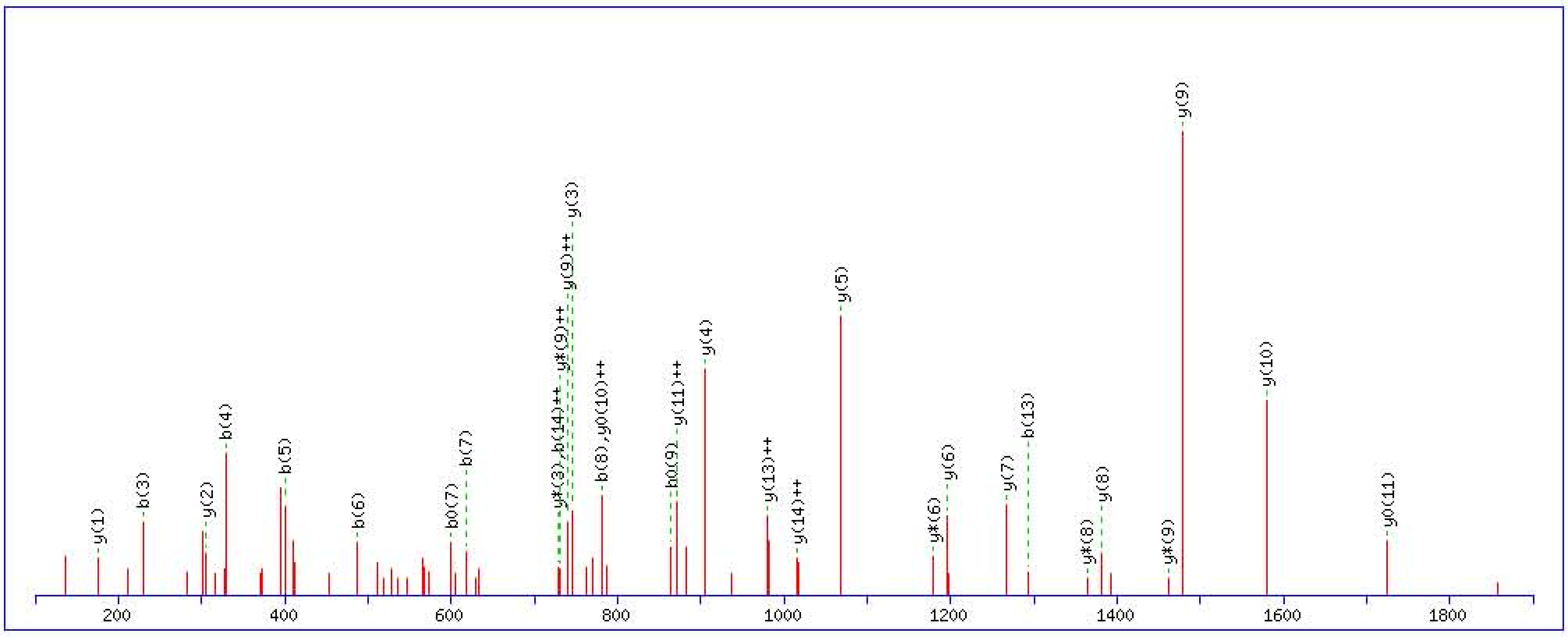
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GGDVASMYTPNAQYCQMR**
Found in **KLKB1_HUMAN**, Plasma kallikrein OS=Homo sapiens GN=KLKB1 PE=1 SV=1

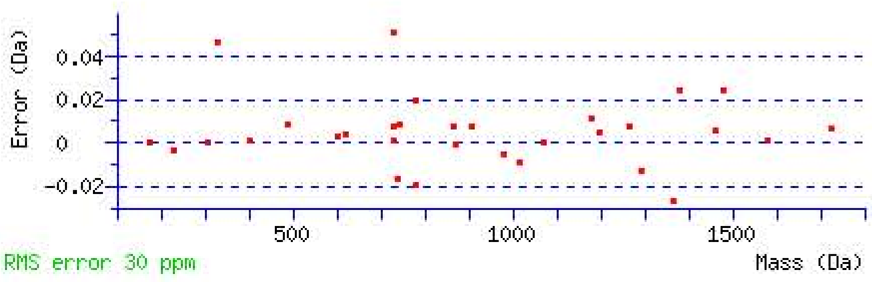
Match to Query 35770: 2359.026252 from(787.349360,3+) rtinseconds(2059) index(36777)
Title: Locus:1.1.1.3136.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

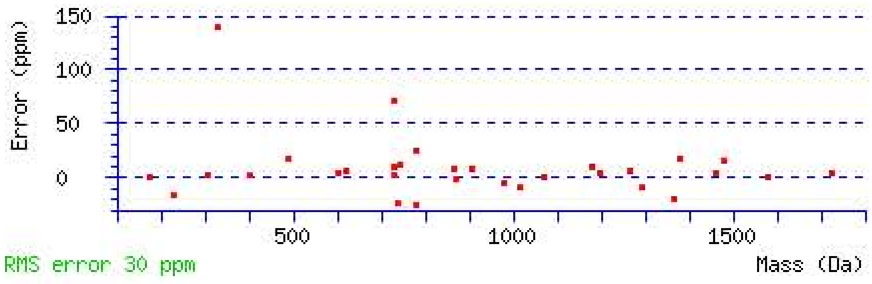
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2359.021759
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q16** : Biotin:Thermo-21345 (Q)
**Ions Score:** 82 **Expect:** 1e-007
**Matches :** 31/162 fragment ions using 40 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 18 |
| 2 | 115.050204 | 58.028740 | | | | | G | 2303.007580 | 1152.007428 | 2285.981031 | 1143.494153 | 2284.997015 | 1143.002145 | 17 |
| 3 | ***230.077147*** | 115.542211 | | | 212.066582 | 106.536929 | D | 2245.986116 | 1123.496696 | 2228.959567 | 1114.983421 | 2227.975551 | 1114.491413 | 16 |
| 4 | ***329.145561*** | 165.076418 | | | 311.134996 | 156.071136 | V | 2130.959173 | 1065.983224 | 2113.932624 | 1057.469950 | 2112.948608 | 1056.977942 | 15 |
| 5 | ***400.182675*** | 200.594975 | | | 382.172110 | 191.589693 | A | 2031.890759 | 1016.449018 | 2014.864210 | 1007.935743 | 2013.880194 | 1007.443735 | 14 |
| 6 | ***487.214703*** | 244.110989 | | | 469.204138 | 235.105707 | S | 1960.853645 | 980.930461 | 1943.827096 | 972.417186 | 1942.843080 | 971.925178 | 13 |
| 7 | ***618.255188*** | 309.631232 | | | 600.244623 | 300.625949 | M | 1873.821617 | 937.414447 | 1856.795068 | 928.901172 | 1855.811052 | 928.409164 | 12 |
| 8 | ***781.318517*** | 391.162896 | | | 763.307952 | 382.157614 | Y | 1742.781132 | 871.894204 | 1725.754583 | 863.380930 | 1724.770567 | 862.888922 | 11 |
| 9 | 882.366196 | 441.686736 | | | 864.355631 | 432.681453 | T | ***1579.717803*** | 790.362540 | 1562.691254 | 781.849265 | 1561.707238 | 781.357257 | 10 |
| 10 | 979.418960 | 490.213118 | | | 961.408395 | 481.207835 | P | ***1478.670124*** | 739.838700 | 1461.643575 | 731.325426 | | | 9 |
| 11 | 1093.461887 | 547.234581 | 1076.435338 | 538.721307 | 1075.451322 | 538.229299 | N | ***1381.617360*** | 691.312318 | 1364.590811 | 682.799044 | | | 8 |
| 12 | 1164.499001 | 582.753138 | 1147.472452 | 574.239864 | 1146.488436 | 573.747856 | A | ***1267.574433*** | 634.290855 | 1250.547884 | 625.777580 | | | 7 |
| 13 | ***1292.557579*** | 646.782428 | 1275.531030 | 638.269153 | 1274.547014 | 637.777145 | Q | ***1196.537319*** | 598.772298 | 1179.510770 | 590.259023 | | | 6 |
| 14 | 1455.620908 | 728.314092 | 1438.594359 | 719.800818 | 1437.610343 | 719.308810 | Y | ***1068.478741*** | 534.743009 | 1051.452192 | 526.229734 | | | 5 |
| 15 | 1615.651557 | 808.329417 | 1598.625008 | 799.816142 | 1597.640992 | 799.324134 | C | ***905.415412*** | 453.211344 | 888.388863 | 444.698070 | | | 4 |
| 16 | 2054.876883 | 1027.942079 | 2037.850334 | 1019.428805 | 2036.866318 | 1018.936797 | Q | ***745.384763*** | 373.196020 | 728.358214 | 364.682745 | | | 3 |
| 17 | 2185.917368 | 1093.462322 | 2168.890819 | 1084.949047 | 2167.906803 | 1084.457039 | M | ***306.159437*** | 153.583356 | 289.132888 | 145.070082 | | | 2 |
| 18 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GGDVASMYTPNAQYCQMR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 81.6 | 2359.021759 | 0.004493 | GGDVASMYTPNAQYCQMR |
| 46.8 | 2359.021759 | 0.004493 | GGDVASMYTPNAQYCQMR |

**Mascot:** http://www.matrixscience.com/

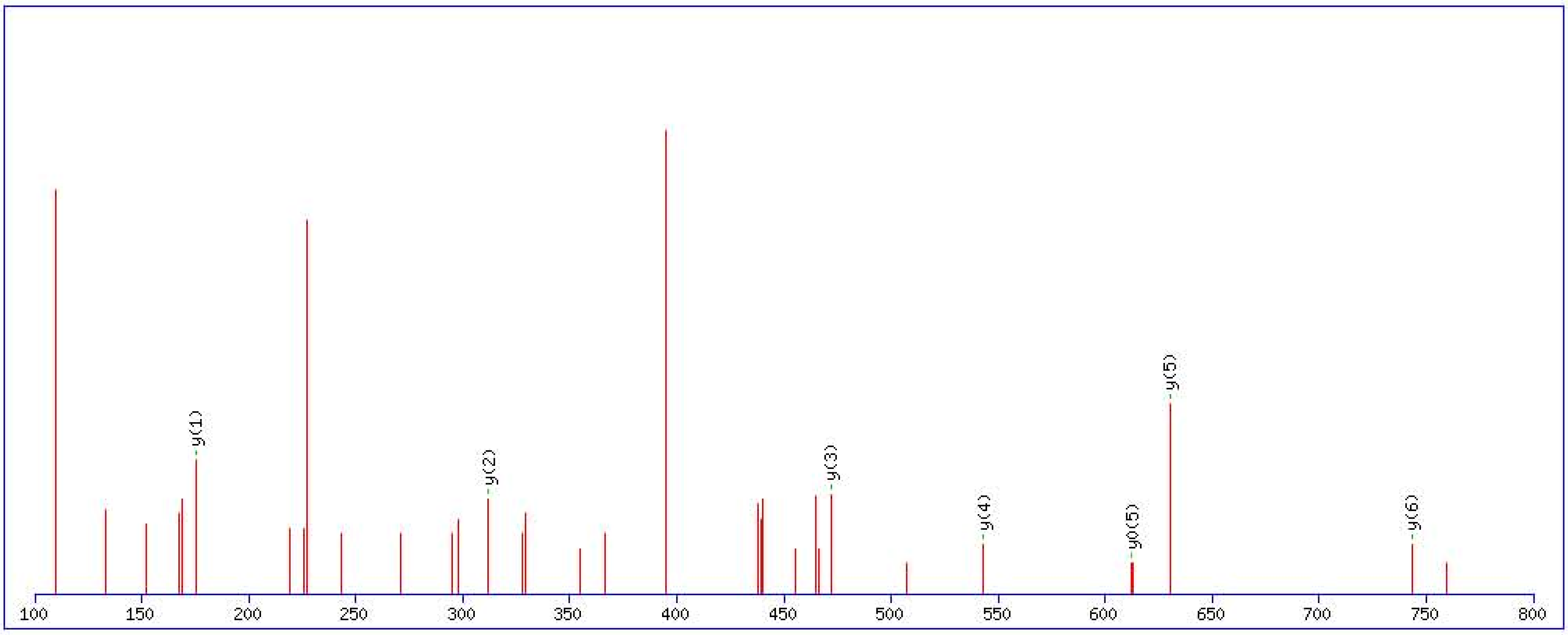
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **QCGHQISACHR**
Found in **KLKB1_HUMAN**, Plasma kallikrein OS=Homo sapiens GN=KLKB1 PE=1 SV=1

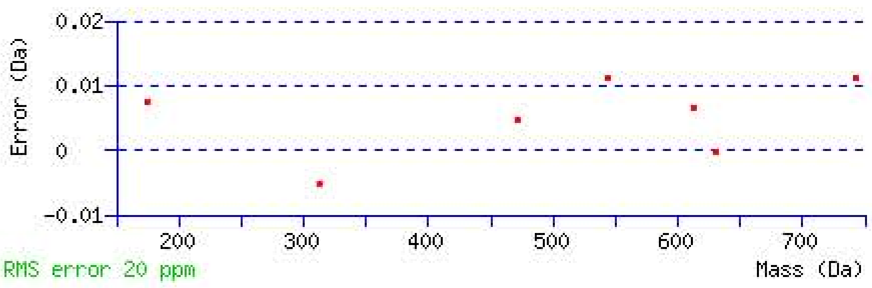
Match to Query 39649: 1663.748856 from(416.944490,4+) rtinseconds(1122) index(63679)
Title: Locus:1.1.1.1328.4 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

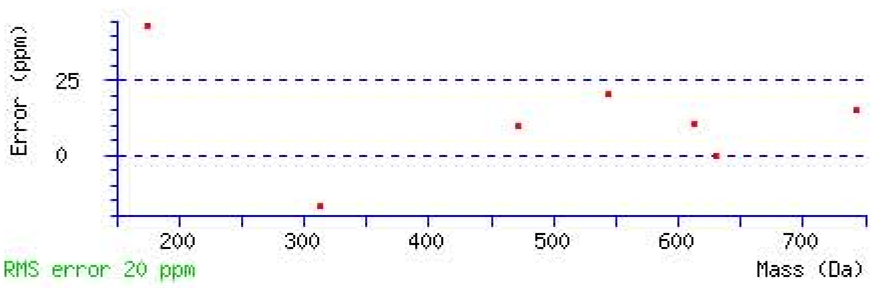
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1663.749374
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 32  Expect: 0.004
Matches : 7/100 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.065854 | 65.036565 | 112.039305 | 56.523291 | | | Q | | | | | | | 11 |
| 2 | 289.096503 | 145.051890 | 272.069954 | 136.538615 | | | C | 1536.698070 | 768.852673 | 1519.671521 | 760.339399 | 1518.687505 | 759.847391 | 10 |
| 3 | 346.117967 | 173.562622 | 329.091418 | 165.049347 | | | G | 1376.667421 | 688.837348 | 1359.640872 | 680.324074 | 1358.656856 | 679.832066 | 9 |
| 4 | 483.176879 | 242.092078 | 466.150330 | 233.578803 | | | H | 1319.645957 | 660.326617 | 1302.619408 | 651.813342 | 1301.635392 | 651.321334 | 8 |
| 5 | 922.402205 | 461.704741 | 905.375656 | 453.191466 | | | Q | 1182.587045 | 591.797161 | 1165.560496 | 583.283886 | 1164.576480 | 582.791878 | 7 |
| 6 | 1035.486269 | 518.246773 | 1018.459720 | 509.733498 | | | I | ***743.361719*** | 372.184498 | 726.335170 | 363.671223 | 725.351154 | 363.179215 | 6 |
| 7 | 1122.518297 | 561.762787 | 1105.491748 | 553.249512 | 1104.507732 | 552.757504 | S | ***630.277655*** | 315.642466 | 613.251106 | 307.129191 | 612.267090 | 306.637183 | 5 |
| 8 | 1193.555411 | 597.281344 | 1176.528862 | 588.768069 | 1175.544846 | 588.276061 | A | ***543.245627*** | 272.126452 | 526.219078 | 263.613177 | | | 4 |
| 9 | 1353.586060 | 677.296668 | 1336.559511 | 668.783394 | 1335.575495 | 668.291386 | C | ***472.208513*** | 236.607894 | 455.181964 | 228.094620 | | | 3 |
| 10 | 1490.644972 | 745.826124 | 1473.618423 | 737.312850 | 1472.634407 | 736.820842 | H | ***312.177864*** | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QCGHQISACHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.0 | 1663.749374 | -0.000518 | QCGHQISACHR |
| 32.0 | 1663.749374 | -0.000518 | QCGHQISACHR |
| 6.5 | 1663.755905 | -0.007049 | FASCVDASGGLKCHR |

**Mascot:** http://www.matrixscience.com/

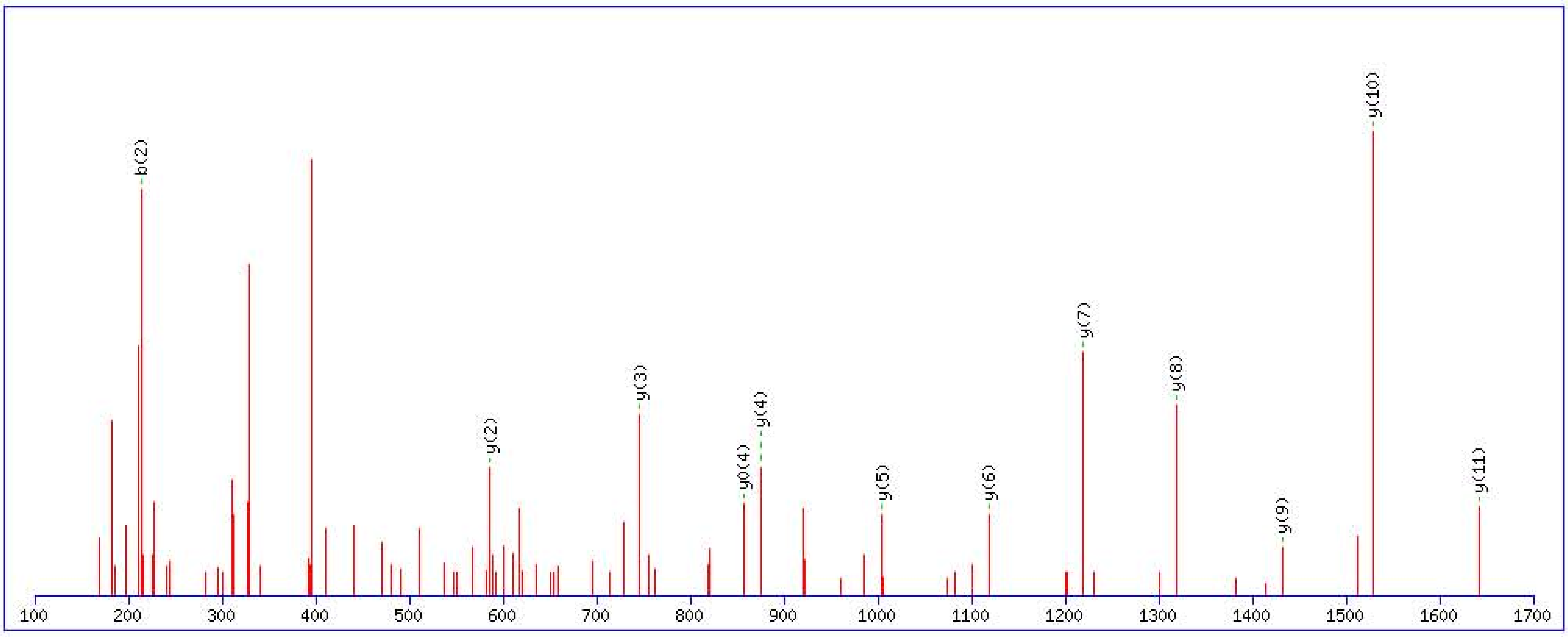
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VNIPLVTNEECQK**
Found in **KLKB1_HUMAN**, Plasma kallikrein OS=Homo sapiens GN=KLKB1 PE=1 SV=1

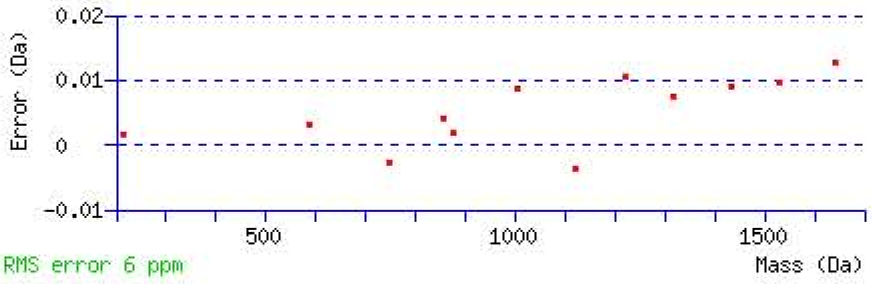
Match to Query 43838: 1853.939532 from(618.987120,3+) rtinseconds(2151) index(69667)
Title: Locus:1.1.1.1686.20 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

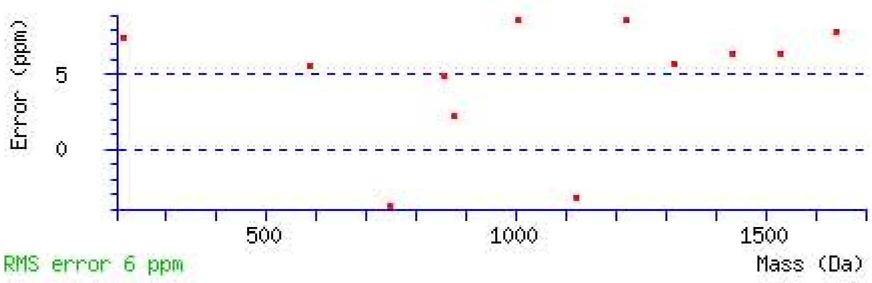
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1853.937927
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q12     : Biotin:Thermo-21345 (Q)
Ions Score: 84  Expect: 3.8e-008
Matches : 12/124 fragment ions using 15 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 13 |
| 2 | 214.118617 | 107.562947 | 197.092068 | 99.049672 | | | N | 1755.876804 | 878.442040 | 1738.850255 | 869.928766 | 1737.866239 | 869.436758 | 12 |
| 3 | 327.202681 | 164.104978 | 310.176132 | 155.591704 | | | I | ***1641.833877*** | 821.420577 | 1624.807328 | 812.907302 | 1623.823312 | 812.415294 | 11 |
| 4 | 424.255445 | 212.631360 | 407.228896 | 204.118086 | | | P | ***1528.749813*** | 764.878545 | 1511.723264 | 756.365270 | 1510.739248 | 755.873262 | 10 |
| 5 | 537.339509 | 269.173393 | 520.312960 | 260.660118 | | | L | ***1431.697049*** | 716.352163 | 1414.670500 | 707.838888 | 1413.686484 | 707.346880 | 9 |
| 6 | 636.407923 | 318.707600 | 619.381374 | 310.194325 | | | V | ***1318.612985*** | 659.810131 | 1301.586436 | 651.296856 | 1300.602420 | 650.804848 | 8 |
| 7 | 737.455602 | 369.231439 | 720.429053 | 360.718165 | 719.445037 | 360.226157 | T | ***1219.544571*** | 610.275924 | 1202.518022 | 601.762649 | 1201.534006 | 601.270641 | 7 |
| 8 | 851.498529 | 426.252903 | 834.471980 | 417.739628 | 833.487964 | 417.247620 | N | ***1118.496892*** | 559.752084 | 1101.470343 | 551.238810 | 1100.486327 | 550.746802 | 6 |
| 9 | 980.541122 | 490.774199 | 963.514573 | 482.260924 | 962.530557 | 481.768916 | E | ***1004.453965*** | 502.730621 | 987.427416 | 494.217346 | 986.443400 | 493.725338 | 5 |
| 10 | 1109.583715 | 555.295496 | 1092.557166 | 546.782221 | 1091.573150 | 546.290213 | E | ***875.411372*** | 438.209324 | 858.384823 | 429.696050 | 857.400807 | 429.204042 | 4 |
| 11 | 1269.614364 | 635.310820 | 1252.587815 | 626.797546 | 1251.603799 | 626.305538 | C | ***746.368779*** | 373.688028 | 729.342230 | 365.174753 | | | 3 |
| 12 | 1708.839690 | 854.923483 | 1691.813141 | 846.410209 | 1690.829125 | 845.918201 | Q | ***586.338130*** | 293.672703 | 569.311581 | 285.159429 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of VNIPLVTNEECQK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 84.0 | 1853.937927 | 0.001605 | VNIPLVTNEECQK |
| 4.9 | 1853.934341 | 0.005191 | RGLSNPNELQAAIDSNR |

**Mascot:** http://www.matrixscience.com/

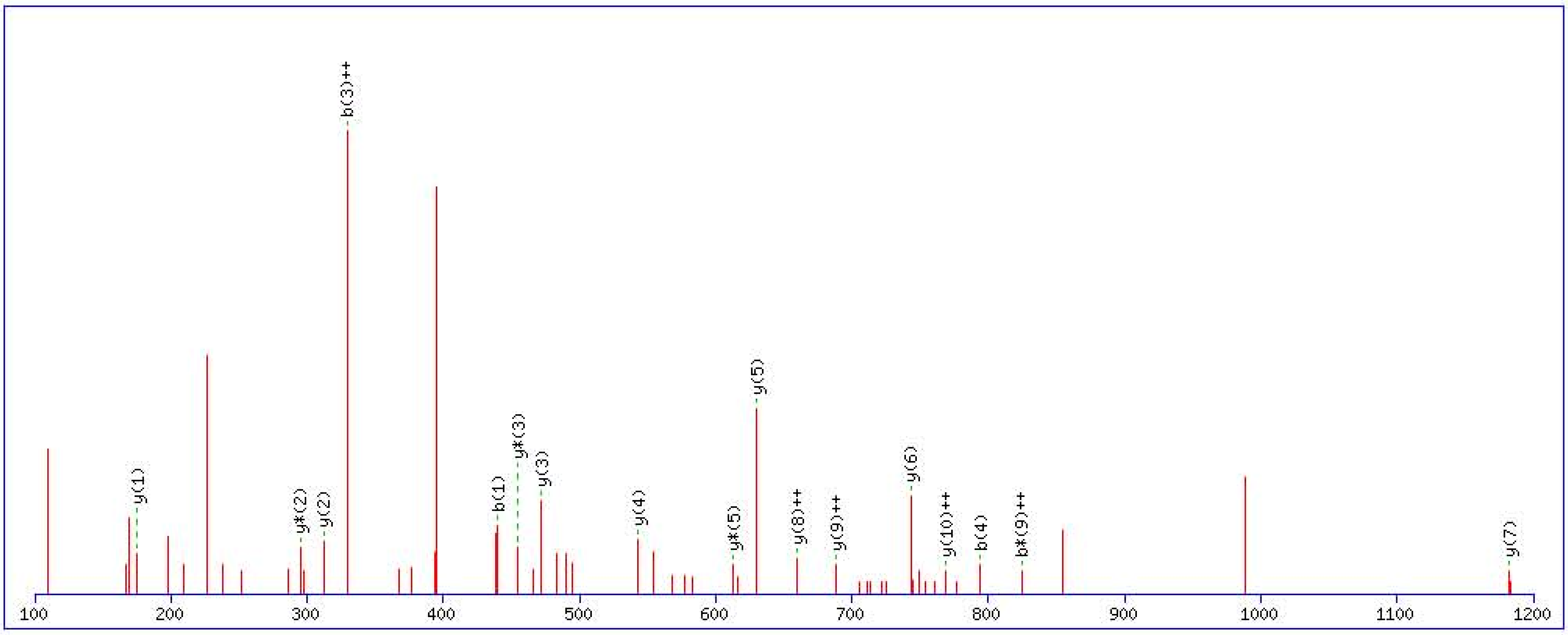
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of QCGHQISACHR
Found in KLKB1_HUMAN, Plasma kallikrein OS=Homo sapiens GN=KLKB1 PE=1 SV=1

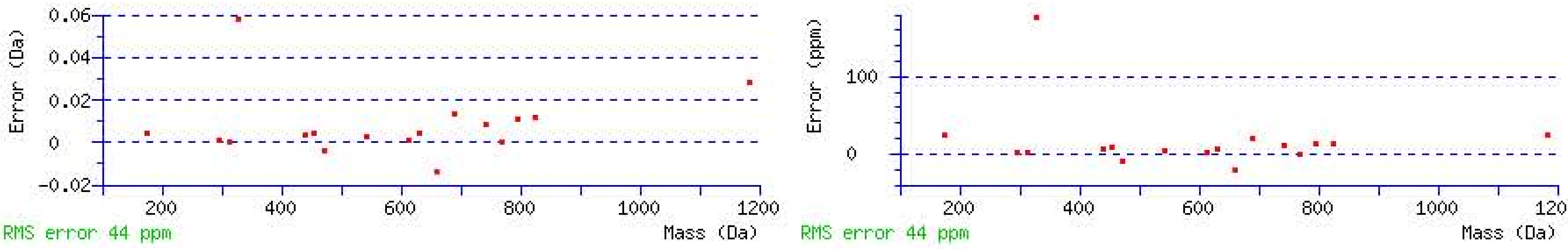
Match to Query 46028: 1974.911616 from(494.735180,4+) rtinseconds(1459) index(65560)
Title: Locus:1.1.1.1445.18 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1974.916122
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.0054
Matches : 17/100 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **440.232602** | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 11 |
| 2 | 600.263251 | 300.635264 | 583.236702 | 292.121989 | | | C | 1536.698070 | 768.852673 | 1519.671521 | 760.339399 | 1518.687505 | 759.847391 | 10 |
| 3 | 657.284715 | 329.145996 | 640.258166 | 320.632721 | | | G | 1376.667421 | 688.837349 | 1359.640872 | 680.324074 | 1358.656856 | 679.832066 | 9 |
| 4 | **794.343627** | 397.675452 | 777.317078 | 389.162177 | | | H | 1319.645957 | 660.326617 | 1302.619408 | 651.813342 | 1301.635392 | 651.321334 | 8 |
| 5 | 1233.568953 | 617.288115 | 1216.542404 | 608.774840 | | | Q | ***1182.587045*** | 591.797161 | 1165.560496 | 583.283886 | 1164.576480 | 582.791878 | 7 |
| 6 | 1346.653017 | 673.830147 | 1329.626468 | 665.316872 | | | I | ***743.361719*** | 372.184498 | 726.335170 | 363.671223 | 725.351154 | 363.179215 | 6 |
| 7 | 1433.685045 | 717.346161 | 1416.658496 | 708.832886 | 1415.674480 | 708.340878 | S | ***630.277655*** | 315.642466 | 613.251106 | 307.129191 | 612.267090 | 306.637183 | 5 |
| 8 | 1504.722159 | 752.864718 | 1487.695610 | 744.351443 | 1486.711594 | 743.859435 | A | ***543.245627*** | 272.126452 | 526.219078 | 263.613177 | | | 4 |
| 9 | 1664.752808 | 832.880042 | 1647.726259 | 824.366768 | 1646.742243 | 823.874760 | C | ***472.208513*** | 236.607894 | 455.181964 | 228.094620 | | | 3 |
| 10 | 1801.811720 | 901.409498 | 1784.785171 | 892.896224 | 1783.801155 | 892.404216 | H | ***312.177864*** | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of QCGHQISACHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.8 | 1974.916122 | -0.004506 | QCGHQISACHR |

**Mascot:** http://www.matrixscience.com/

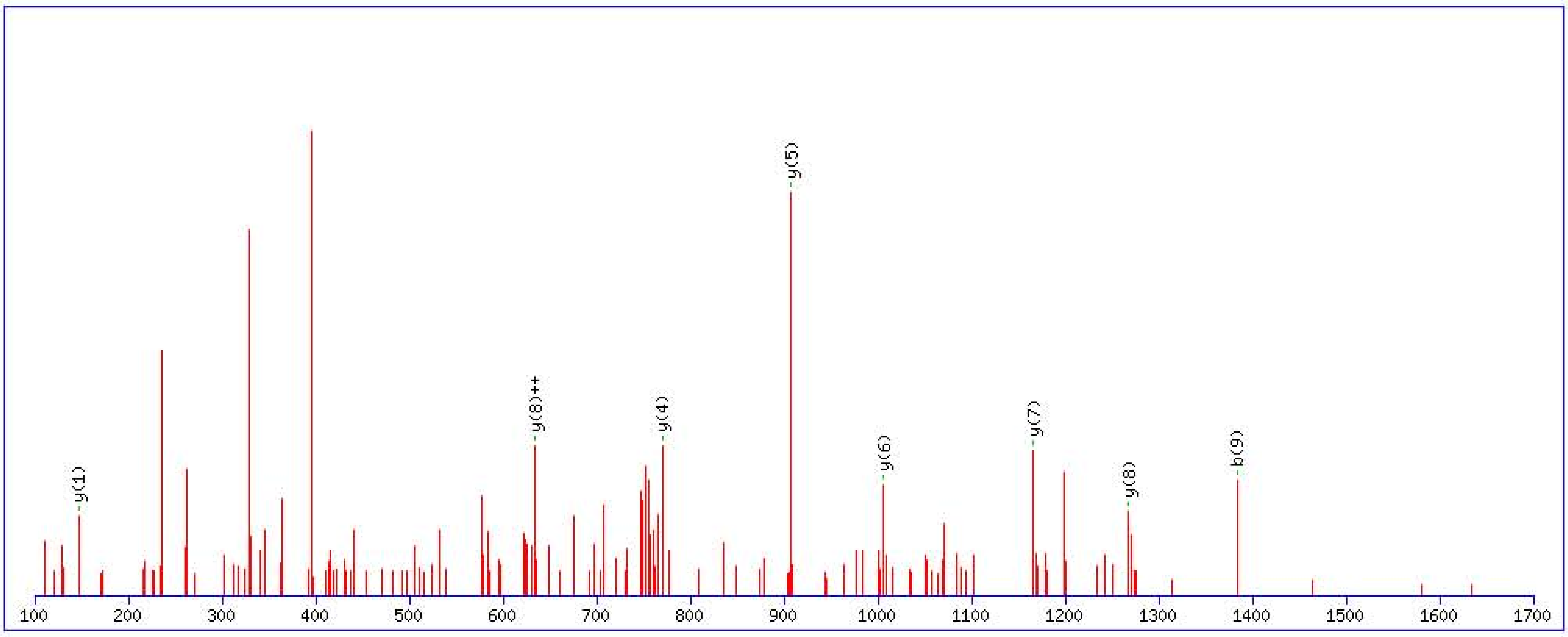
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DFTCVHQALK**
Found in **IC1_HUMAN**, Plasma protease C1 inhibitor OS=Homo sapiens GN=SERPING1 PE=1 SV=2

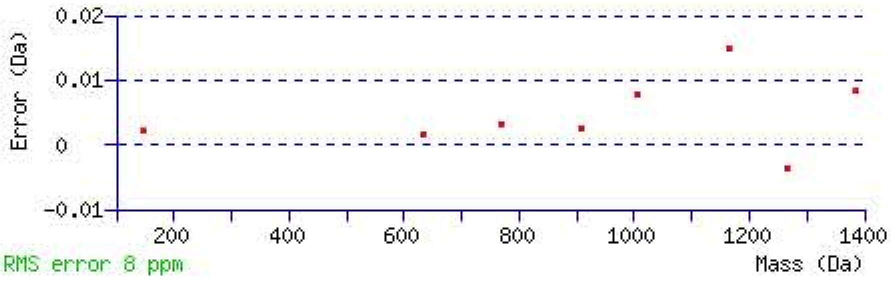
Match to Query 34641: 1528.765408 from(765.389980,2+) rtinseconds(1829) index(51724)
Title: Locus:1.1.1.1252.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

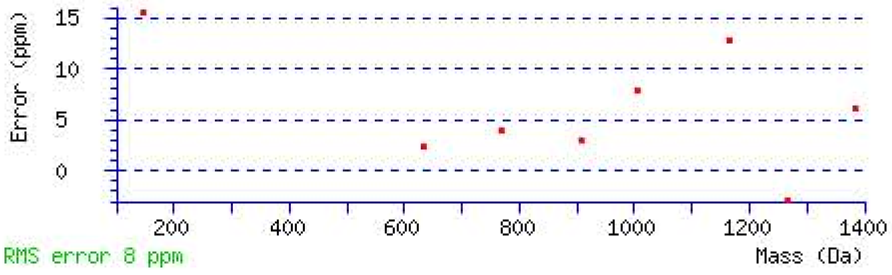
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1528.753052
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 33 **Expect:** 0.0028
**Matches :** 8/82 fragment ions using 14 most intense peaks (help)

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 10 |
| 2 | 263.102633 | 132.054954 | | | 245.092068 | 123.049672 | F | 1414.733376 | 707.870326 | 1397.706827 | 699.357051 | 1396.722811 | 698.865043 | 9 |
| 3 | 364.150312 | 182.578794 | | | 346.139747 | 173.573512 | T | ***1267.664962*** | 634.336119 | 1250.638413 | 625.822844 | 1249.654397 | 625.330836 | 8 |
| 4 | 524.180961 | 262.594119 | | | 506.170396 | 253.588836 | C | ***1166.617283*** | 583.812279 | 1149.590734 | 575.299005 | | | 7 |
| 5 | 623.249375 | 312.128326 | | | 605.238810 | 303.123043 | V | ***1006.586634*** | 503.796955 | 989.560085 | 495.283680 | | | 6 |
| 6 | 760.308287 | 380.657782 | | | 742.297722 | 371.652499 | H | ***907.518220*** | 454.262748 | 890.491671 | 445.749473 | | | 5 |
| 7 | 1199.533613 | 600.270444 | 1182.507064 | 591.757170 | 1181.523048 | 591.265162 | Q | ***770.459308*** | 385.733292 | 753.432759 | 377.220017 | | | 4 |
| 8 | 1270.570727 | 635.789001 | 1253.544178 | 627.275727 | 1252.560162 | 626.783719 | A | 331.233982 | 166.120629 | 314.207433 | 157.607354 | | | 3 |
| 9 | **1383.654791** | 692.331033 | 1366.628242 | 683.817759 | 1365.644226 | 683.325751 | L | 260.196868 | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of DFTCVHQALK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.4 | 1528.753052 | 0.012356 | DFTCVHQALK |
| 5.8 | 1528.755524 | 0.009884 | MIQSDKGADPPDKK |
| 4.9 | 1528.752121 | 0.013287 | NRKEESYIFESK |
| 3.3 | 1528.780685 | -0.015277 | EVLDQGTEISK |
| 2.7 | 1528.744293 | 0.021115 | KDYTSGAMLTGELK |
| 0.9 | 1528.755524 | 0.009884 | QQNEGDSIISK |
| 0.4 | 1528.773254 | -0.007846 | ENLQLNQETEAIK |
| 0.1 | 1528.782043 | -0.016635 | GPMGPKGGPGAPGAPGPK |

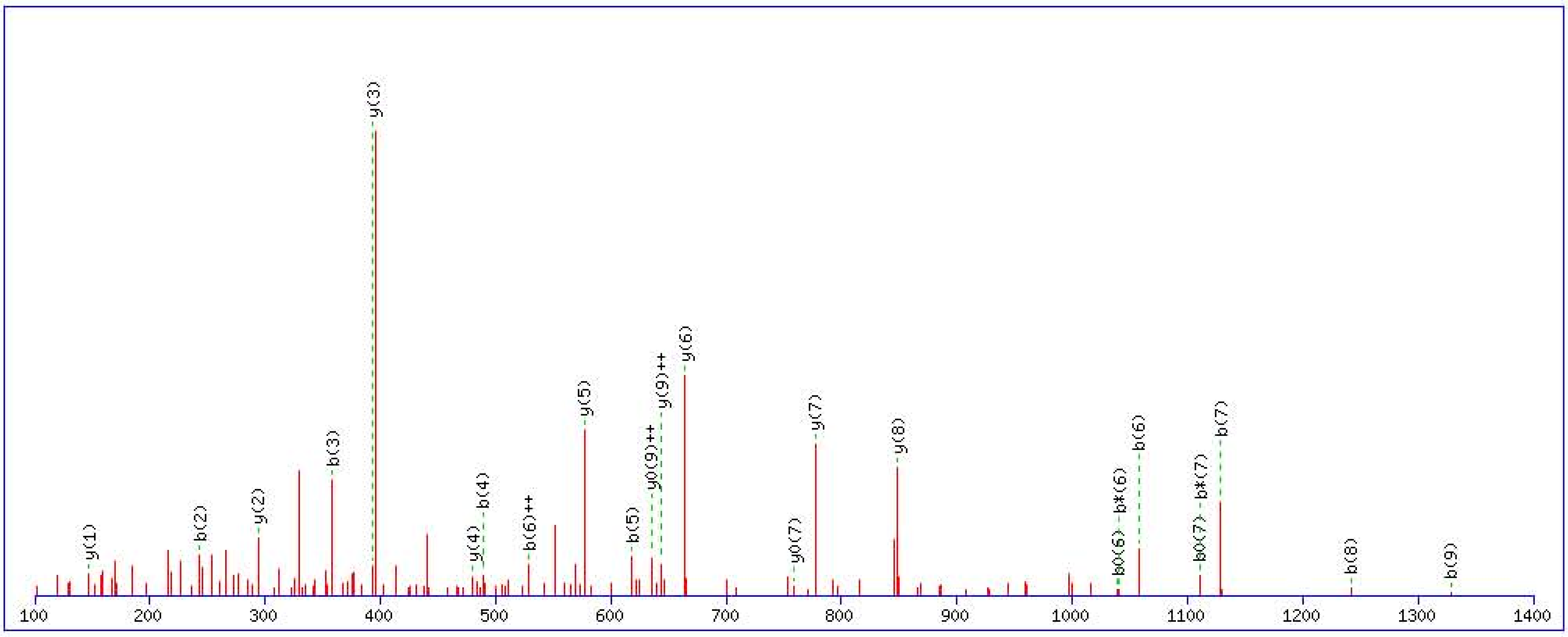
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LEDMEQALSPSVFK**
Found in **IC1_HUMAN**, Plasma protease C1 inhibitor OS=Homo sapiens GN=SERPING1 PE=1 SV=2

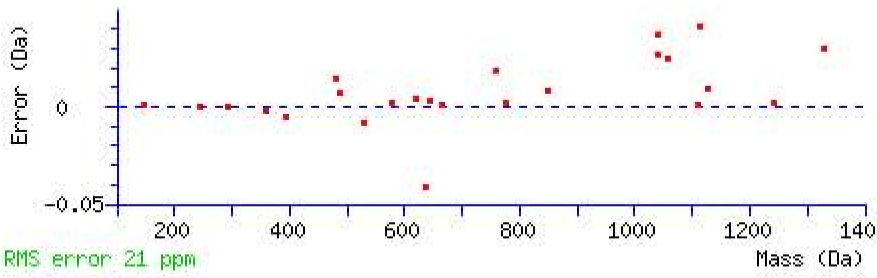
Match to Query 44584: 1903.943502 from(635.655110,3+) rtinseconds(2437) index(39082)
Title: Locus:1.1.1.3268.5 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

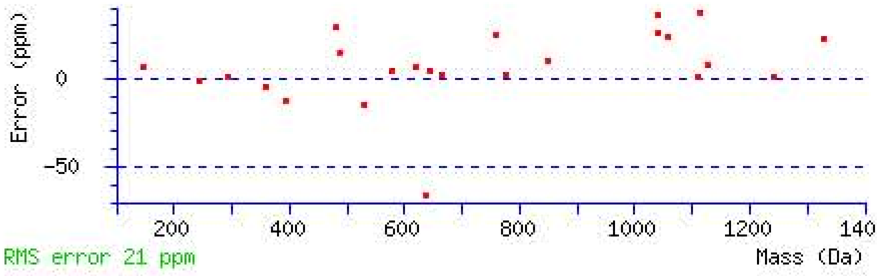
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1903.942337
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 0.00027
Matches : 24/138 fragment ions using 46 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 14 |
| 2 | ***243.133933*** | 122.070605 | | | 225.123368 | 113.065322 | E | 1791.865570 | 896.436423 | 1774.839021 | 887.923149 | 1773.855005 | 887.431141 | 13 |
| 3 | ***358.160876*** | 179.584076 | | | 340.150311 | 170.578794 | D | 1662.822977 | 831.915127 | 1645.796428 | 823.401852 | 1644.812412 | 822.909844 | 12 |
| 4 | ***489.201361*** | 245.104319 | | | 471.190796 | 236.099036 | M | 1547.796034 | 774.401655 | 1530.769485 | 765.888381 | 1529.785469 | 765.396373 | 11 |
| 5 | ***618.243954*** | 309.625615 | | | 600.233389 | 300.620333 | E | 1416.755549 | 708.881413 | 1399.729000 | 700.368138 | 1398.744984 | 699.876130 | 10 |
| 6 | ***1057.469280*** | 529.238278 | 1040.442731 | 520.725004 | 1039.458715 | 520.232996 | Q | 1287.712956 | 644.360116 | 1270.686407 | 635.846842 | 1269.702391 | 635.354834 | 9 |
| 7 | ***1128.506394*** | 564.756835 | 1111.479845 | 556.243561 | 1110.495829 | 555.751553 | A | ***848.487630*** | 424.747453 | 831.461081 | 416.234179 | 830.477065 | 415.742171 | 8 |
| 8 | ***1241.590458*** | 621.298867 | 1224.563909 | 612.785593 | 1223.579893 | 612.293584 | L | ***777.450516*** | 389.228896 | 760.423967 | 380.715622 | 759.439951 | 380.223614 | 7 |
| 9 | ***1328.622486*** | 664.814881 | 1311.595937 | 656.301607 | 1310.611921 | 655.809598 | S | ***664.366452*** | 332.686864 | 647.339903 | 324.173590 | 646.355887 | 323.681582 | 6 |
| 10 | 1425.675250 | 713.341263 | 1408.648701 | 704.827989 | 1407.664685 | 704.335981 | P | ***577.334424*** | 289.170850 | 560.307875 | 280.657576 | 559.323859 | 280.165568 | 5 |
| 11 | 1512.707278 | 756.857277 | 1495.680729 | 748.344003 | 1494.696713 | 747.851995 | S | ***480.281660*** | 240.644468 | 463.255111 | 232.131194 | 462.271095 | 231.639186 | 4 |
| 12 | 1611.775692 | 806.391484 | 1594.749143 | 797.878210 | 1593.765127 | 797.386202 | V | ***393.249632*** | 197.128454 | 376.223083 | 188.615180 | | | 3 |
| 13 | 1758.844106 | 879.925691 | 1741.817557 | 871.412417 | 1740.833541 | 870.920409 | F | ***294.181218*** | 147.594247 | 277.154669 | 139.080973 | | | 2 |
| 14 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LEDMEQALSPSVFK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 49.6 | 1903.942337 | 0.001165 | LEDMEQALSPSVFK |

**Mascot:** http://www.matrixscience.com/

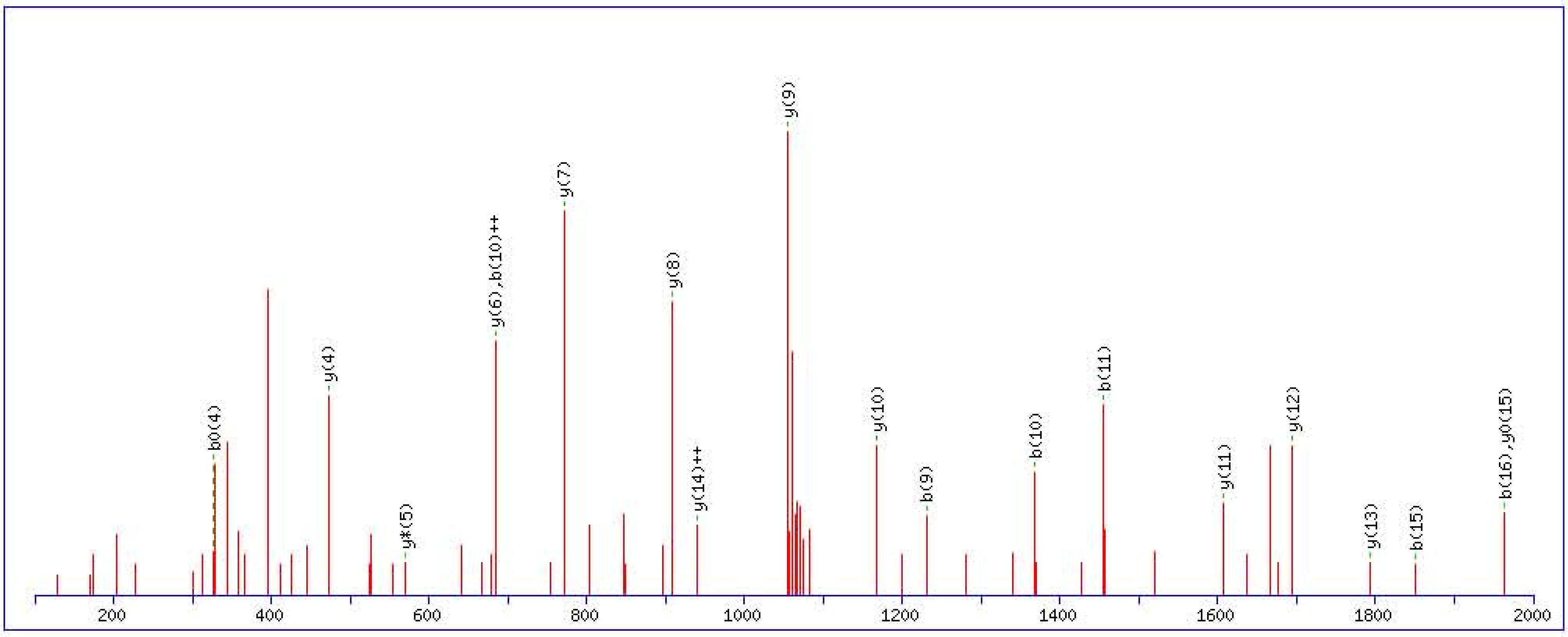
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GVTSVSQIFHSPDLAIR**
Found in **IC1_HUMAN**, Plasma protease C1 inhibitor OS=Homo sapiens GN=SERPING1 PE=1 SV=2

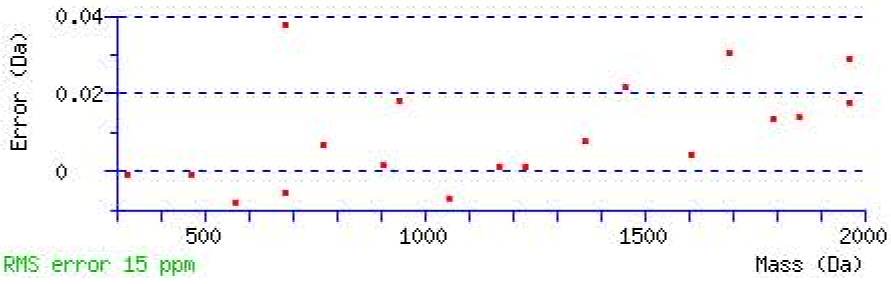
Match to Query 49793: 2137.158028 from(1069.586290,2+) rtinseconds(2341) index(38460)
Title: Locus:1.1.1.3234.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

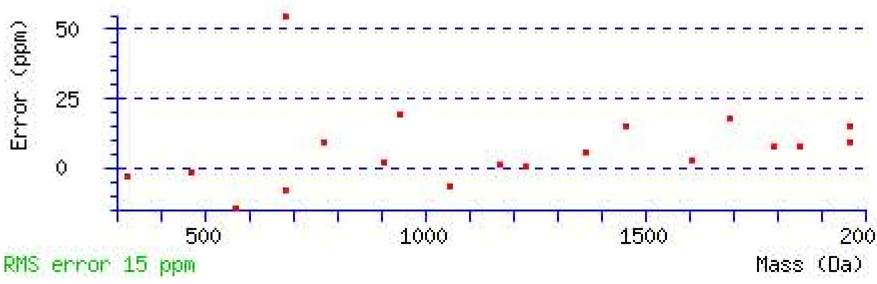
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2137.135406
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 74  Expect: 1.4e-007
Matches : 19/168 fragment ions using 19 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 17 |
| 2 | 157.097154 | 79.052215 | | | | | V | 2081.121208 | 1041.064242 | 2064.094659 | 1032.550967 | 2063.110643 | 1032.058959 | 16 |
| 3 | 258.144833 | 129.576055 | | | 240.134268 | 120.570772 | T | 1982.052794 | 991.530035 | 1965.026245 | 983.016761 | 1964.042229 | 982.524753 | 15 |
| 4 | 345.176861 | 173.092068 | | | 327.166296 | 164.086786 | S | 1881.005115 | 941.006196 | 1863.978566 | 932.492921 | 1862.994550 | 932.000913 | 14 |
| 5 | 444.245275 | 222.626275 | | | 426.234710 | 213.620993 | V | ***1793.973087*** | 897.490182 | 1776.946538 | 888.976907 | 1775.962522 | 888.484899 | 13 |
| 6 | 531.277303 | 266.142290 | | | 513.266738 | 257.137007 | S | ***1694.904673*** | 847.955975 | 1677.878124 | 839.442700 | 1676.894108 | 838.950692 | 12 |
| 7 | 970.502629 | 485.754953 | 953.476080 | 477.241678 | 952.492064 | 476.749670 | Q | ***1607.872645*** | 804.439961 | 1590.846096 | 795.926686 | 1589.862080 | 795.434678 | 11 |
| 8 | 1083.586693 | 542.296985 | 1066.560144 | 533.783710 | 1065.576128 | 533.291702 | I | ***1168.647319*** | 584.827298 | 1151.620770 | 576.314023 | 1150.636754 | 575.822015 | 10 |
| 9 | **1230.655107** | 615.831192 | 1213.628558 | 607.317917 | 1212.644542 | 606.825909 | F | ***1055.563255*** | 528.285266 | 1038.536706 | 519.771991 | 1037.552690 | 519.279983 | 9 |
| 10 | **1367.714019** | 684.360648 | 1350.687470 | 675.847373 | 1349.703454 | 675.355365 | H | ***908.494841*** | 454.751059 | 891.468292 | 446.237784 | 890.484276 | 445.745776 | 8 |
| 11 | **1454.746047** | 727.876662 | 1437.719498 | 719.363387 | 1436.735482 | 718.871379 | S | ***771.435929*** | 386.221603 | 754.409380 | 377.708328 | 753.425364 | 377.216320 | 7 |
| 12 | 1551.798811 | 776.403044 | 1534.772262 | 767.889769 | 1533.788246 | 767.397761 | P | ***684.403901*** | 342.705589 | 667.377352 | 334.192314 | 666.393336 | 333.700306 | 6 |
| 13 | 1666.825754 | 833.916515 | 1649.799205 | 825.403241 | 1648.815189 | 824.911233 | D | 587.351137 | 294.179207 | 570.324588 | 285.665932 | 569.340572 | 285.173924 | 5 |
| 14 | 1779.909818 | 890.458547 | 1762.883269 | 881.945273 | 1761.899253 | 881.453265 | L | ***472.324194*** | 236.665735 | 455.297645 | 228.152460 | | | 4 |
| 15 | **1850.946932** | 925.977104 | 1833.920383 | 917.463830 | 1832.936367 | 916.971822 | A | 359.240130 | 180.123703 | 342.213581 | 171.610429 | | | 3 |
| 16 | **1964.030996** | 982.519136 | 1947.004447 | 974.005862 | 1946.020431 | 973.513853 | I | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 17 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of GVTSVSQIFHSPDLAIR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 74.4 | 2137.135406 | 0.022622 | GVTSVSQIFHSPDLAIR |
| 1.1 | 2137.185455 | -0.027427 | ISERTPSALAILENANVLAR |
| 0.2 | 2137.178955 | -0.020927 | VAEAMRLAGPLARTVADLQR |

**Mascot:** http://www.matrixscience.com/

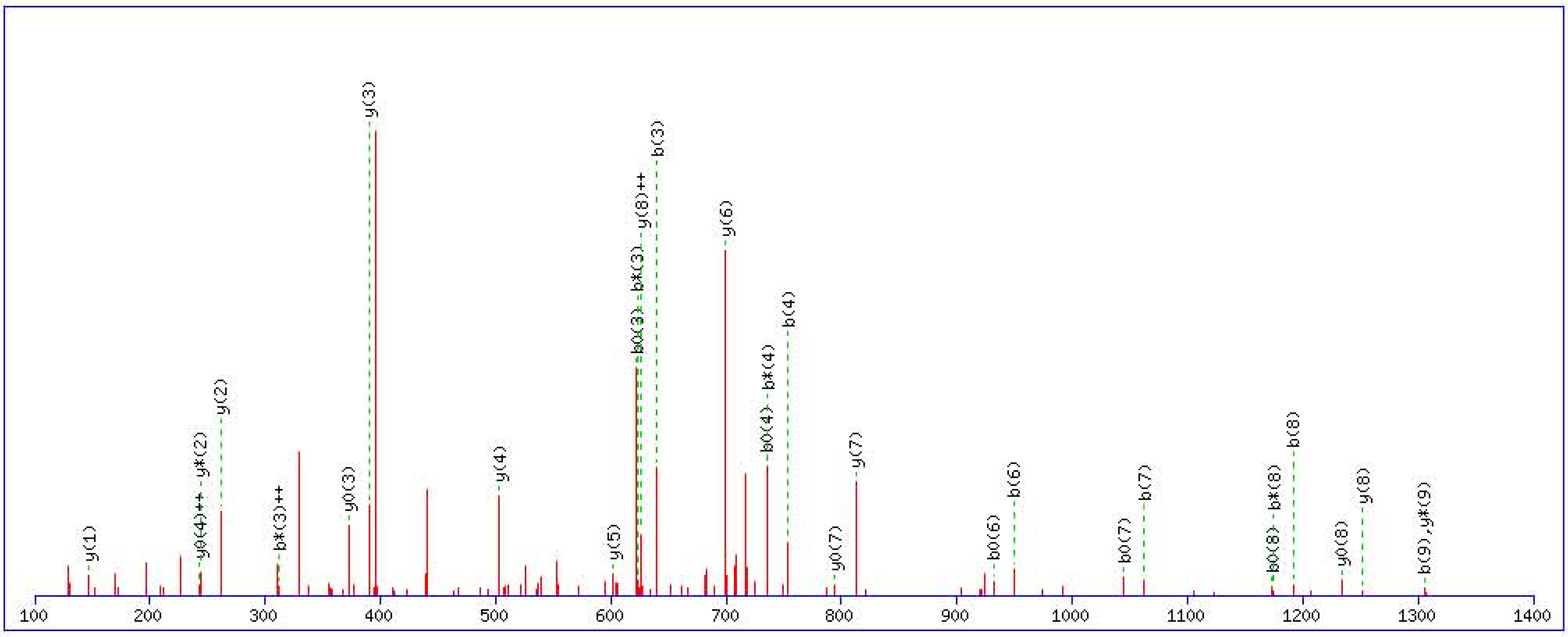
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EAQLPVIENK**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

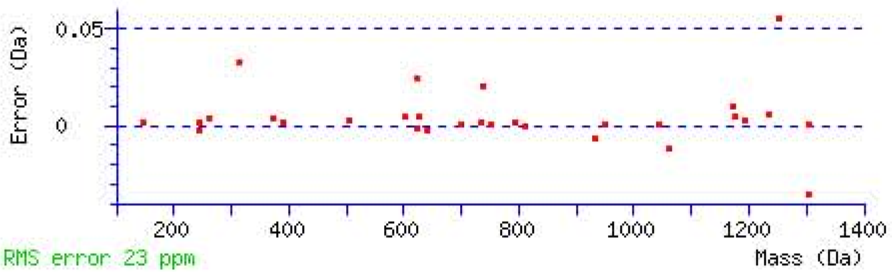
Match to Query 32464: 1450.784868 from(726.399710,2+) rtinseconds(1964) index(5676)
Title: Locus:1.1.1.1493.10 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

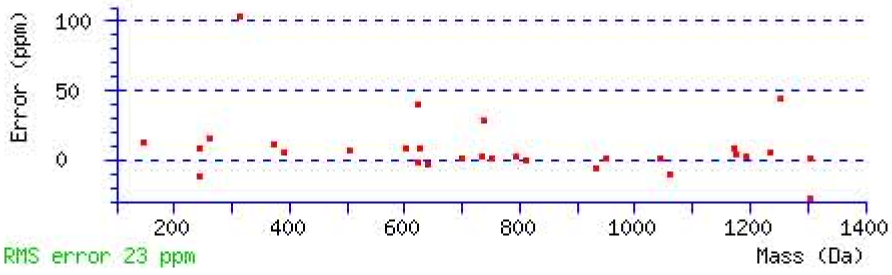
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1450.785355
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 39 **Expect:** 0.00079
**Matches :** 30/100 fragment ions using 61 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 10 |
| 2 | 201.086983 | 101.047130 | | | 183.076418 | 92.041847 | A | 1322.750070 | 661.878673 | 1305.723521 | 653.365398 | 1304.739505 | 652.873390 | 9 |
| 3 | **640.312309** | 320.659793 | 623.285760 | 312.146518 | 622.301744 | 311.654510 | Q | ***1251.712956*** | 626.360116 | 1234.686407 | 617.846841 | 1233.702391 | 617.354833 | 8 |
| 4 | **753.396373** | 377.201825 | 736.369824 | 368.688550 | 735.385808 | 368.196542 | L | ***812.487630*** | 406.747453 | 795.461081 | 398.234178 | 794.477065 | 397.742170 | 7 |
| 5 | 850.449137 | 425.728207 | 833.422588 | 417.214932 | 832.438572 | 416.722924 | P | ***699.403566*** | 350.205421 | 682.377017 | 341.692146 | 681.393001 | 341.200138 | 6 |
| 6 | **949.517551** | 475.262414 | 932.491002 | 466.749139 | 931.506986 | 466.257131 | V | ***602.350802*** | 301.679039 | 585.324253 | 293.165764 | 584.340237 | 292.673756 | 5 |
| 7 | **1062.601615** | 531.804446 | 1045.575066 | 523.291171 | 1044.591050 | 522.799163 | I | ***503.282388*** | 252.144832 | 486.255839 | 243.631557 | 485.271823 | 243.139549 | 4 |
| 8 | **1191.644208** | 596.325742 | 1174.617659 | 587.812468 | 1173.633643 | 587.320459 | E | ***390.198324*** | 195.602800 | 373.171775 | 187.089525 | 372.187759 | 186.597517 | 3 |
| 9 | **1305.687135** | 653.347205 | 1288.660586 | 644.833931 | 1287.676570 | 644.341923 | N | ***261.155731*** | 131.081503 | 244.129182 | 122.568229 | | | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EAQLPVIENK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 38.6 | 1450.785355 | -0.000487 | EAQLPVIENK |
| 5.3 | 1450.764236 | 0.020632 | EIFHPEIQK |
| 4.5 | 1450.790527 | -0.005659 | QNIWRHNRLSK |
| 3.9 | 1450.764236 | 0.020632 | AEPPTWAQLK |
| 2.5 | 1450.796600 | -0.011732 | QISAVHKETK |
| 0.9 | 1450.789429 | -0.004561 | VIIAFGFMVPDVK |
| 0.8 | 1450.775467 | 0.009401 | QAPAPTKWNK |

**Mascot:** http://www.matrixscience.com/

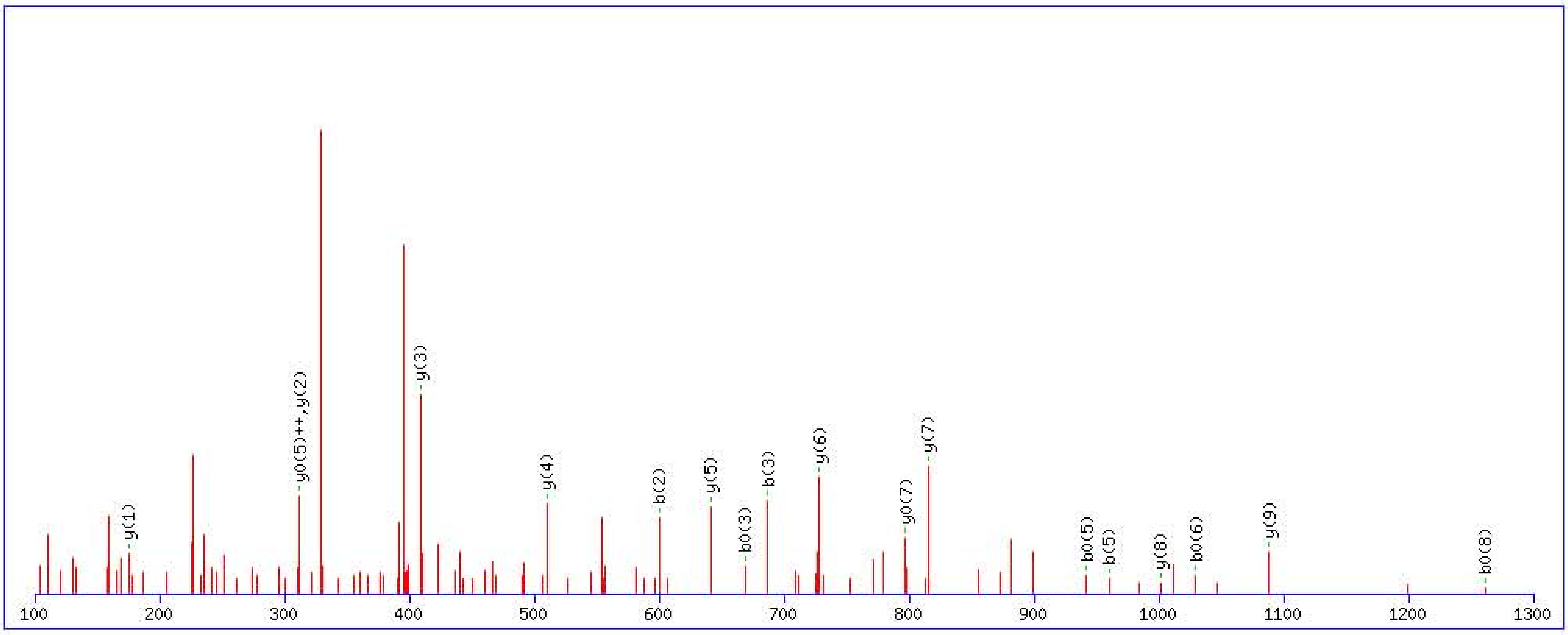
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **CQSWSSMTPHR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

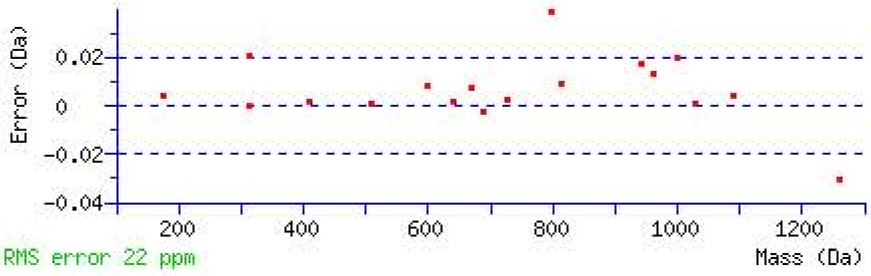
Match to Query 40196: 1686.740292 from(563.254040,3+) rtinseconds(1783) index(67397)
Title: Locus:1.1.1.1558.16 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

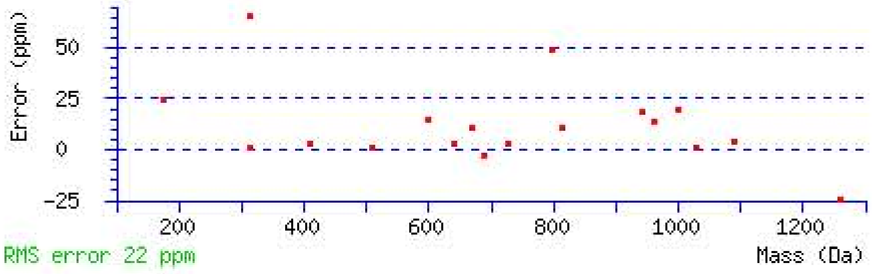
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1686.742889
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q2** : Biotin:Thermo-21345 (Q)
**Ions Score:** 52 **Expect:** 4.1e-005
**Matches :** 18/108 fragment ions using 32 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 11 |
| 2 | **600.263251** | 300.635264 | 583.236702 | 292.121989 | | | Q | 1527.719515 | 764.363396 | 1510.692966 | 755.850121 | 1509.708950 | 755.358113 | 10 |
| 3 | **687.295279** | 344.151278 | 670.268730 | 335.638003 | 669.284714 | 335.145995 | S | ***1088.494189*** | 544.750733 | 1071.467640 | 536.237458 | 1070.483624 | 535.745450 | 9 |
| 4 | 873.374592 | 437.190934 | 856.348043 | 428.677660 | 855.364027 | 428.185652 | W | ***1001.462161*** | 501.234719 | 984.435612 | 492.721444 | 983.451596 | 492.229436 | 8 |
| 5 | **960.406620** | 480.706948 | 943.380071 | 472.193674 | 942.396055 | 471.701666 | S | ***815.382848*** | 408.195062 | 798.356299 | 399.681787 | 797.372283 | 399.189779 | 7 |
| 6 | 1047.438648 | 524.222962 | 1030.412099 | 515.709688 | 1029.428083 | 515.217680 | S | ***728.350820*** | 364.679048 | 711.324271 | 356.165774 | 710.340255 | 355.673766 | 6 |
| 7 | 1178.479133 | 589.743205 | 1161.452584 | 581.229930 | 1160.468568 | 580.737922 | M | ***641.318792*** | 321.163034 | 624.292243 | 312.649760 | 623.308227 | 312.157752 | 5 |
| 8 | 1279.526812 | 640.267044 | 1262.500263 | 631.753770 | 1261.516247 | 631.261762 | T | ***510.278307*** | 255.642791 | 493.251758 | 247.129517 | 492.267742 | 246.637509 | 4 |
| 9 | 1376.579576 | 688.793426 | 1359.553027 | 680.280152 | 1358.569011 | 679.788144 | P | ***409.230628*** | 205.118952 | 392.204079 | 196.605677 | | | 3 |
| 10 | 1513.638488 | 757.322882 | 1496.611939 | 748.809608 | 1495.627923 | 748.317600 | H | ***312.177864*** | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CQSWSSMTPHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.6 | 1686.742889 | -0.002597 | CQSWSSMTPHR |
| 5.3 | 1686.759964 | -0.019672 | MAMAMSDSGASRLRR |

**Mascot:** http://www.matrixscience.com/

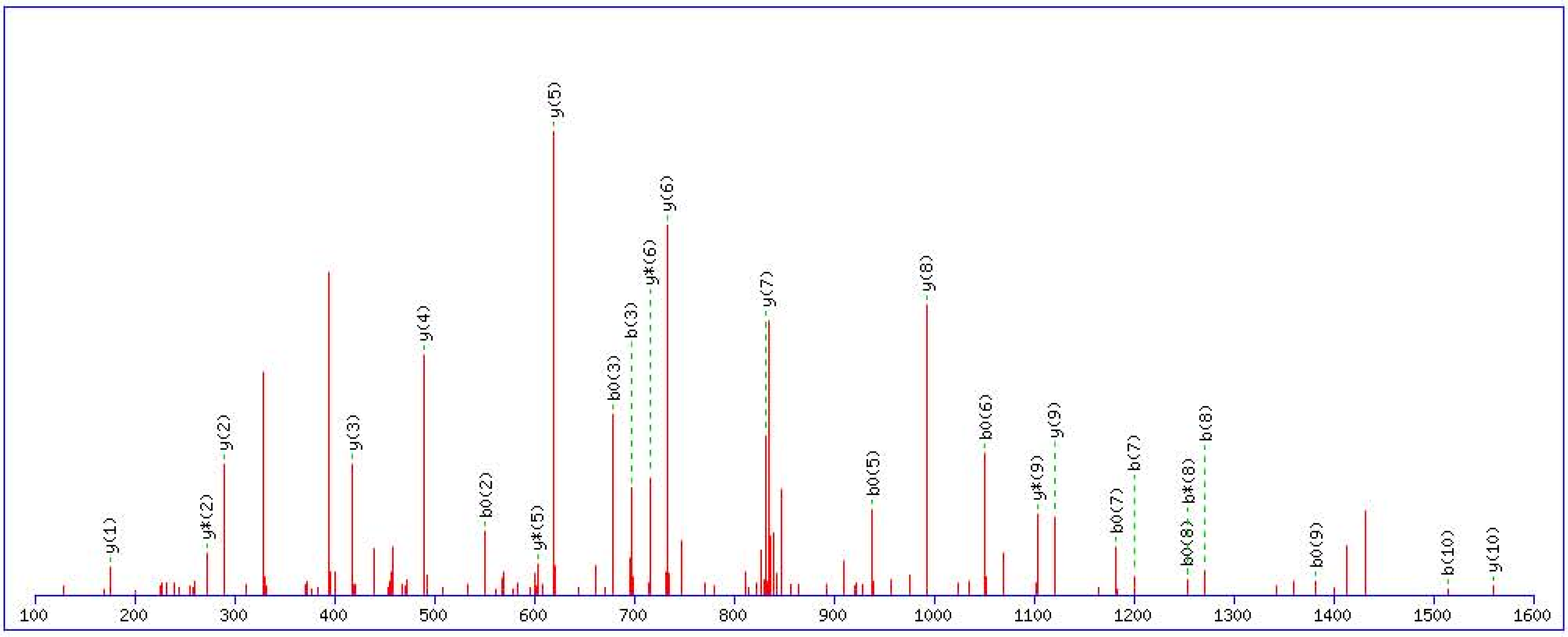
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **EQQCVIMAENR**
Found in **PLGB_HUMAN**, Plasminogen-like protein B OS=Homo sapiens GN=PLGLB1 PE=1 SV=1

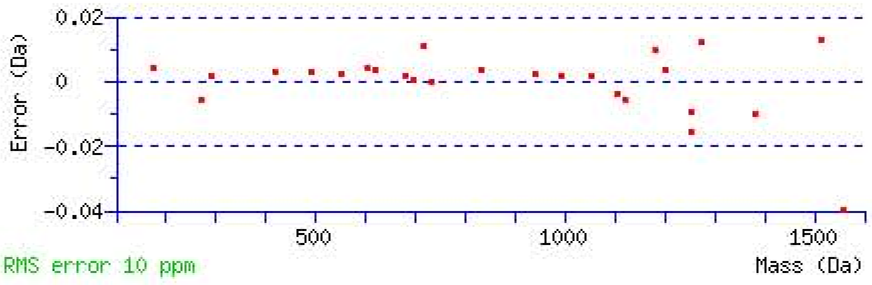
Match to Query 40212: 1687.782908 from(844.898730,2+) rtinseconds(1812) index(67558)
Title: Locus:1.1.1.1568.12 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

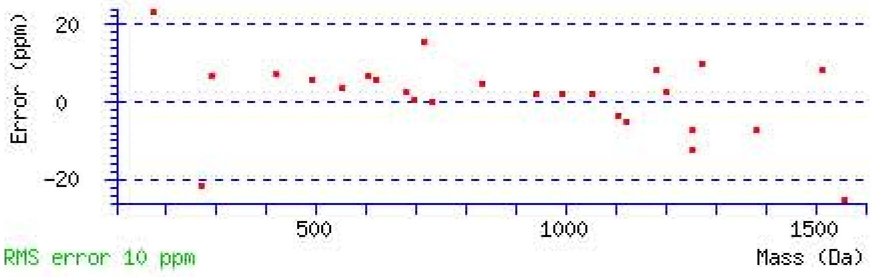
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1687.784393
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 71  Expect: 1.1e-006
Matches : 26/114 fragment ions using 42 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 11 |
| 2 | 569.275195 | 285.141236 | 552.248646 | 276.627961 | 551.264630 | 276.135953 | Q | ***1559.749102*** | 780.378189 | 1542.722553 | 771.864915 | 1541.738537 | 771.372907 | 10 |
| 3 | **697.333773** | 349.170525 | 680.307224 | 340.657250 | 679.323208 | 340.165242 | Q | ***1120.523776*** | 560.765526 | 1103.497227 | 552.252252 | 1102.513211 | 551.760244 | 9 |
| 4 | 857.364422 | 429.185849 | 840.337873 | 420.672575 | 839.353857 | 420.180567 | C | ***992.465198*** | 496.736237 | 975.438649 | 488.222963 | 974.454633 | 487.730955 | 8 |
| 5 | 956.432836 | 478.720056 | 939.406287 | 470.206782 | 938.422271 | 469.714774 | V | ***832.434549*** | 416.720913 | 815.408000 | 408.207638 | 814.423984 | 407.715630 | 7 |
| 6 | 1069.516900 | 535.262088 | 1052.490351 | 526.748814 | 1051.506335 | 526.256806 | I | ***733.366135*** | 367.186706 | 716.339586 | 358.673431 | 715.355570 | 358.181423 | 6 |
| 7 | **1200.557385** | 600.782331 | 1183.530836 | 592.269056 | 1182.546820 | 591.777048 | M | ***620.282071*** | 310.644674 | 603.255522 | 302.131399 | 602.271506 | 301.639391 | 5 |
| 8 | **1271.594499** | 636.300888 | 1254.567950 | 627.787613 | 1253.583934 | 627.295605 | A | ***489.241586*** | 245.124431 | 472.215037 | 236.611156 | 471.231021 | 236.119148 | 4 |
| 9 | 1400.637092 | 700.822184 | 1383.610543 | 692.308910 | 1382.626527 | 691.816902 | E | ***418.204472*** | 209.605874 | 401.177923 | 201.092600 | 400.193907 | 200.600592 | 3 |
| 10 | **1514.680019** | 757.843648 | 1497.653470 | 749.330373 | 1496.669454 | 748.838365 | N | ***289.161879*** | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EQQCVIMAENR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 70.6 | 1687.784393 | -0.001485 | EQQCVIMAENR |
| 68.7 | 1687.784393 | -0.001485 | EQQCVIMAENR |
| 10.7 | 1687.781006 | 0.001902 | ELMAWNQAENR |
| 7.0 | 1687.758408 | 0.024500 | ADGSCSTDFKTTRSR |
| 4.1 | 1687.763275 | 0.019633 | KMFKQTWMDNMGR |
| 3.6 | 1687.773666 | 0.009242 | TTGPPSGQMPDNPPHR |
| 3.6 | 1687.776093 | 0.006815 | QQEEAQAAAAAASAESR |
| 3.4 | 1687.791382 | -0.008474 | GAEDSLADQAANKWGR |
| 2.2 | 1687.773193 | 0.009715 | FGAVCTCMEKATGLK |
| 2.2 | 1687.773636 | 0.009272 | GSSLCSYYGRSAAGPR |

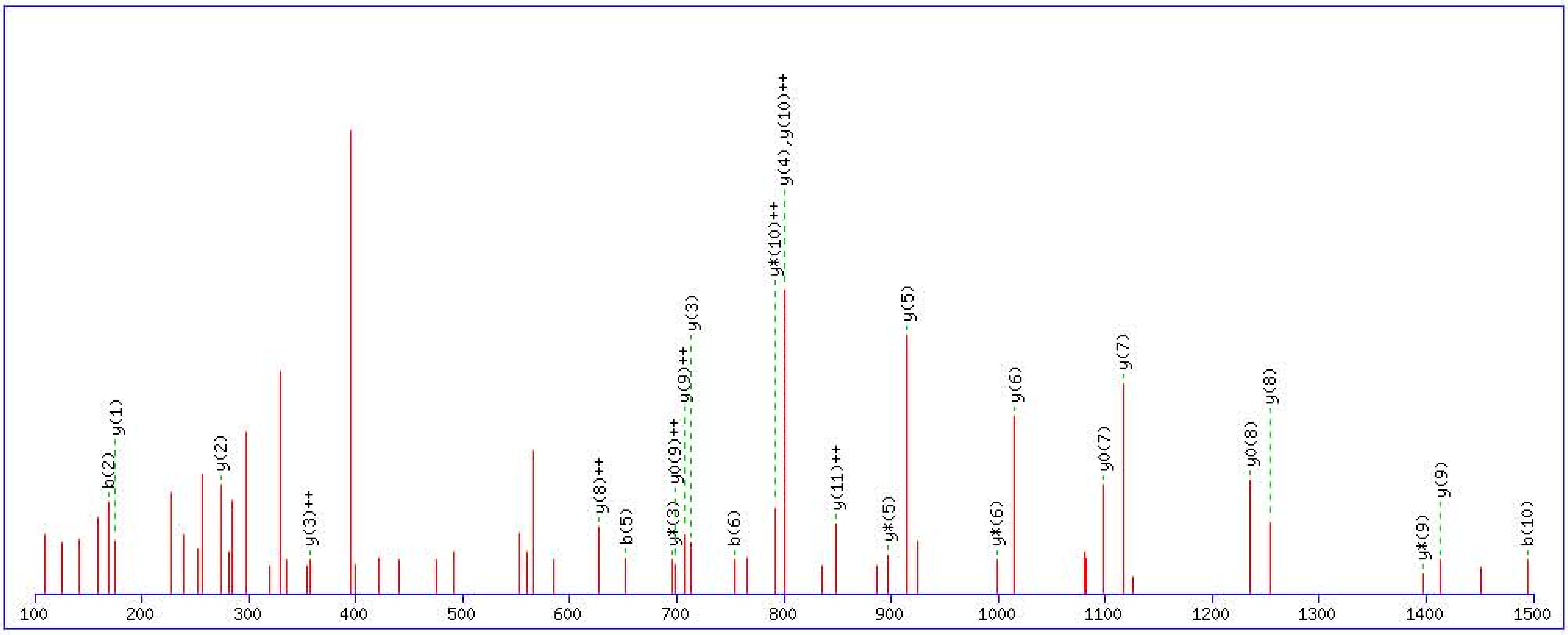
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **APWCHTTNSQVR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

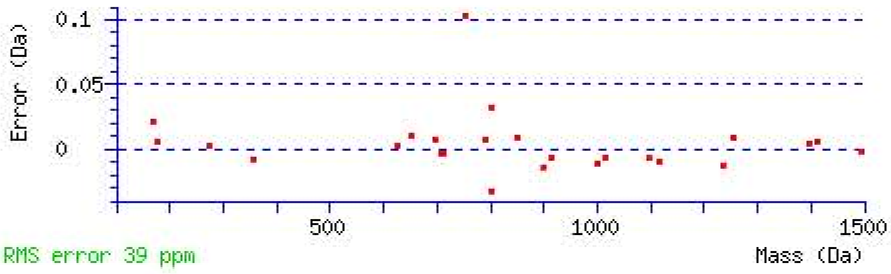
Match to Query 42017: 1766.825622 from(589.949150,3+) rtinseconds(1498) index(18476)
Title: Locus:1.1.1.524.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

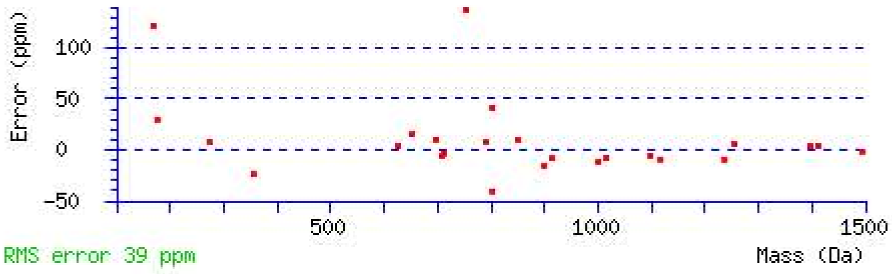
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1766.834488
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q10** : Biotin:Thermo-21345 (Q)
**Ions Score:** 44 **Expect:** 0.00057
**Matches :** 26/102 fragment ions using 52 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 12 |
| 2 | **169.097154** | 85.052215 | | | | | P | 1696.804643 | 848.905960 | 1679.778094 | 840.392685 | 1678.794078 | 839.900677 | 11 |
| 3 | 355.176467 | 178.091872 | | | | | W | 1599.751879 | 800.379578 | 1582.725330 | 791.866303 | 1581.741314 | 791.374295 | 10 |
| 4 | 515.207116 | 258.107196 | | | | | C | ***1413.672566*** | 707.339921 | 1396.646017 | 698.826647 | 1395.662001 | 698.334639 | 9 |
| 5 | **652.266028** | 326.636652 | | | | | H | ***1253.641917*** | 627.324597 | 1236.615368 | 618.811322 | 1235.631352 | 618.319314 | 8 |
| 6 | **753.313707** | 377.160492 | | | 735.303142 | 368.155209 | T | ***1116.583005*** | 558.795141 | 1099.556456 | 550.281866 | 1098.572440 | 549.789858 | 7 |
| 7 | 854.361386 | 427.684331 | | | 836.350821 | 418.679049 | T | ***1015.535326*** | 508.271301 | 998.508777 | 499.758027 | 997.524761 | 499.266019 | 6 |
| 8 | 968.404313 | 484.705795 | 951.377764 | 476.192520 | 950.393748 | 475.700512 | N | ***914.487647*** | 457.747462 | 897.461098 | 449.234187 | 896.477082 | 448.742179 | 5 |
| 9 | 1055.436341 | 528.221809 | 1038.409792 | 519.708534 | 1037.425776 | 519.216526 | S | ***800.444720*** | 400.725998 | 783.418171 | 392.212724 | 782.434155 | 391.720716 | 4 |
| 10 | **1494.661667** | 747.834472 | 1477.635118 | 739.321197 | 1476.651102 | 738.829189 | Q | ***713.412692*** | 357.209984 | 696.386143 | 348.696710 | | | 3 |
| 11 | 1593.730081 | 797.368679 | 1576.703532 | 788.855404 | 1575.719516 | 788.363396 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084047 | | | 2 |
| 12 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of APWCHTTNSQVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.0 | 1766.834488 | -0.008866 | APWCHTTNSQVR |

**Mascot:** http://www.matrixscience.com/

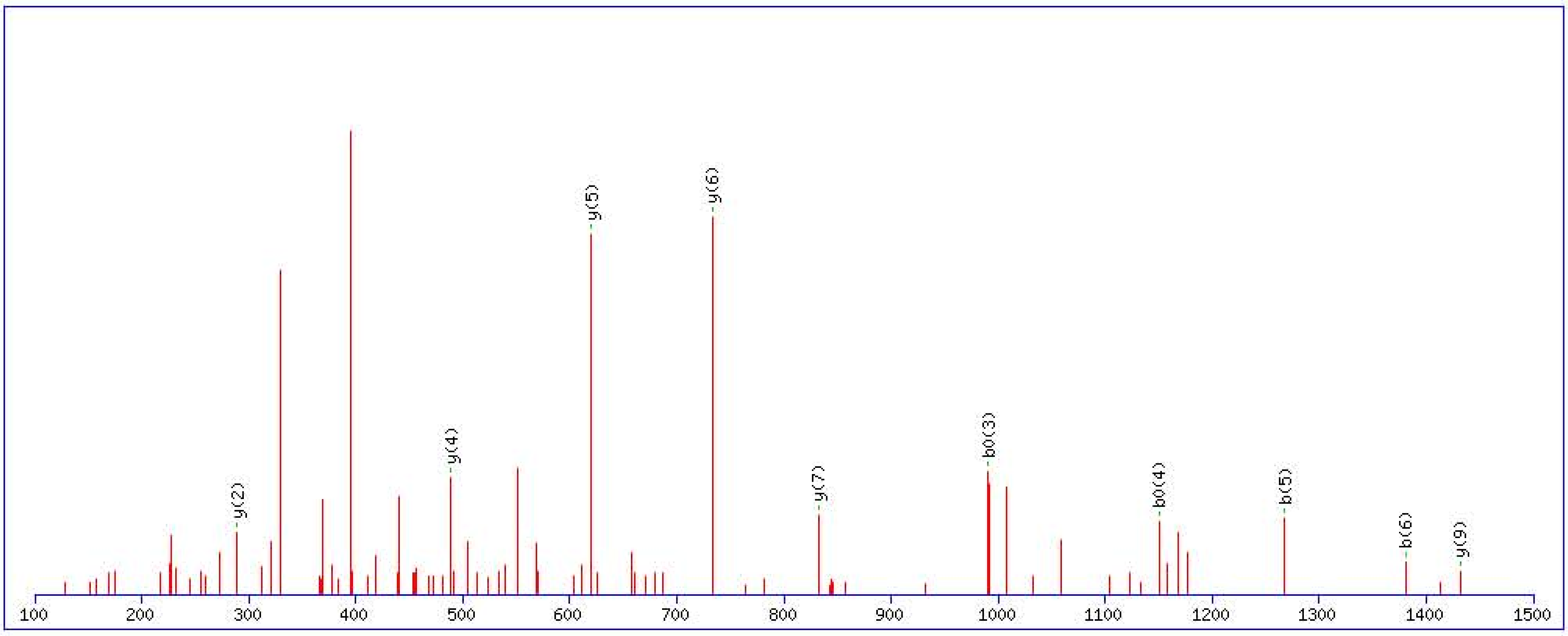
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EQQCVIMAENR**
Found in **PLGB_HUMAN**, Plasminogen-like protein B OS=Homo sapiens GN=PLGLB1 PE=1 SV=1

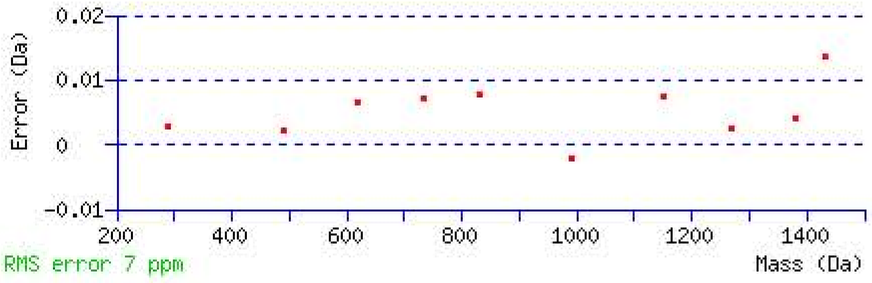
Match to Query 46476: 1998.951822 from(667.324550,3+) rtinseconds(2127) index(69541)
Title: Locus:1.1.1.1678.6 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

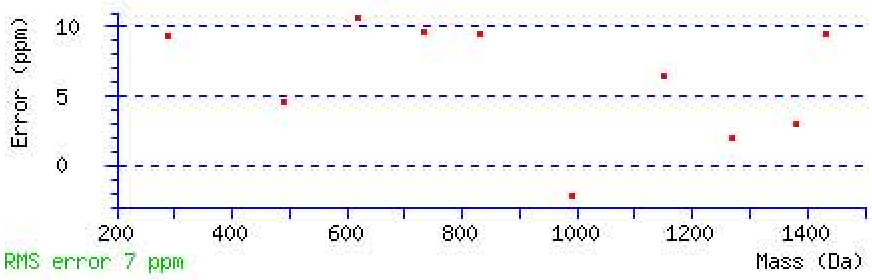
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1998.951141
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 37  Expect: 0.00068
Matches : 10/114 fragment ions using 14 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 11 |
| 2 | 569.275195 | 285.141236 | 552.248646 | 276.627961 | 551.264630 | 276.135953 | Q | 1870.915850 | 935.961563 | 1853.889301 | 927.448288 | 1852.905285 | 926.956280 | 10 |
| 3 | 1008.500521 | 504.753899 | 991.473972 | 496.240624 | 990.489956 | 495.748616 | Q | ***1431.690524*** | 716.348900 | 1414.663975 | 707.835625 | 1413.679959 | 707.343617 | 9 |
| 4 | 1168.531170 | 584.769223 | 1151.504621 | 576.255949 | 1150.520605 | 575.763940 | C | 992.465198 | 496.736237 | 975.438649 | 488.222962 | 974.454633 | 487.730954 | 8 |
| 5 | **1267.599584** | 634.303430 | 1250.573035 | 625.790156 | 1249.589019 | 625.298148 | V | ***832.434549*** | 416.720912 | 815.408000 | 408.207638 | 814.423984 | 407.715630 | 7 |
| 6 | **1380.683648** | 690.845462 | 1363.657099 | 682.332188 | 1362.673083 | 681.840179 | I | ***733.366135*** | 367.186705 | 716.339586 | 358.673431 | 715.355570 | 358.181423 | 6 |
| 7 | 1511.724133 | 756.365704 | 1494.697584 | 747.852430 | 1493.713568 | 747.360422 | M | ***620.282071*** | 310.644673 | 603.255522 | 302.131399 | 602.271506 | 301.639391 | 5 |
| 8 | 1582.761247 | 791.884261 | 1565.734698 | 783.370987 | 1564.750682 | 782.878979 | A | ***489.241586*** | 245.124431 | 472.215037 | 236.611156 | 471.231021 | 236.119148 | 4 |
| 9 | 1711.803840 | 856.405558 | 1694.777291 | 847.892283 | 1693.793275 | 847.400275 | E | 418.204472 | 209.605874 | 401.177923 | 201.092599 | 400.193907 | 200.600591 | 3 |
| 10 | 1825.846767 | 913.427021 | 1808.820218 | 904.913747 | 1807.836202 | 904.421739 | N | ***289.161879*** | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 11 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of EQQCVIMAENR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 37.4 | 1998.951141 | 0.000681 | EQQCVIMAENR |
| 3.5 | 1998.979935 | -0.028113 | EYVLRPSYNGSFVTPDR |
| 3.1 | 1998.942841 | 0.008981 | QQEEAQAAAAAASAESR |
| 3.1 | 1998.950912 | 0.000910 | YEAKQLRTFYQMYDK |

**Mascot:** http://www.matrixscience.com/

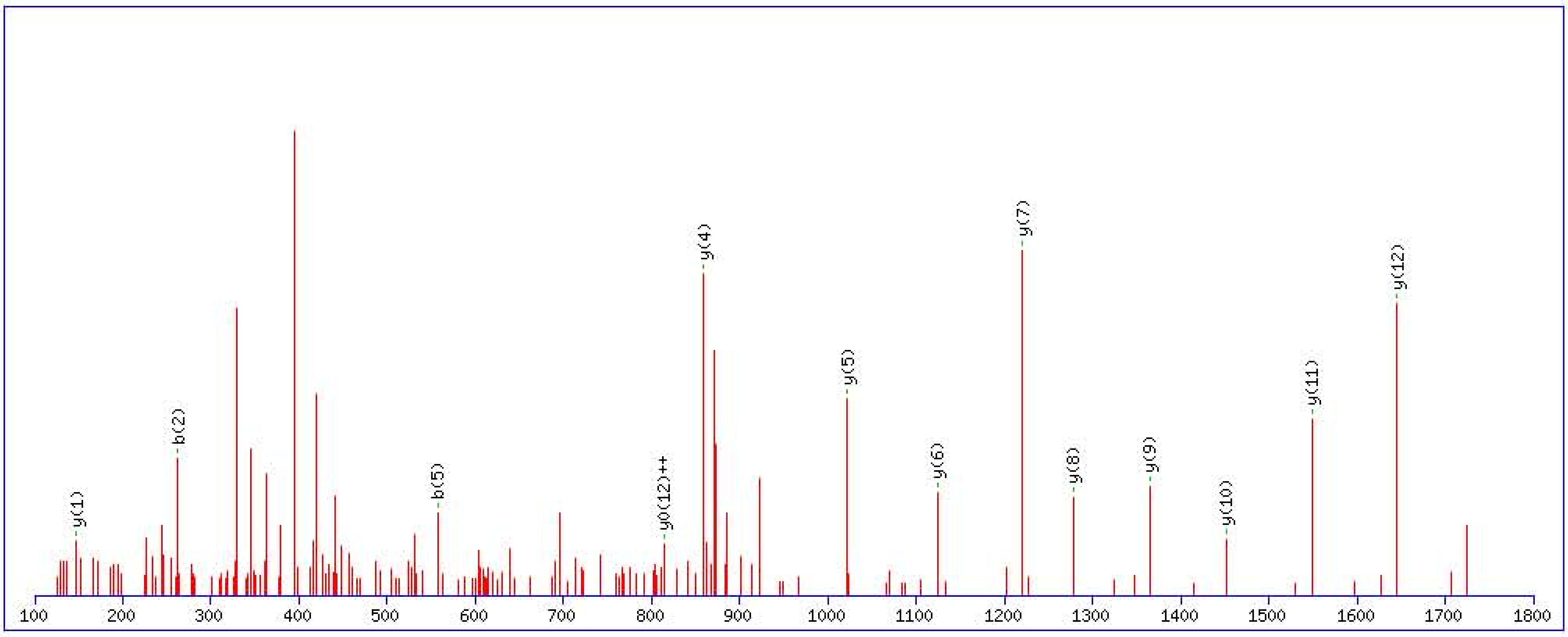
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **CTTPPPSSGPTYQCLK**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

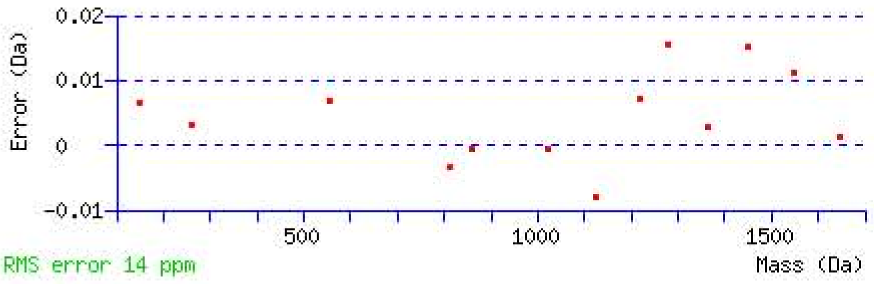
Match to Query 49314: 2103.978162 from(702.333330,3+) rtinseconds(1757) index(67249)
Title: Locus:1.1.1.1549.21 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

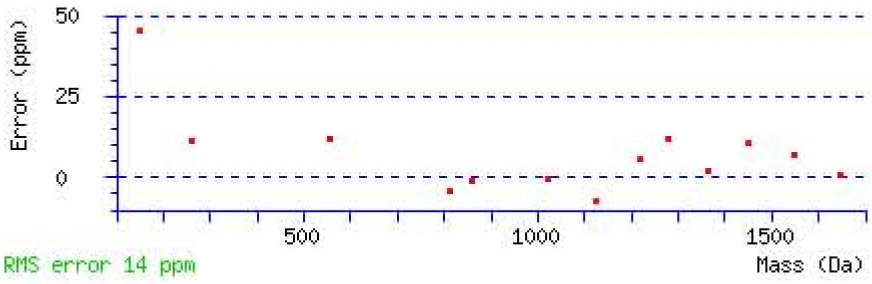
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2103.979172
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 85  Expect: 5.1e-008
Matches : 13/144 fragment ions using 16 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 16 |
| 2 | **262.085604** | 131.546440 | | | 244.075039 | 122.541158 | T | 1944.955785 | 972.981531 | 1927.929236 | 964.468256 | 1926.945220 | 963.976248 | 15 |
| 3 | 363.133283 | 182.070280 | | | 345.122718 | 173.064997 | T | 1843.908106 | 922.457691 | 1826.881557 | 913.944417 | 1825.897541 | 913.452409 | 14 |
| 4 | 460.186047 | 230.596661 | | | 442.175482 | 221.591379 | P | 1742.860427 | 871.933852 | 1725.833878 | 863.420577 | 1724.849862 | 862.928569 | 13 |
| 5 | **557.238811** | 279.123044 | | | 539.228246 | 270.117761 | P | ***1645.807663*** | 823.407470 | 1628.781114 | 814.894195 | 1627.797098 | 814.402187 | 12 |
| 6 | 654.291575 | 327.649426 | | | 636.281010 | 318.644143 | P | ***1548.754899*** | 774.881088 | 1531.728350 | 766.367813 | 1530.744334 | 765.875805 | 11 |
| 7 | 741.323603 | 371.165440 | | | 723.313038 | 362.160157 | S | ***1451.702135*** | 726.354706 | 1434.675586 | 717.841431 | 1433.691570 | 717.349423 | 10 |
| 8 | 828.355631 | 414.681454 | | | 810.345066 | 405.676171 | S | ***1364.670107*** | 682.838692 | 1347.643558 | 674.325417 | 1346.659542 | 673.833409 | 9 |
| 9 | 885.377095 | 443.192186 | | | 867.366530 | 434.186903 | G | ***1277.638079*** | 639.322678 | 1260.611530 | 630.809403 | 1259.627514 | 630.317395 | 8 |
| 10 | 982.429859 | 491.718568 | | | 964.419294 | 482.713285 | P | ***1220.616615*** | 610.811946 | 1203.590066 | 602.298671 | 1202.606050 | 601.806663 | 7 |
| 11 | 1083.477538 | 542.242407 | | | 1065.466973 | 533.237125 | T | ***1123.563851*** | 562.285564 | 1106.537302 | 553.772289 | 1105.553286 | 553.280281 | 6 |
| 12 | 1246.540867 | 623.774072 | | | 1228.530302 | 614.768789 | Y | ***1022.516172*** | 511.761724 | 1005.489623 | 503.248450 | | | 5 |
| 13 | 1685.766193 | 843.386735 | 1668.739644 | 834.873460 | 1667.755628 | 834.381452 | Q | ***859.452843*** | 430.230060 | 842.426294 | 421.716785 | | | 4 |
| 14 | 1845.796842 | 923.402059 | 1828.770293 | 914.888785 | 1827.786277 | 914.396777 | C | 420.227517 | 210.617396 | 403.200968 | 202.104122 | | | 3 |
| 15 | 1958.880906 | 979.944091 | 1941.854357 | 971.430817 | 1940.870341 | 970.938809 | L | 260.196868 | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 16 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of CTTPPPSSGPTYQCLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 84.9 | 2103.979172 | -0.001010 | CTTPPPSSGPTYQCLK |
| 14.9 | 2103.964554 | 0.013608 | TAADTPAIMNWDLFFTMK |

**Mascot:** http://www.matrixscience.com/

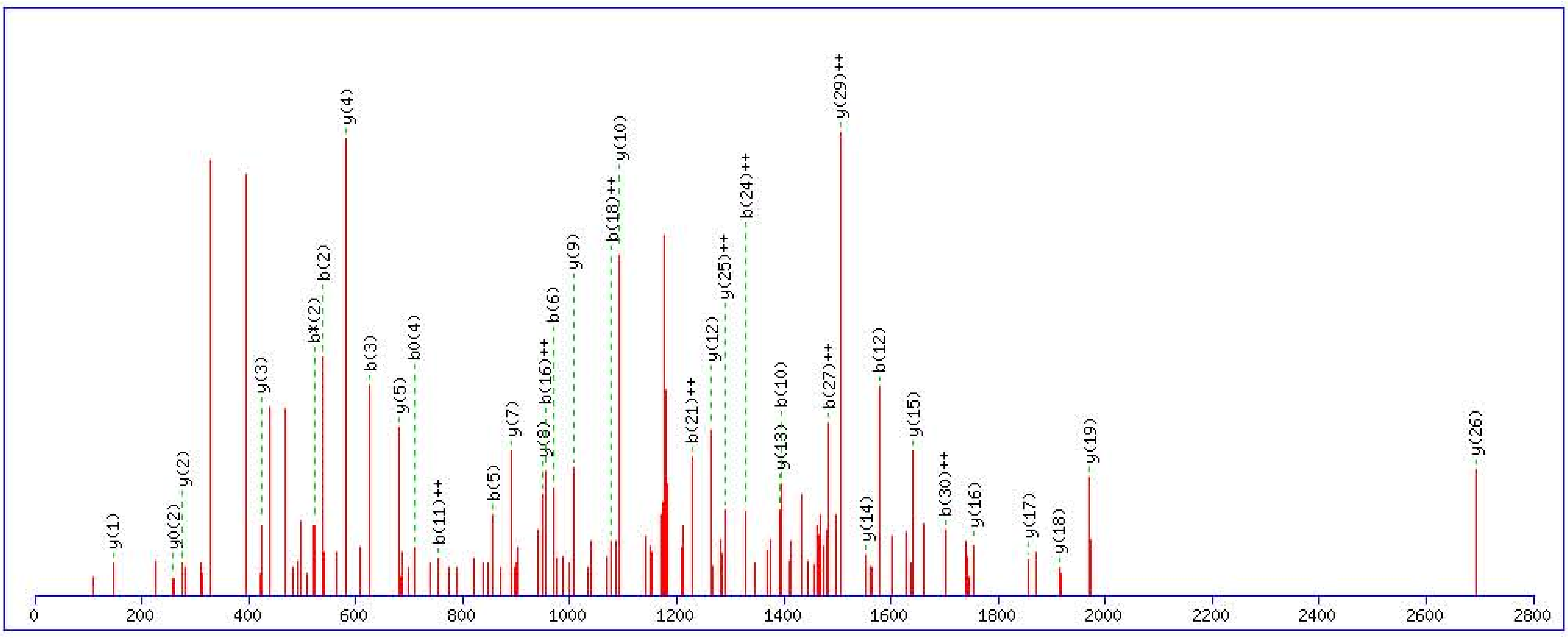
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VQSTELCAGHLAGGTDSCQGDSGGPLVCFEK**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

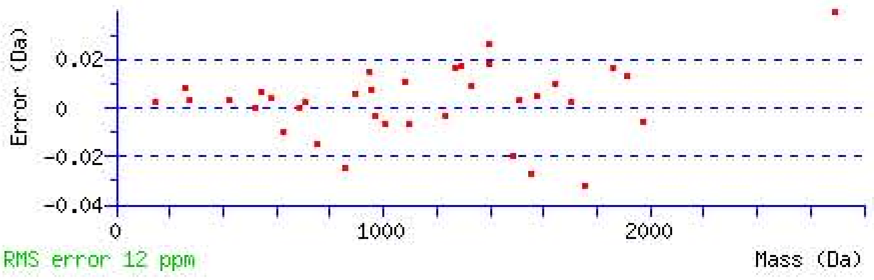
Match to Query 53919: 3547.565772 from(1183.529200,3+) rtinseconds(2154) index(69692)
Title: Locus:1.1.1.1687.20 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

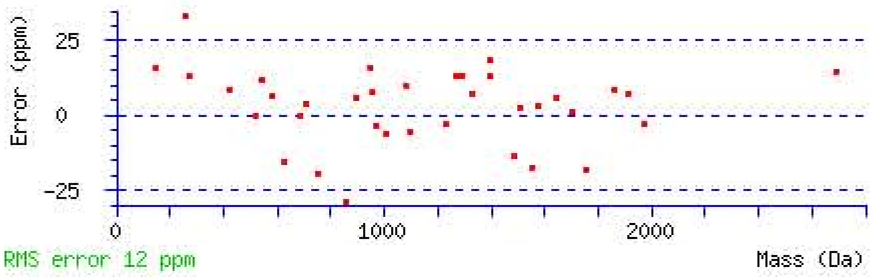
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3547.584061
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Ions Score: 96  Expect: 3.8e-009
Matches : 36/352 fragment ions using 73 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 31 |
| 2 | **539.301016** | 270.154146 | 522.274467 | 261.640872 | | | Q | 3449.522877 | 1725.265076 | 3432.496328 | 1716.751802 | 3431.512312 | 1716.259794 | 30 |
| 3 | **626.333044** | 313.670160 | 609.306495 | 305.156886 | 608.322479 | 304.664878 | S | 3010.297551 | 1505.652413 | 2993.271002 | 1497.139139 | 2992.286986 | 1496.647131 | 29 |
| 4 | 727.380723 | 364.194000 | 710.354174 | 355.680725 | 709.370158 | 355.188717 | T | 2923.265523 | 1462.136399 | 2906.238974 | 1453.623125 | 2905.254958 | 1453.131117 | 28 |
| 5 | **856.423316** | 428.715296 | 839.396767 | 420.202022 | 838.412751 | 419.710014 | E | 2822.217844 | 1411.612560 | 2805.191295 | 1403.099285 | 2804.207279 | 1402.607277 | 27 |
| 6 | **969.507380** | 485.257328 | 952.480831 | 476.744054 | 951.496815 | 476.252046 | L | ***2693.175251*** | 1347.091263 | 2676.148702 | 1338.577989 | 2675.164686 | 1338.085981 | 26 |
| 7 | 1129.538029 | 565.272653 | 1112.511480 | 556.759378 | 1111.527464 | 556.267370 | C | 2580.091187 | 1290.549231 | 2563.064638 | 1282.035957 | 2562.080622 | 1281.543949 | 25 |
| 8 | 1200.575143 | 600.791210 | 1183.548594 | 592.277935 | 1182.564578 | 591.785927 | A | 2420.060538 | 1210.533907 | 2403.033989 | 1202.020632 | 2402.049973 | 1201.528624 | 24 |
| 9 | 1257.596607 | 629.301942 | 1240.570058 | 620.788667 | 1239.586042 | 620.296659 | G | 2349.023424 | 1175.015350 | 2331.996875 | 1166.502075 | 2331.012859 | 1166.010067 | 23 |
| 10 | **1394.655519** | 697.831397 | 1377.628970 | 689.318123 | 1376.644954 | 688.826115 | H | 2292.001960 | 1146.504618 | 2274.975411 | 1137.991343 | 2273.991395 | 1137.499335 | 22 |
| 11 | 1507.739583 | **754.373429** | 1490.713034 | 745.860155 | 1489.729018 | 745.368147 | L | 2154.943048 | 1077.975162 | 2137.916499 | 1069.461887 | 2136.932483 | 1068.969879 | 21 |
| 12 | **1578.776697** | 789.891986 | 1561.750148 | 781.378712 | 1560.766132 | 780.886704 | A | 2041.858984 | 1021.433130 | 2024.832435 | 1012.919855 | 2023.848419 | 1012.427847 | 20 |
| 13 | 1635.798161 | 818.402718 | 1618.771612 | 809.889444 | 1617.787596 | 809.397436 | G | ***1970.821870*** | 985.914573 | 1953.795321 | 977.401298 | 1952.811305 | 976.909290 | 19 |
| 14 | 1692.819625 | 846.913450 | 1675.793076 | 838.400176 | 1674.809060 | 837.908168 | G | ***1913.800406*** | 957.403841 | 1896.773857 | 948.890566 | 1895.789841 | 948.398558 | 18 |
| 15 | 1793.867304 | 897.437290 | 1776.840755 | 888.924015 | 1775.856739 | 888.432007 | T | ***1856.778942*** | 928.893109 | 1839.752393 | 920.379835 | 1838.768377 | 919.887826 | 17 |
| 16 | 1908.894247 | **954.950761** | 1891.867698 | 946.437487 | 1890.883682 | 945.945479 | D | ***1755.731263*** | 878.369269 | 1738.704714 | 869.855995 | 1737.720698 | 869.363987 | 16 |
| 17 | 1995.926275 | 998.466775 | 1978.899726 | 989.953501 | 1977.915710 | 989.461493 | S | ***1640.704320*** | 820.855798 | 1623.677771 | 812.342523 | 1622.693755 | 811.850515 | 15 |
| 18 | 2155.956924 | **1078.482100** | 2138.930375 | 1069.968825 | 2137.946359 | 1069.476817 | C | ***1553.672292*** | 777.339784 | 1536.645743 | 768.826509 | 1535.661727 | 768.334501 | 14 |
| 19 | 2284.015502 | 1142.511389 | 2266.988953 | 1133.998114 | 2266.004937 | 1133.506106 | Q | ***1393.641643*** | 697.324459 | 1376.615094 | 688.811185 | 1375.631078 | 688.319177 | 13 |
| 20 | 2341.036966 | 1171.022121 | 2324.010417 | 1162.508846 | 2323.026401 | 1162.016838 | G | ***1265.583065*** | 633.295170 | 1248.556516 | 624.781896 | 1247.572500 | 624.289888 | 12 |
| 21 | 2456.063909 | **1228.535592** | 2439.037360 | 1220.022318 | 2438.053344 | 1219.530310 | D | 1208.561601 | 604.784438 | 1191.535052 | 596.271164 | 1190.551036 | 595.779156 | 11 |
| 22 | 2543.095937 | 1272.051606 | 2526.069388 | 1263.538332 | 2525.085372 | 1263.046324 | S | ***1093.534658*** | 547.270967 | 1076.508109 | 538.757692 | 1075.524093 | 538.265684 | 10 |
| 23 | 2600.117401 | 1300.562338 | 2583.090852 | 1292.049064 | 2582.106836 | 1291.557056 | G | ***1006.502630*** | 503.754953 | 989.476081 | 495.241678 | 988.492065 | 494.749670 | 9 |
| 24 | 2657.138865 | **1329.073070** | 2640.112316 | 1320.559796 | 2639.128300 | 1320.067788 | G | ***949.481166*** | 475.244221 | 932.454617 | 466.730946 | 931.470601 | 466.238938 | 8 |
| 25 | 2754.191629 | 1377.599452 | 2737.165080 | 1369.086178 | 2736.181064 | 1368.594170 | P | ***892.459702*** | 446.733489 | 875.433153 | 438.220214 | 874.449137 | 437.728206 | 7 |
| 26 | 2867.275693 | 1434.141484 | 2850.249144 | 1425.628210 | 2849.265128 | 1425.136202 | L | 795.406938 | 398.207107 | 778.380389 | 389.693832 | 777.396373 | 389.201824 | 6 |
| 27 | 2966.344107 | **1483.675691** | 2949.317558 | 1475.162417 | 2948.333542 | 1474.670409 | V | ***682.322874*** | 341.665075 | 665.296325 | 333.151800 | 664.312309 | 332.659792 | 5 |
| 28 | 3126.374756 | 1563.691016 | 3109.348207 | 1555.177741 | 3108.364191 | 1554.685733 | C | ***583.254460*** | 292.130868 | 566.227911 | 283.617593 | 565.243895 | 283.125585 | 4 |
| 29 | 3273.443170 | 1637.225223 | 3256.416621 | 1628.711948 | 3255.432605 | 1628.219940 | F | ***423.223811*** | 212.115543 | 406.197262 | 203.602269 | 405.213246 | 203.110261 | 3 |
| 30 | 3402.485763 | **1701.746519** | 3385.459214 | 1693.233245 | 3384.475198 | 1692.741237 | E | ***276.155397*** | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 31 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



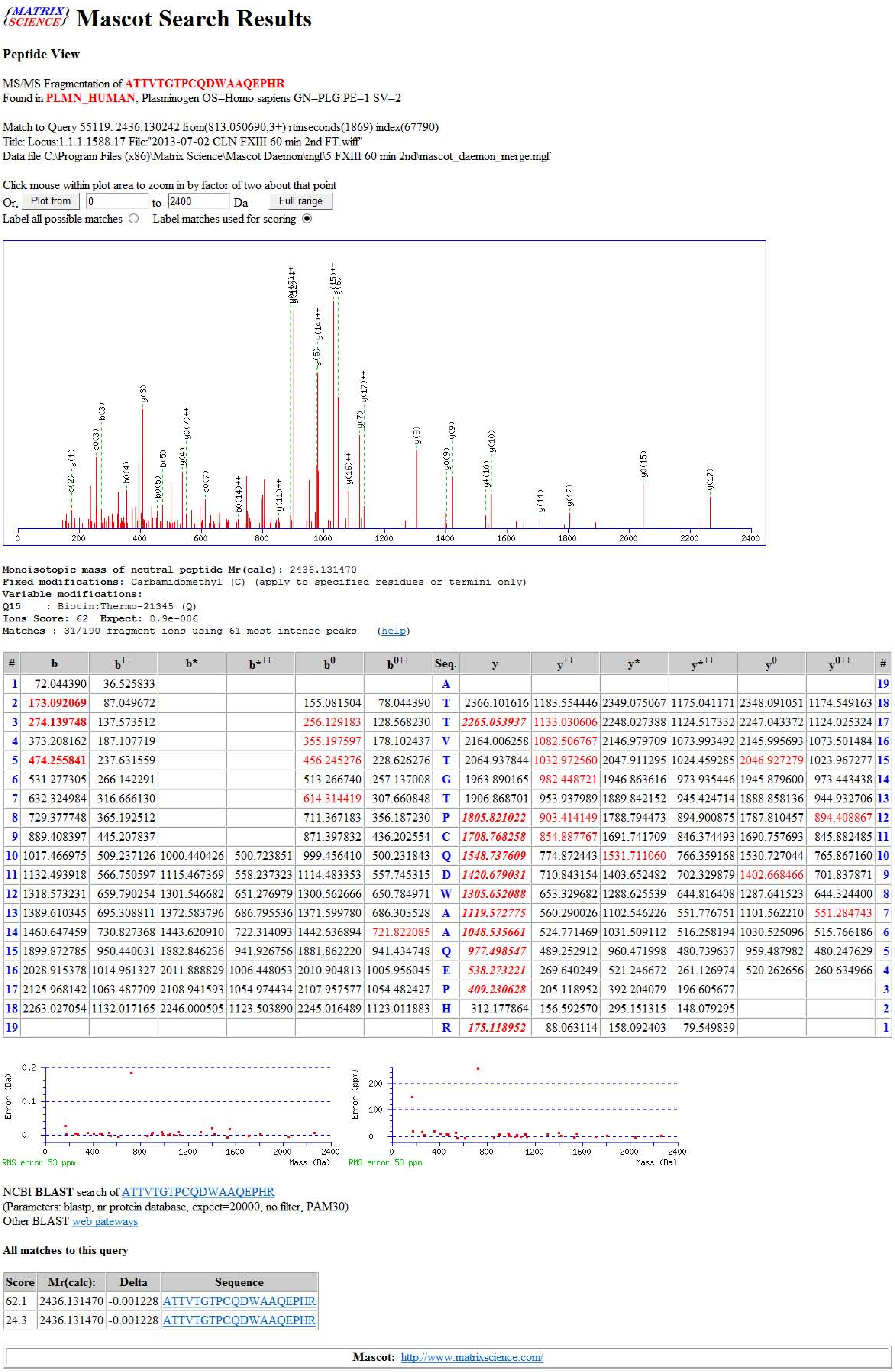


NCBI **BLAST** search of VQSTELCAGHLAGGTDSCQGDSGGPLVCFEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 95.7 | 3547.584061 | -0.018289 | VQSTELCAGHLAGGTDSCQGDSGGPLVCFEK |
| 11.9 | 3547.584061 | -0.018289 | VQSTELCAGHLAGGTDSCQGDSGGPLVCFEK |

**Mascot:** http://www.matrixscience.com/



# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ATTVTGTPCQDWAAQEPHR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

Match to Query 55119: 2436.130242 from(813.050690,3+) rtinseconds(1869) index(67790)
Title: Locus:1.1.1.1588.17 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●

```
Monoisotopic mass of neutral peptide Mr(calc): 2436.131470
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q15     : Biotin:Thermo-21345 (Q)
Ions Score: 62  Expect: 8.9e-006
Matches : 31/190 fragment ions using 61 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 | | | | | A | | | | | | | 19 |
| 2 | **173.092069** | 87.049672 | | | 155.081504 | 78.044390 | T | 2366.101616 | 1183.554446 | 2349.075067 | 1175.041171 | 2348.091051 | 1174.549163 | 18 |
| 3 | **274.139748** | 137.573512 | | | 256.129183 | 128.568230 | T | ***2265.053937*** | 1133.030606 | 2248.027388 | 1124.517332 | 2247.043372 | 1124.025324 | 17 |
| 4 | 373.208162 | 187.107719 | | | 355.197597 | 178.102437 | V | 2164.006258 | 1082.506767 | 2146.979709 | 1073.993492 | 2145.995693 | 1073.501484 | 16 |
| 5 | **474.255841** | 237.631559 | | | 456.245276 | 228.626276 | T | 2064.937844 | 1032.972560 | 2047.911295 | 1024.459285 | 2046.927279 | 1023.967277 | 15 |
| 6 | 531.277305 | 266.142291 | | | 513.266740 | 257.137008 | G | 1963.890165 | 982.448721 | 1946.863616 | 973.935446 | 1945.879600 | 973.443438 | 14 |
| 7 | 632.324984 | 316.666130 | | | 614.314419 | 307.660848 | T | 1906.868701 | 953.937989 | 1889.842152 | 945.424714 | 1888.858136 | 944.932706 | 13 |
| 8 | 729.377748 | 365.192512 | | | 711.367183 | 356.187230 | P | ***1805.821022*** | 903.414149 | 1788.794473 | 894.900875 | 1787.810457 | 894.408867 | 12 |
| 9 | 889.408397 | 445.207837 | | | 871.397832 | 436.202554 | C | ***1708.768258*** | 854.887767 | 1691.741709 | 846.374493 | 1690.757693 | 845.882485 | 11 |
| 10 | 1017.466975 | 509.237126 | 1000.440426 | 500.723851 | 999.456410 | 500.231843 | Q | ***1548.737609*** | 774.872443 | 1531.711060 | 766.359168 | 1530.727044 | 765.867160 | 10 |
| 11 | 1132.493918 | 566.750597 | 1115.467369 | 558.237323 | 1114.483353 | 557.745315 | D | ***1420.679031*** | 710.843154 | 1403.652482 | 702.329879 | 1402.668466 | 701.837871 | 9 |
| 12 | 1318.573231 | 659.790254 | 1301.546682 | 651.276979 | 1300.562666 | 650.784971 | W | ***1305.652088*** | 653.329682 | 1288.625539 | 644.816408 | 1287.641523 | 644.324400 | 8 |
| 13 | 1389.610345 | 695.308811 | 1372.583796 | 686.795536 | 1371.599780 | 686.303528 | A | ***1119.572775*** | 560.290026 | 1102.546226 | 551.776751 | 1101.562210 | 551.284743 | 7 |
| 14 | 1460.647459 | 730.827368 | 1443.620910 | 722.314093 | 1442.636894 | 721.822085 | A | ***1048.535661*** | 524.771469 | 1031.509112 | 516.258194 | 1030.525096 | 515.766186 | 6 |
| 15 | 1899.872785 | 950.440031 | 1882.846236 | 941.926756 | 1881.862220 | 941.434748 | Q | ***977.498547*** | 489.252912 | 960.471998 | 480.739637 | 959.487982 | 480.247629 | 5 |
| 16 | 2028.915378 | 1014.961327 | 2011.888829 | 1006.448053 | 2010.904813 | 1005.956045 | E | ***538.273221*** | 269.640249 | 521.246672 | 261.126974 | 520.262656 | 260.634966 | 4 |
| 17 | 2125.968142 | 1063.487709 | 2108.941593 | 1054.974434 | 2107.957577 | 1054.482427 | P | ***409.230628*** | 205.118952 | 392.204079 | 196.605677 | | | 3 |
| 18 | 2263.027054 | 1132.017165 | 2246.000505 | 1123.503890 | 2245.016489 | 1123.011883 | H | 312.177864 | 156.592570 | 295.151315 | 148.079295 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |

RMS error 53 ppm

RMS error 53 ppm

NCBI **BLAST** search of ATTVTGTPCQDWAAQEPHR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 62.1 | 2436.131470 | -0.001228 | ATTVTGTPCQDWAAQEPHR |
| 24.3 | 2436.131470 | -0.001228 | ATTVTGTPCQDWAAQEPHR |

**Mascot:** http://www.matrixscience.com/

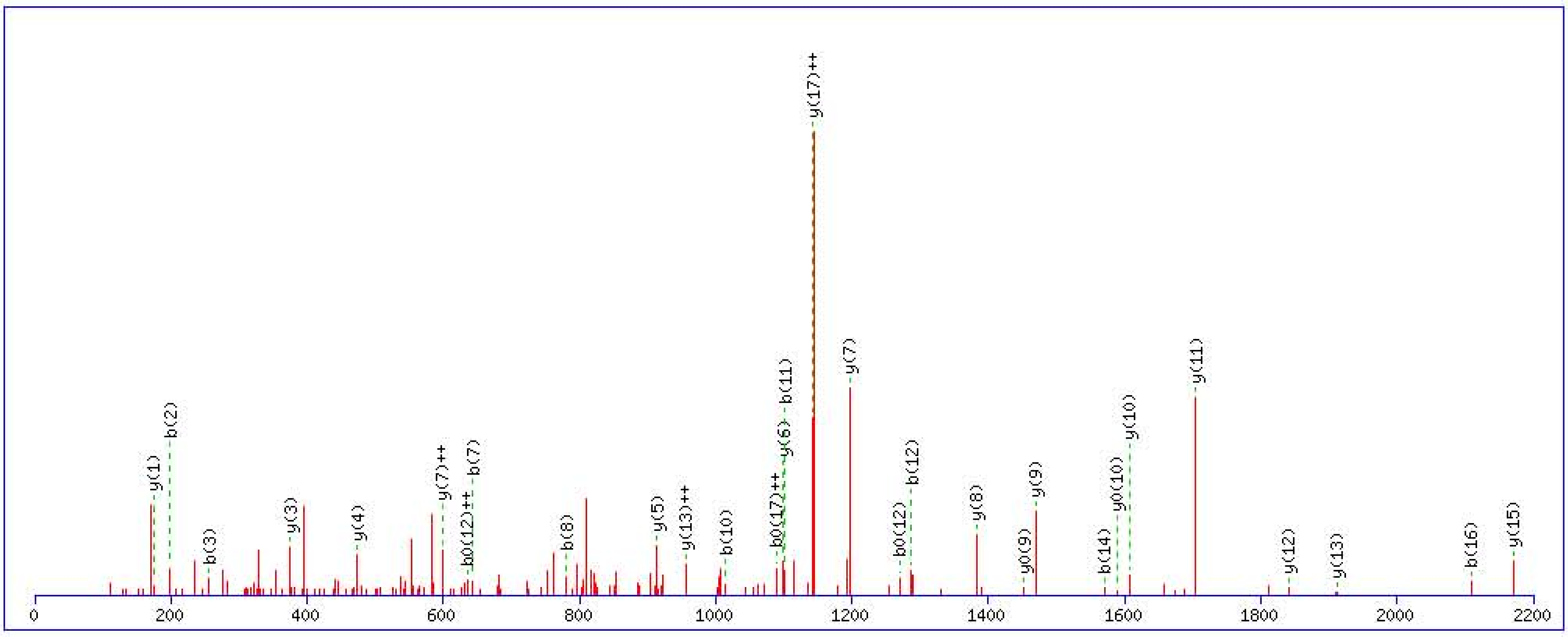
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VVGGCVAHPHSWPWQVSLR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

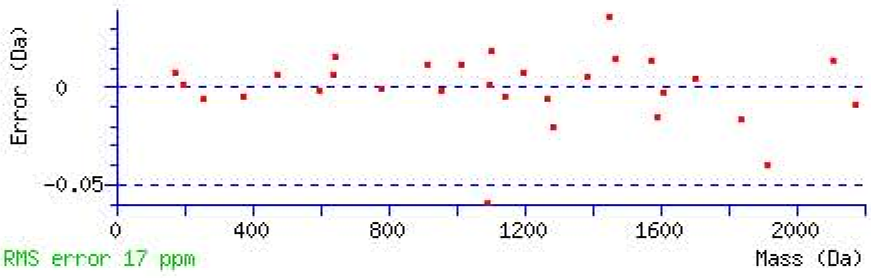
Match to Query 56154: 2482.252602 from(828.424810,3+) rtinseconds(2211) index(70029)
Title: Locus:1.1.1.1707.12 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

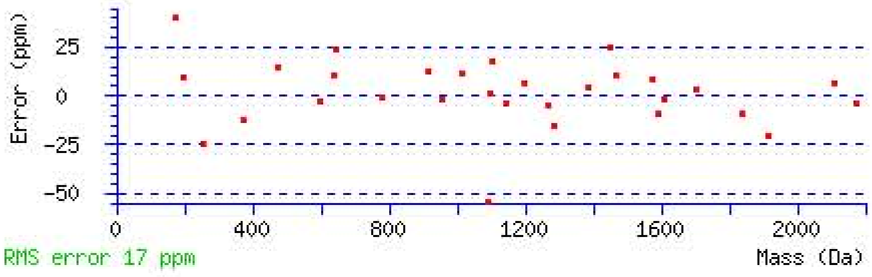
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2482.251480
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q15 : Biotin:Thermo-21345 (Q)
**Ions Score:** 59 **Expect:** 4.3e-005
**Matches :** 30/164 fragment ions using 69 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 19 |
| 2 | **199.144104** | 100.075690 | | | | | V | 2384.190309 | 1192.598792 | 2367.163760 | 1184.085518 | 2366.179744 | 1183.593510 | 18 |
| 3 | **256.165568** | 128.586422 | | | | | G | 2285.121895 | 1143.064585 | 2268.095346 | 1134.551311 | 2267.111330 | 1134.059303 | 17 |
| 4 | 313.187032 | 157.097154 | | | | | G | 2228.100431 | 1114.553853 | 2211.073882 | 1106.040579 | 2210.089866 | 1105.548571 | 16 |
| 5 | 473.217681 | 237.112479 | | | | | C | ***2171.078967*** | 1086.043121 | 2154.052418 | 1077.529847 | 2153.068402 | 1077.037839 | 15 |
| 6 | 572.286095 | 286.646686 | | | | | V | 2011.048318 | 1006.027797 | 1994.021769 | 997.514523 | 1993.037753 | 997.022515 | 14 |
| 7 | **643.323209** | 322.165243 | | | | | A | ***1911.979904*** | 956.493590 | 1894.953355 | 947.980316 | 1893.969339 | 947.488308 | 13 |
| 8 | **780.382121** | 390.694699 | | | | | H | ***1840.942790*** | 920.975033 | 1823.916241 | 912.461759 | 1822.932225 | 911.969751 | 12 |
| 9 | 877.434885 | 439.221081 | | | | | P | ***1703.883878*** | 852.445577 | 1686.857329 | 843.932303 | 1685.873313 | 843.440295 | 11 |
| 10 | **1014.493797** | 507.750537 | | | | | H | ***1606.831114*** | 803.919195 | 1589.804565 | 795.405921 | 1588.820549 | 794.913913 | 10 |
| 11 | **1101.525825** | 551.266550 | | | 1083.515260 | 542.261268 | S | ***1469.772202*** | 735.389739 | 1452.745653 | 726.876465 | 1451.761637 | 726.384457 | 9 |
| 12 | **1287.605138** | 644.306207 | | | 1269.594573 | 635.300924 | W | ***1382.740174*** | 691.873725 | 1365.713625 | 683.360451 | 1364.729609 | 682.868443 | 8 |
| 13 | 1384.657902 | 692.832589 | | | 1366.647337 | 683.827306 | P | ***1196.660861*** | 598.834069 | 1179.634312 | 590.320794 | 1178.650296 | 589.828786 | 7 |
| 14 | **1570.737215** | 785.872245 | | | 1552.726650 | 776.866963 | W | ***1099.608097*** | 550.307687 | 1082.581548 | 541.794412 | 1081.597532 | 541.302404 | 6 |
| 15 | 2009.962541 | 1005.484909 | 1992.935992 | 996.971634 | 1991.951976 | 996.479626 | Q | ***913.528784*** | 457.268030 | 896.502235 | 448.754756 | 895.518219 | 448.262748 | 5 |
| 16 | **2109.030955** | 1055.019115 | 2092.004406 | 1046.505841 | 2091.020390 | 1046.013833 | V | ***474.303458*** | 237.655367 | 457.276909 | 229.142092 | 456.292893 | 228.650084 | 4 |
| 17 | 2196.062983 | 1098.535129 | 2179.036434 | 1090.021855 | 2178.052418 | 1089.529847 | S | ***375.235044*** | 188.121160 | 358.208495 | 179.607886 | 357.224479 | 179.115878 | 3 |
| 18 | 2309.147047 | 1155.077161 | 2292.120498 | 1146.563887 | 2291.136482 | 1146.071879 | L | 288.203016 | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VVGGCVAHPHSWPWQVSLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 58.8 | 2482.251480 | 0.001122 | VVGGCVAHPHSWPWQVSLR |

**Mascot:** http://www.matrixscience.com/

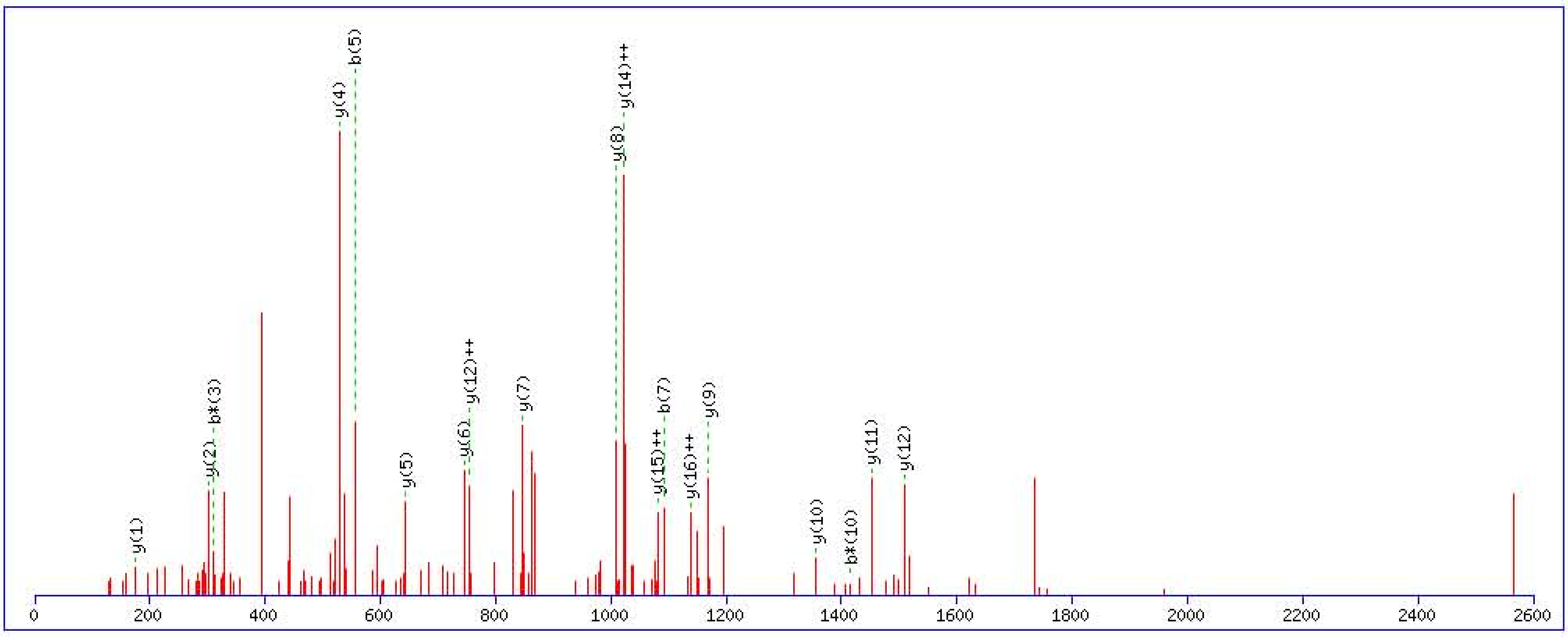
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NPDNDPQGPWCYTTDPEKR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

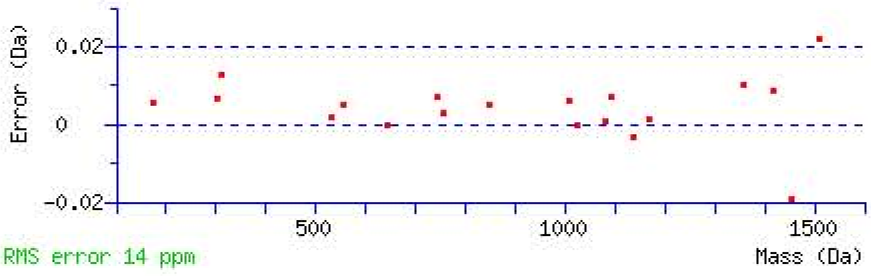
Match to Query 57648: 2600.140332 from(867.720720,3+) rtinseconds(1971) index(68570)
Title: Locus:1.1.1.1623.26 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

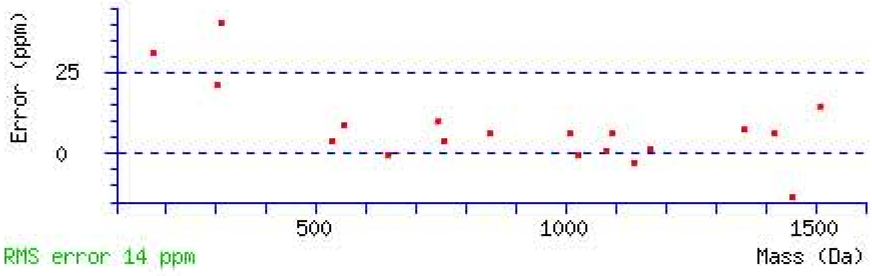
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2600.142410
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7     : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 1.6e-006
Matches : 19/208 fragment ions using 34 most intense peaks   (help)
```

| # | b | b$^{++}$ | b$^{*}$ | b$^{*++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y$^{*}$ | y$^{*++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 19 |
| 2 | 212.102967 | 106.555121 | 195.076418 | 98.041847 | | | P | 2487.106759 | 1244.057017 | 2470.080210 | 1235.543743 | 2469.096194 | 1235.051735 | 18 |
| 3 | 327.129910 | 164.068593 | 310.103361 | 155.555319 | 309.119345 | 155.063311 | D | 2390.053995 | 1195.530635 | 2373.027446 | 1187.017361 | 2372.043430 | 1186.525353 | 17 |
| 4 | 441.172837 | 221.090057 | 424.146288 | 212.576782 | 423.162272 | 212.084774 | N | 2275.027052 | 1138.017164 | 2258.000503 | 1129.503889 | 2257.016487 | 1129.011881 | 16 |
| 5 | **556.199780** | 278.603528 | 539.173231 | 270.090254 | 538.189215 | 269.598246 | D | 2160.984125 | 1080.995700 | 2143.957576 | 1072.482426 | 2142.973560 | 1071.990418 | 15 |
| 6 | 653.252544 | 327.129910 | 636.225995 | 318.616636 | 635.241979 | 318.124628 | P | 2045.957182 | 1023.482229 | 2028.930633 | 1014.968955 | 2027.946617 | 1014.476946 | 14 |
| 7 | **1092.477870** | 546.742573 | 1075.451321 | 538.229299 | 1074.467305 | 537.737290 | Q | 1948.904418 | 974.955847 | 1931.877869 | 966.442572 | 1930.893853 | 965.950564 | 13 |
| 8 | 1149.499334 | 575.253305 | 1132.472785 | 566.740030 | 1131.488769 | 566.248022 | G | ***1509.679092*** | 755.343184 | 1492.652543 | 746.829910 | 1491.668527 | 746.337902 | 12 |
| 9 | 1246.552098 | 623.779687 | 1229.525549 | 615.266413 | 1228.541533 | 614.774404 | P | ***1452.657628*** | 726.832452 | 1435.631079 | 718.319178 | 1434.647063 | 717.827170 | 11 |
| 10 | 1432.631411 | 716.819343 | 1415.604862 | 708.306069 | 1414.620846 | 707.814061 | W | ***1355.604864*** | 678.306070 | 1338.578315 | 669.792796 | 1337.594299 | 669.300788 | 10 |
| 11 | 1592.662060 | 796.834668 | 1575.635511 | 788.321394 | 1574.651495 | 787.829385 | C | ***1169.525551*** | 585.266414 | 1152.499002 | 576.753139 | 1151.514986 | 576.261131 | 9 |
| 12 | 1755.725389 | 878.366333 | 1738.698840 | 869.853058 | 1737.714824 | 869.361050 | Y | ***1009.494902*** | 505.251089 | 992.468353 | 496.737815 | 991.484337 | 496.245807 | 8 |
| 13 | 1856.773068 | 928.890172 | 1839.746519 | 920.376898 | 1838.762503 | 919.884889 | T | ***846.431573*** | 423.719425 | 829.405024 | 415.206150 | 828.421008 | 414.714142 | 7 |
| 14 | 1957.820747 | 979.414012 | 1940.794198 | 970.900737 | 1939.810182 | 970.408729 | T | ***745.383894*** | 373.195585 | 728.357345 | 364.682311 | 727.373329 | 364.190303 | 6 |
| 15 | 2072.847690 | 1036.927483 | 2055.821141 | 1028.414208 | 2054.837125 | 1027.922200 | D | ***644.336215*** | 322.671746 | 627.309666 | 314.158471 | 626.325650 | 313.666463 | 5 |
| 16 | 2169.900454 | 1085.453865 | 2152.873905 | 1076.940590 | 2151.889889 | 1076.448582 | P | ***529.309272*** | 265.158274 | 512.282723 | 256.645000 | 511.298707 | 256.152992 | 4 |
| 17 | 2298.943047 | 1149.975161 | 2281.916498 | 1141.461887 | 2280.932482 | 1140.969879 | E | 432.256508 | 216.631892 | 415.229959 | 208.118618 | 414.245943 | 207.626610 | 3 |
| 18 | 2427.038010 | 1214.022643 | 2410.011461 | 1205.509368 | 2409.027445 | 1205.017360 | K | ***303.213915*** | 152.110595 | 286.187366 | 143.597321 | | | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of NPDNDPQGPWCYTTDPEKR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 65.5 | 2600.142410 | -0.002078 | NPDNDPQGPWCYTTDPEKR |

**Mascot:** http://www.matrixscience.com/

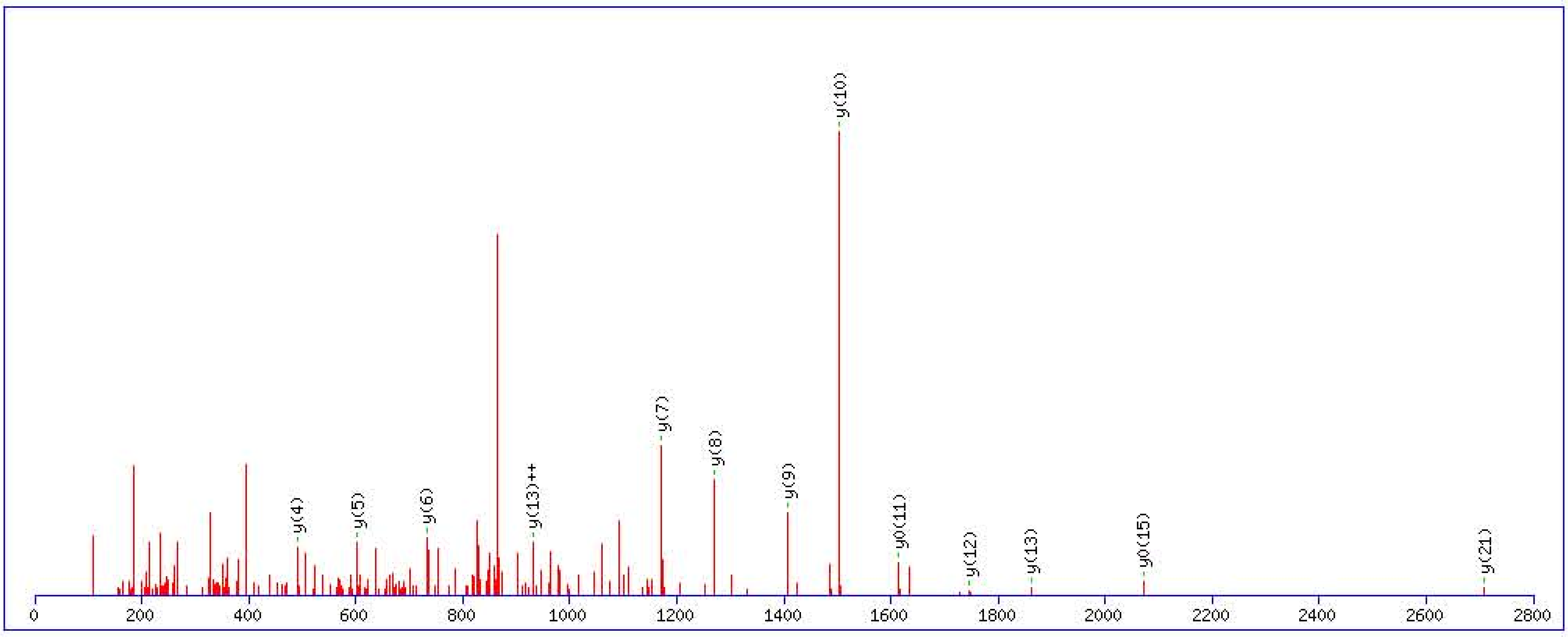
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VILGAHQEVNLEPHVQEIEVSR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

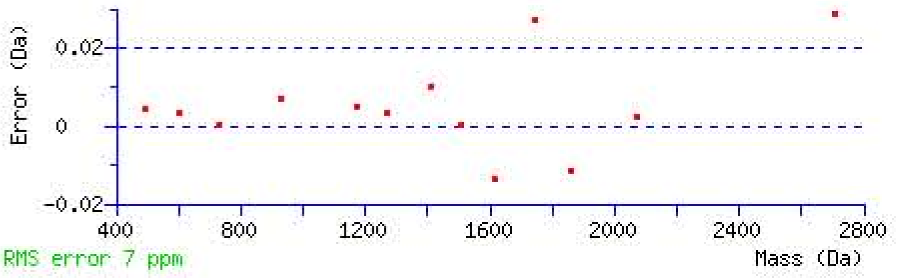
Match to Query 59495: 2806.475496 from(702.626150,4+) rtinseconds(2056) index(69147)
Title: Locus:1.1.1.1653.11 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

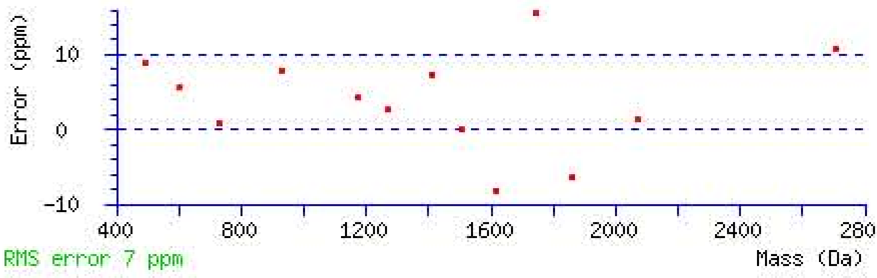
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] 0 to 2800 Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2806.479965
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q16    : Biotin:Thermo-21345 (Q)
Ions Score: 63  Expect: 1.3e-005
Matches : 13/224 fragment ions using 19 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 22 |
| 2 | 213.159754 | 107.083515 | | | | | I | ***2708.418847*** | 1354.713061 | 2691.392298 | 1346.199787 | 2690.408282 | 1345.707779 | 21 |
| 3 | 326.243818 | 163.625547 | | | | | L | 2595.334783 | 1298.171029 | 2578.308234 | 1289.657755 | 2577.324218 | 1289.165747 | 20 |
| 4 | 383.265282 | 192.136279 | | | | | G | 2482.250719 | 1241.628997 | 2465.224170 | 1233.115723 | 2464.240154 | 1232.623715 | 19 |
| 5 | 454.302396 | 227.654836 | | | | | A | 2425.229255 | 1213.118265 | 2408.202706 | 1204.604991 | 2407.218690 | 1204.112983 | 18 |
| 6 | 591.361308 | 296.184292 | | | | | H | 2354.192141 | 1177.599708 | 2337.165592 | 1169.086434 | 2336.181576 | 1168.594426 | 17 |
| 7 | 719.419886 | 360.213581 | 702.393337 | 351.700307 | | | Q | 2217.133229 | 1109.070252 | 2200.106680 | 1100.556978 | 2199.122664 | 1100.064970 | 16 |
| 8 | 848.462479 | 424.734878 | 831.435930 | 416.221603 | 830.451914 | 415.729595 | E | 2089.074651 | 1045.040963 | 2072.048102 | 1036.527689 | 2071.064086 | 1036.035681 | 15 |
| 9 | 947.530893 | 474.269085 | 930.504344 | 465.755810 | 929.520328 | 465.263802 | V | 1960.032058 | 980.519667 | 1943.005509 | 972.006393 | 1942.021493 | 971.514385 | 14 |
| 10 | 1061.573820 | 531.290548 | 1044.547271 | 522.777274 | 1043.563255 | 522.285266 | N | ***1860.963644*** | 930.985460 | 1843.937095 | 922.472186 | 1842.953079 | 921.980178 | 13 |
| 11 | 1174.657884 | 587.832580 | 1157.631335 | 579.319306 | 1156.647319 | 578.827297 | L | ***1746.920717*** | 873.963997 | 1729.894168 | 865.450722 | 1728.910152 | 864.958714 | 12 |
| 12 | 1303.700477 | 652.353877 | 1286.673928 | 643.840602 | 1285.689912 | 643.348594 | E | 1633.836653 | 817.421965 | 1616.810104 | 808.908690 | 1615.826088 | 808.416682 | 11 |
| 13 | 1400.753241 | 700.880259 | 1383.726692 | 692.366984 | 1382.742676 | 691.874976 | P | ***1504.794060*** | 752.900668 | 1487.767511 | 744.387394 | 1486.783495 | 743.895386 | 10 |
| 14 | 1537.812153 | 769.409715 | 1520.785604 | 760.896440 | 1519.801588 | 760.404432 | H | ***1407.741296*** | 704.374286 | 1390.714747 | 695.861012 | 1389.730731 | 695.369004 | 9 |
| 15 | 1636.880567 | 818.943922 | 1619.854018 | 810.430647 | 1618.870002 | 809.938639 | V | ***1270.682384*** | 635.844830 | 1253.655835 | 627.331556 | 1252.671819 | 626.839548 | 8 |
| 16 | 2076.105893 | 1038.556584 | 2059.079344 | 1030.043310 | 2058.095328 | 1029.551302 | Q | ***1171.613970*** | 586.310623 | 1154.587421 | 577.797349 | 1153.603405 | 577.305341 | 7 |
| 17 | 2205.148486 | 1103.077881 | 2188.121937 | 1094.564606 | 2187.137921 | 1094.072598 | E | ***732.388644*** | 366.697960 | 715.362095 | 358.184686 | 714.378079 | 357.692678 | 6 |
| 18 | 2318.232550 | 1159.619913 | 2301.206001 | 1151.106638 | 2300.221985 | 1150.614631 | I | ***603.346051*** | 302.176664 | 586.319502 | 293.663389 | 585.335486 | 293.171381 | 5 |
| 19 | 2447.275143 | 1224.141210 | 2430.248594 | 1215.627935 | 2429.264578 | 1215.135927 | E | ***490.261987*** | 245.634631 | 473.235438 | 237.121357 | 472.251422 | 236.629349 | 4 |
| 20 | 2546.343557 | 1273.675417 | 2529.317008 | 1265.162142 | 2528.332992 | 1264.670134 | V | 361.219394 | 181.113335 | 344.192845 | 172.600060 | 343.208829 | 172.108052 | 3 |
| 21 | 2633.375585 | 1317.191431 | 2616.349036 | 1308.678156 | 2615.365020 | 1308.186148 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 22 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VILGAHQEVNLEPHVQEIEVSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 62.6 | 2806.479965 | -0.004469 | VILGAHQEVNLEPHVQEIEVSR |

**Mascot:** http://www.matrixscience.com/

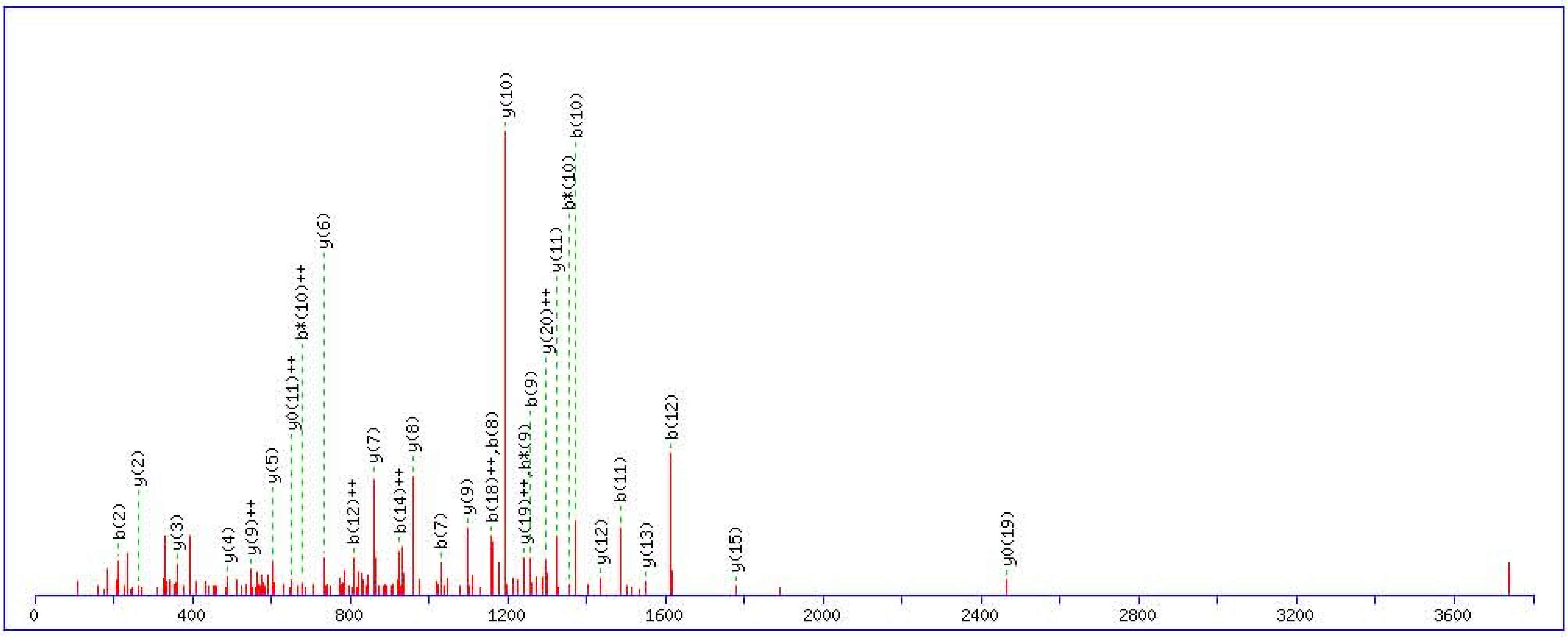
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VILGAHQEVNLEPHVQEIEVSR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

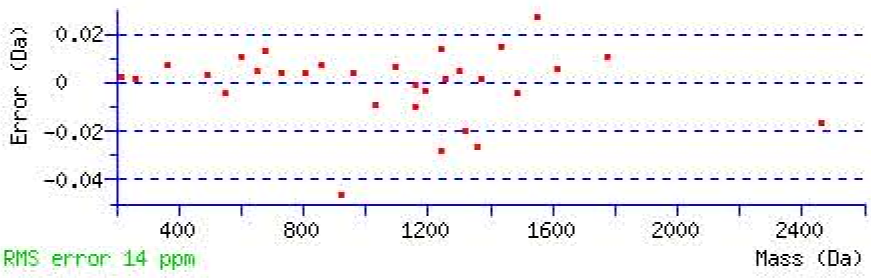
Match to Query 59497: 2806.477212 from(936.499680,3+) rtinseconds(2097) index(69351)
Title: Locus:1.1.1.1667.22 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

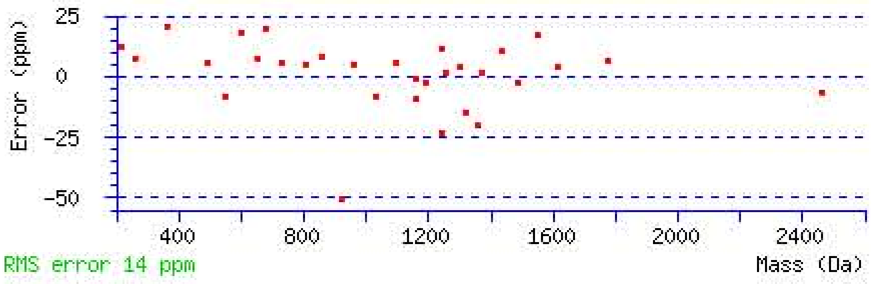
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2806.479965
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 76  Expect: 6e-007
Matches : 31/224 fragment ions using 50 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 22 |
| 2 | **213.159754** | 107.083515 | | | | | I | 2708.418847 | 1354.713061 | 2691.392298 | 1346.199787 | 2690.408282 | 1345.707779 | 21 |
| 3 | 326.243818 | 163.625547 | | | | | L | 2595.334783 | 1298.171029 | 2578.308234 | 1289.657755 | 2577.324218 | 1289.165747 | 20 |
| 4 | 383.265282 | 192.136279 | | | | | G | 2482.250719 | 1241.628997 | 2465.224170 | 1233.115723 | 2464.240154 | 1232.623715 | 19 |
| 5 | 454.302396 | 227.654836 | | | | | A | 2425.229255 | 1213.118265 | 2408.202706 | 1204.604991 | 2407.218690 | 1204.112983 | 18 |
| 6 | 591.361308 | 296.184292 | | | | | H | 2354.192141 | 1177.599708 | 2337.165592 | 1169.086434 | 2336.181576 | 1168.594426 | 17 |
| 7 | **1030.586634** | 515.796955 | 1013.560085 | 507.283681 | | | Q | 2217.133229 | 1109.070252 | 2200.106680 | 1100.556978 | 2199.122664 | 1100.064970 | 16 |
| 8 | **1159.629227** | 580.318252 | 1142.602678 | 571.804977 | 1141.618662 | 571.312969 | E | ***1777.907903*** | 889.457590 | 1760.881354 | 880.944315 | 1759.897338 | 880.452307 | 15 |
| 9 | **1258.697641** | 629.852459 | 1241.671092 | 621.339184 | 1240.687076 | 620.847176 | V | 1648.865310 | 824.936293 | 1631.838761 | 816.423019 | 1630.854745 | 815.931011 | 14 |
| 10 | **1372.740568** | 686.873922 | 1355.714019 | 678.360648 | 1354.730003 | 677.868640 | N | ***1549.796896*** | 775.402086 | 1532.770347 | 766.888812 | 1531.786331 | 766.396804 | 13 |
| 11 | **1485.824632** | 743.415954 | 1468.798083 | 734.902680 | 1467.814067 | 734.410672 | L | ***1435.753969*** | 718.380623 | 1418.727420 | 709.867348 | 1417.743404 | 709.375340 | 12 |
| 12 | **1614.867225** | **807.937251** | 1597.840676 | 799.423976 | 1596.856660 | 798.931968 | E | ***1322.669905*** | 661.838591 | 1305.643356 | 653.325316 | 1304.659340 | 652.833308 | 11 |
| 13 | 1711.919989 | 856.463633 | 1694.893440 | 847.950358 | 1693.909424 | 847.458350 | P | ***1193.627312*** | 597.317294 | 1176.600763 | 588.804020 | 1175.616747 | 588.312012 | 10 |
| 14 | 1848.978901 | **924.993089** | 1831.952352 | 916.479814 | 1830.968336 | 915.987806 | H | ***1096.574548*** | 548.790912 | 1079.547999 | 540.277638 | 1078.563983 | 539.785630 | 9 |
| 15 | 1948.047315 | 974.527296 | 1931.020766 | 966.014021 | 1930.036750 | 965.522013 | V | ***959.515636*** | 480.261456 | 942.489087 | 471.748182 | 941.505071 | 471.256174 | 8 |
| 16 | 2076.105893 | 1038.556584 | 2059.079344 | 1030.043310 | 2058.095328 | 1029.551302 | Q | ***860.447222*** | 430.727249 | 843.420673 | 422.213975 | 842.436657 | 421.721967 | 7 |
| 17 | 2205.148486 | 1103.077881 | 2188.121937 | 1094.564606 | 2187.137921 | 1094.072598 | E | ***732.388644*** | 366.697960 | 715.362095 | 358.184686 | 714.378079 | 357.692678 | 6 |
| 18 | 2318.232550 | **1159.619913** | 2301.206001 | 1151.106638 | 2300.221985 | 1150.614631 | I | ***603.346051*** | 302.176664 | 586.319502 | 293.663389 | 585.335486 | 293.171381 | 5 |
| 19 | 2447.275143 | 1224.141210 | 2430.248594 | 1215.627935 | 2429.264578 | 1215.135927 | E | ***490.261987*** | 245.634631 | 473.235438 | 237.121357 | 472.251422 | 236.629349 | 4 |
| 20 | 2546.343557 | 1273.675417 | 2529.317008 | 1265.162142 | 2528.332992 | 1264.670134 | V | ***361.219394*** | 181.113335 | 344.192845 | 172.600060 | 343.208829 | 172.108052 | 3 |
| 21 | 2633.375585 | 1317.191431 | 2616.349036 | 1308.678156 | 2615.365020 | 1308.186148 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 22 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VILGAHQEVNLEPHVQEIEVSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 75.7 | 2806.479965 | -0.002753 | VILGAHQEVNLEPHVQEIEVSR |
| 6.3 | 2806.479965 | -0.002753 | VILGAHQEVNLEPHVQEIEVSR |

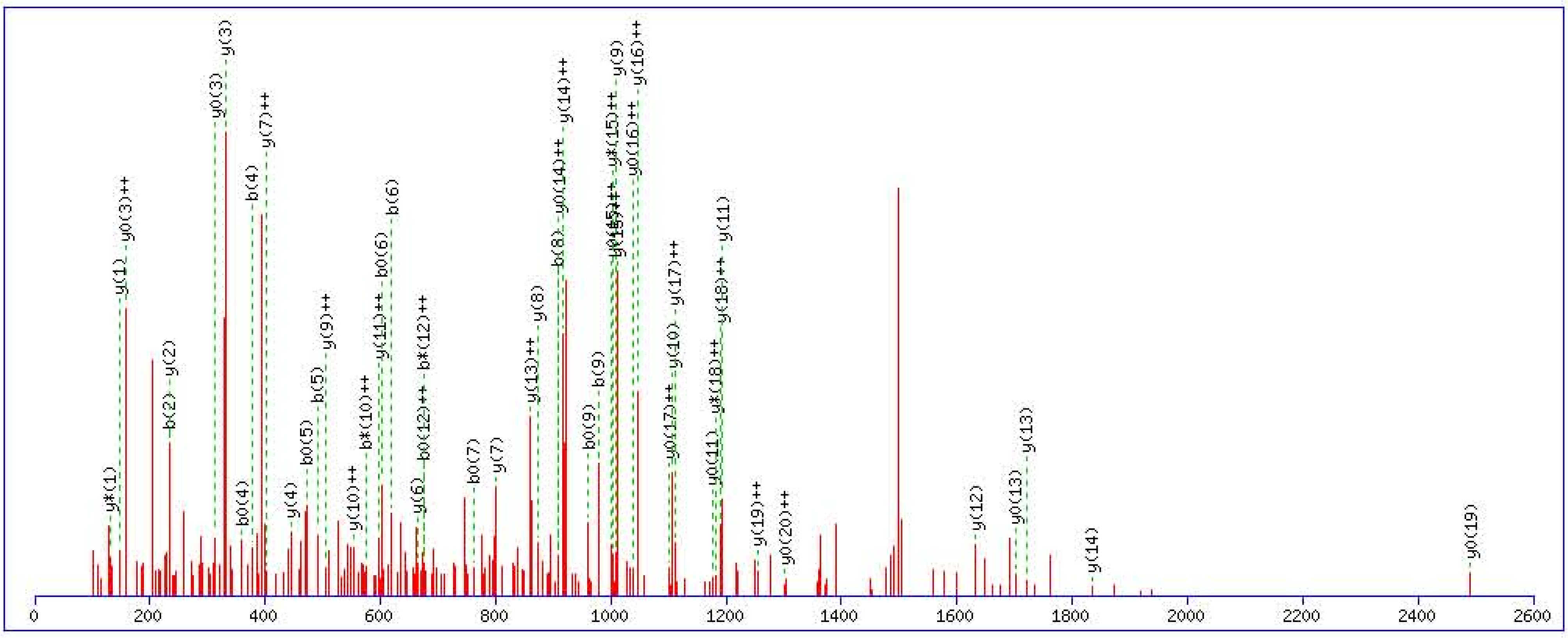
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TMSGLECQAWDSQSPHAHGYIPSK**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

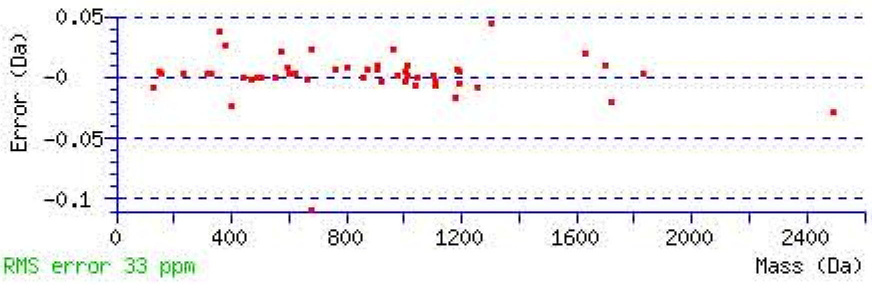
Match to Query 61677: 2997.356896 from(750.346500,4+) rtinseconds(1996) index(68772)
Title: Locus:1.1.1.1632.20 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

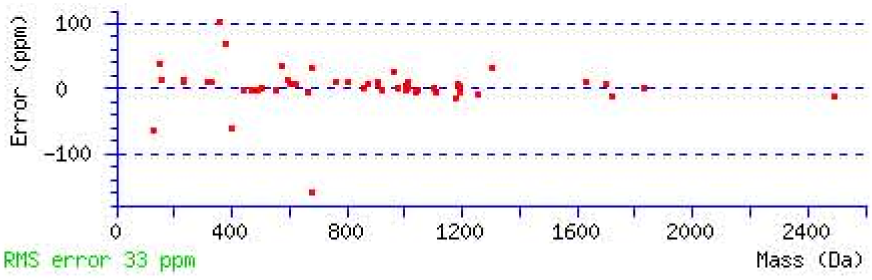
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2997.357162
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 40  Expect: 0.001
Matches : 51/260 fragment ions using 154 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 24 |
| 2 | **233.095440** | 117.051358 | | | 215.084875 | 108.046076 | M | 2897.316768 | 1449.162022 | 2880.290219 | 1440.648748 | 2879.306203 | 1440.156740 | 23 |
| 3 | 320.127468 | 160.567372 | | | 302.116903 | 151.562089 | S | 2766.276283 | 1383.641780 | 2749.249734 | 1375.128505 | 2748.265718 | 1374.636497 | 22 |
| 4 | **377.148932** | 189.078104 | | | 359.138367 | 180.072821 | G | 2679.244255 | 1340.125766 | 2662.217706 | 1331.612491 | 2661.233690 | 1331.120483 | 21 |
| 5 | **490.232996** | 245.620136 | | | 472.222431 | 236.614853 | L | 2622.222791 | 1311.615034 | 2605.196242 | 1303.101759 | 2604.212226 | 1302.609751 | 20 |
| 6 | **619.275589** | 310.141433 | | | 601.265024 | 301.136150 | E | 2509.138727 | 1255.073002 | 2492.112178 | 1246.559727 | 2491.128162 | 1246.067719 | 19 |
| 7 | 779.306238 | 390.156757 | | | 761.295673 | 381.151475 | C | 2380.096134 | 1190.551705 | 2363.069585 | 1182.038431 | 2362.085569 | 1181.546423 | 18 |
| 8 | **907.364816** | 454.186046 | 890.338267 | 445.672772 | 889.354251 | 445.180764 | Q | 2220.065485 | 1110.536381 | 2203.038936 | 1102.023106 | 2202.054920 | 1101.531098 | 17 |
| 9 | **978.401930** | 489.704603 | 961.375381 | 481.191329 | 960.391365 | 480.699321 | A | 2092.006907 | 1046.507092 | 2074.980358 | 1037.993817 | 2073.996342 | 1037.501809 | 16 |
| 10 | 1164.481243 | 582.744260 | 1147.454694 | 574.230985 | 1146.470678 | 573.738977 | W | 2020.969793 | 1010.988535 | 2003.943244 | 1002.475260 | 2002.959228 | 1001.983252 | 15 |
| 11 | 1279.508186 | 640.257731 | 1262.481637 | 631.744457 | 1261.497621 | 631.252449 | D | ***1834.890480*** | 917.948878 | 1817.863931 | 909.435604 | 1816.879915 | 908.943596 | 14 |
| 12 | 1366.540214 | 683.773745 | 1349.513665 | 675.260471 | 1348.529649 | 674.768463 | S | ***1719.863537*** | 860.435407 | 1702.836988 | 851.922132 | 1701.852972 | 851.430124 | 13 |
| 13 | 1805.765540 | 903.386408 | 1788.738991 | 894.873134 | 1787.754975 | 894.381126 | Q | ***1632.831509*** | 816.919393 | 1615.804960 | 808.406118 | 1614.820944 | 807.914110 | 12 |
| 14 | 1892.797568 | 946.902422 | 1875.771019 | 938.389148 | 1874.787003 | 937.897140 | S | ***1193.606183*** | 597.306730 | 1176.579634 | 588.793455 | 1175.595618 | 588.301447 | 11 |
| 15 | 1989.850332 | 995.428804 | 1972.823783 | 986.915530 | 1971.839767 | 986.423522 | P | ***1106.574155*** | 553.790716 | 1089.547606 | 545.277441 | 1088.563590 | 544.785433 | 10 |
| 16 | 2126.909244 | 1063.958260 | 2109.882695 | 1055.444986 | 2108.898679 | 1054.952978 | H | ***1009.521391*** | 505.264334 | 992.494842 | 496.751059 | 991.510826 | 496.259051 | 9 |
| 17 | 2197.946358 | 1099.476817 | 2180.919809 | 1090.963543 | 2179.935793 | 1090.471535 | A | ***872.462479*** | 436.734878 | 855.435930 | 428.221603 | 854.451914 | 427.729595 | 8 |
| 18 | 2335.005270 | 1168.006273 | 2317.978721 | 1159.492999 | 2316.994705 | 1159.000991 | H | ***801.425365*** | 401.216321 | 784.398816 | 392.703046 | 783.414800 | 392.211038 | 7 |
| 19 | 2392.026734 | 1196.517005 | 2375.000185 | 1188.003731 | 2374.016169 | 1187.511723 | G | ***664.366453*** | 332.686865 | 647.339904 | 324.173590 | 646.355888 | 323.681582 | 6 |
| 20 | 2555.090063 | 1278.048670 | 2538.063514 | 1269.535395 | 2537.079498 | 1269.043387 | Y | 607.344989 | 304.176133 | 590.318440 | 295.662858 | 589.334424 | 295.170850 | 5 |
| 21 | 2668.174127 | 1334.590702 | 2651.147578 | 1326.077427 | 2650.163562 | 1325.585419 | I | ***444.281660*** | 222.644468 | 427.255111 | 214.131194 | 426.271095 | 213.639186 | 4 |
| 22 | 2765.226891 | 1383.117084 | 2748.200342 | 1374.603809 | 2747.216326 | 1374.111801 | P | ***331.197596*** | 166.102436 | 314.171047 | 157.589162 | 313.187031 | 157.097154 | 3 |
| 23 | 2852.258919 | 1426.633098 | 2835.232370 | 1418.119823 | 2834.248354 | 1417.627815 | S | ***234.144832*** | 117.576054 | 217.118283 | 109.062780 | 216.134267 | 108.570772 | 2 |
| 24 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of TMSGLECQAWDSQSPHAHGYIPSK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 39.7 | 2997.357162 | -0.000266 | TMSGLECQAWDSQSPHAHGYIPSK |
| 11.1 | 2997.357162 | -0.000266 | TMSGLECQAWDSQSPHAHGYIPSK |

**Mascot:** http://www.matrixscience.com/

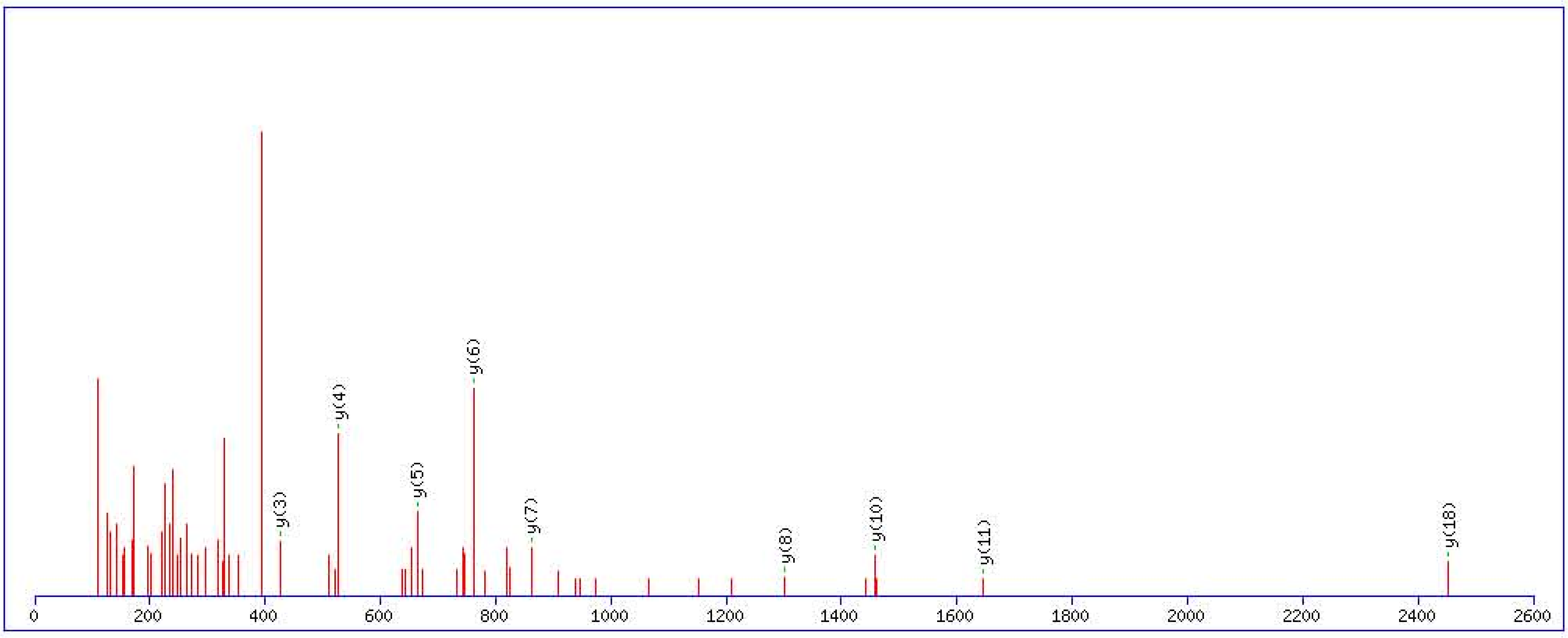
# Mascot Search Results

**Peptide View**

MS/MS Fragmentation of **GNVAVTVSGHTCQHWSAQTPHTHNR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

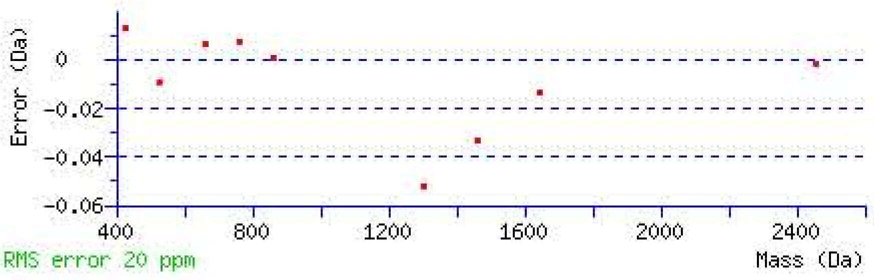
Match to Query 62322: 3092.446164 from(516.414970,6+) rtinseconds(1418) index(65249)
Title: Locus:1.1.1.1431.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

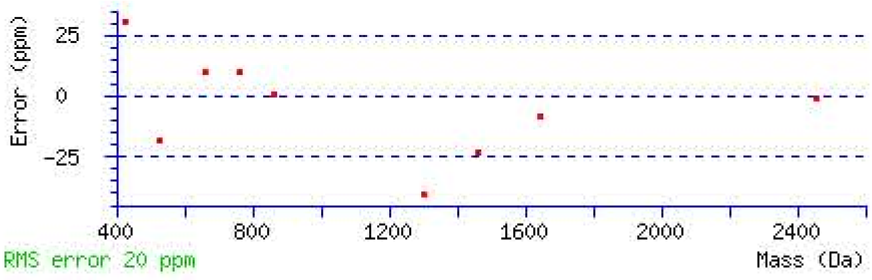
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3092.457016
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q18    : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 0.00013
Matches : 9/270 fragment ions using 15 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 25 |
| 2 | 172.071667 | 86.539471 | 155.045118 | 78.026197 | | | N | 3036.442790 | 1518.725033 | 3019.416241 | 1510.211758 | 3018.432225 | 1509.719750 | 24 |
| 3 | 271.140081 | 136.073679 | 254.113532 | 127.560404 | | | V | 2922.399863 | 1461.703569 | 2905.373314 | 1453.190295 | 2904.389298 | 1452.698287 | 23 |
| 4 | 342.177195 | 171.592236 | 325.150646 | 163.078961 | | | A | 2823.331449 | 1412.169362 | 2806.304900 | 1403.656088 | 2805.320884 | 1403.164080 | 22 |
| 5 | 441.245609 | 221.126443 | 424.219060 | 212.613168 | | | V | 2752.294335 | 1376.650805 | 2735.267786 | 1368.137531 | 2734.283770 | 1367.645523 | 21 |
| 6 | 542.293288 | 271.650282 | 525.266739 | 263.137008 | 524.282723 | 262.645000 | T | 2653.225921 | 1327.116598 | 2636.199372 | 1318.603324 | 2635.215356 | 1318.111316 | 20 |
| 7 | 641.361702 | 321.184489 | 624.335153 | 312.671215 | 623.351137 | 312.179207 | V | 2552.178242 | 1276.592759 | 2535.151693 | 1268.079484 | 2534.167677 | 1267.587476 | 19 |
| 8 | 728.393730 | 364.700503 | 711.367181 | 356.187229 | 710.383165 | 355.695221 | S | ***2453.109828*** | 1227.058552 | 2436.083279 | 1218.545277 | 2435.099263 | 1218.053269 | 18 |
| 9 | 785.415194 | 393.211235 | 768.388645 | 384.697961 | 767.404629 | 384.205953 | G | 2366.077800 | 1183.542538 | 2349.051251 | 1175.029263 | 2348.067235 | 1174.537255 | 17 |
| 10 | 922.474106 | 461.740691 | 905.447557 | 453.227417 | 904.463541 | 452.735409 | H | 2309.056336 | 1155.031806 | 2292.029787 | 1146.518531 | 2291.045771 | 1146.026523 | 16 |
| 11 | 1023.521785 | 512.264530 | 1006.495236 | 503.751256 | 1005.511220 | 503.259248 | T | 2171.997424 | 1086.502350 | 2154.970875 | 1077.989075 | 2153.986859 | 1077.497067 | 15 |
| 12 | 1183.552434 | 592.279855 | 1166.525885 | 583.766581 | 1165.541869 | 583.274572 | C | 2070.949745 | 1035.978510 | 2053.923196 | 1027.465236 | 2052.939180 | 1026.973228 | 14 |
| 13 | 1311.611012 | 656.309144 | 1294.584463 | 647.795870 | 1293.600447 | 647.303862 | Q | 1910.919096 | 955.963186 | 1893.892547 | 947.449911 | 1892.908531 | 946.957903 | 13 |
| 14 | 1448.669924 | 724.838600 | 1431.643375 | 716.325326 | 1430.659359 | 715.833318 | H | 1782.860518 | 891.933897 | 1765.833969 | 883.420622 | 1764.849953 | 882.928614 | 12 |
| 15 | 1634.749237 | 817.878257 | 1617.722688 | 809.364982 | 1616.738672 | 808.872974 | W | ***1645.801606*** | 823.404441 | 1628.775057 | 814.891166 | 1627.791041 | 814.399158 | 11 |
| 16 | 1721.781265 | 861.394271 | 1704.754716 | 852.880996 | 1703.770700 | 852.388988 | S | ***1459.722293*** | 730.364784 | 1442.695744 | 721.851510 | 1441.711728 | 721.359502 | 10 |
| 17 | 1792.818379 | 896.912828 | 1775.791830 | 888.399553 | 1774.807814 | 887.907545 | A | 1372.690265 | 686.848770 | 1355.663716 | 678.335496 | 1354.679700 | 677.843488 | 9 |
| 18 | 2232.043705 | 1116.525490 | 2215.017156 | 1108.012216 | 2214.033140 | 1107.520208 | Q | ***1301.653151*** | 651.330213 | 1284.626602 | 642.816939 | 1283.642586 | 642.324931 | 8 |
| 19 | 2333.091384 | 1167.049330 | 2316.064835 | 1158.536055 | 2315.080819 | 1158.044047 | T | ***862.427825*** | 431.717550 | 845.401276 | 423.204276 | 844.417260 | 422.712268 | 7 |
| 20 | 2430.144148 | 1215.575712 | 2413.117599 | 1207.062437 | 2412.133583 | 1206.570429 | P | ***761.380146*** | 381.193711 | 744.353597 | 372.680436 | 743.369581 | 372.188428 | 6 |
| 21 | 2567.203060 | 1284.105168 | 2550.176511 | 1275.591893 | 2549.192495 | 1275.099885 | H | ***664.327382*** | 332.667329 | 647.300833 | 324.154054 | 646.316817 | 323.662046 | 5 |
| 22 | 2668.250739 | 1334.629007 | 2651.224190 | 1326.115733 | 2650.240174 | 1325.623725 | T | ***527.268470*** | 264.137873 | 510.241921 | 255.624598 | 509.257905 | 255.132590 | 4 |
| 23 | 2805.309651 | 1403.158463 | 2788.283102 | 1394.645189 | 2787.299086 | 1394.153181 | H | ***426.220791*** | 213.614033 | 409.194242 | 205.100759 | | | 3 |
| 24 | 2919.352578 | 1460.179927 | 2902.326029 | 1451.666652 | 2901.342013 | 1451.174644 | N | 289.161879 | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 25 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GNVAVTVSGHTCQHWSAQTPHTHNR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.0 | 3092.457016 | -0.010852 | GNVAVTVSGHTCQHWSAQTPHTHNR |
| 21.1 | 3092.457016 | -0.010852 | GNVAVTVSGHTCQHWSAQTPHTHNR |

**Mascot:** http://www.matrixscience.com/

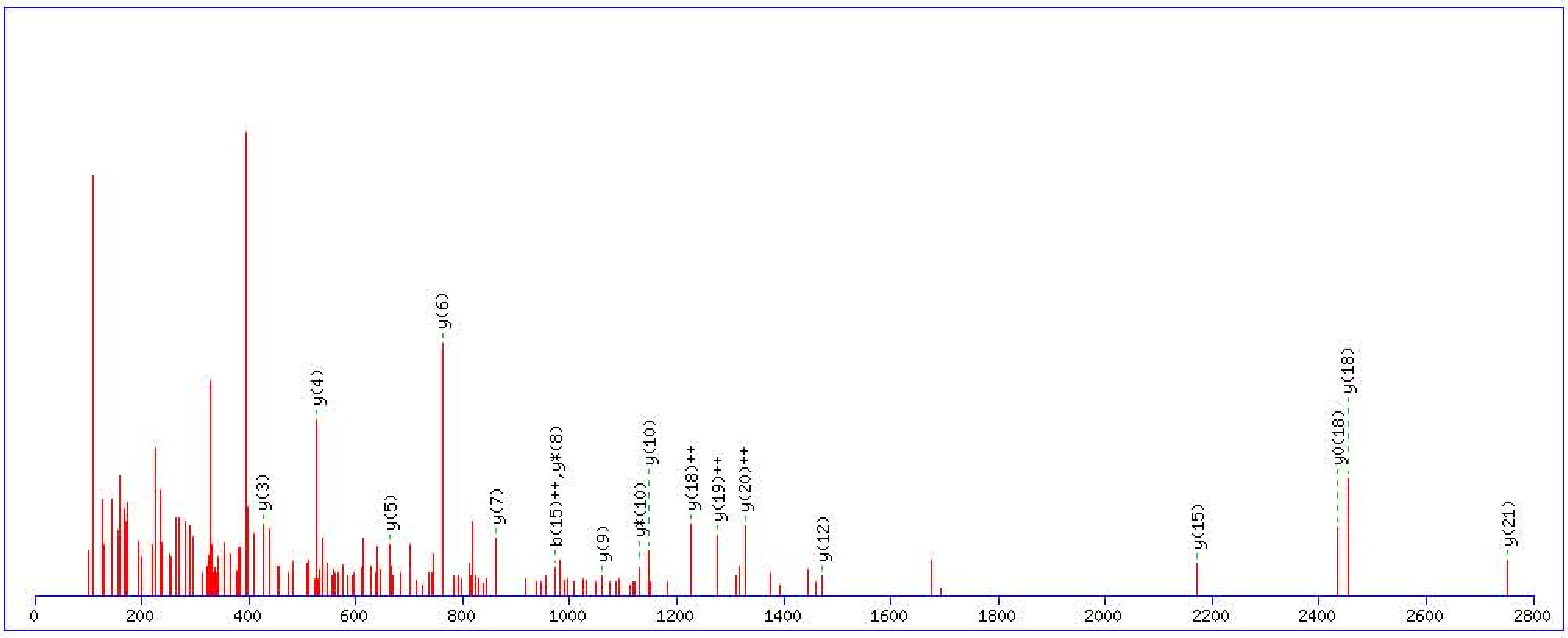
# MATRIX SCIENCE Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GNVAVTVSGHTCQHWSAQTPHTHNR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

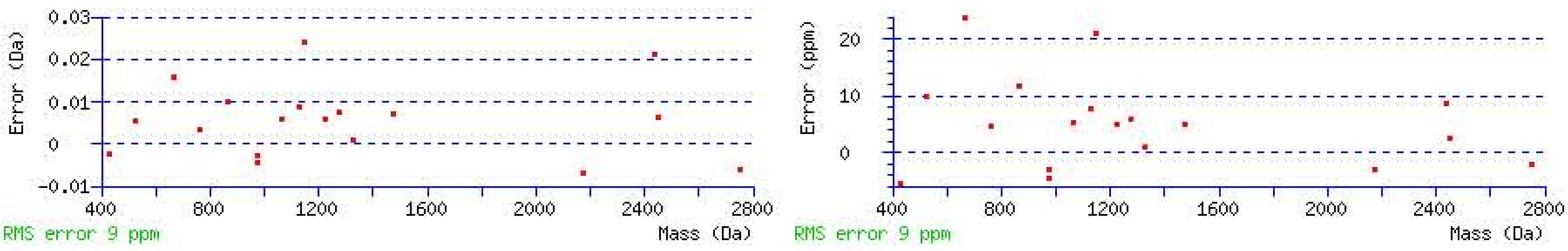
Match to Query 62328: 3092.449044 from(516.415450,6+) rtinseconds(1453) index(65507)
Title: Locus:1.1.1.1443.15 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 3092.457016
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q13** : Biotin:Thermo-21345 (Q)
**Ions Score:** 52 **Expect:** 0.00011
**Matches :** 18/270 fragment ions using 34 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 25 |
| 2 | 172.071667 | 86.539471 | 155.045118 | 78.026197 | | | N | 3036.442790 | 1518.725033 | 3019.416241 | 1510.211758 | 3018.432225 | 1509.719750 | 24 |
| 3 | 271.140081 | 136.073679 | 254.113532 | 127.560404 | | | V | 2922.399863 | 1461.703569 | 2905.373314 | 1453.190295 | 2904.389298 | 1452.698287 | 23 |
| 4 | 342.177195 | 171.592236 | 325.150646 | 163.078961 | | | A | 2823.331449 | 1412.169362 | 2806.304900 | 1403.656088 | 2805.320884 | 1403.164080 | 22 |
| 5 | 441.245609 | 221.126443 | 424.219060 | 212.613168 | | | V | ***2752.294335*** | 1376.650805 | 2735.267786 | 1368.137531 | 2734.283770 | 1367.645523 | 21 |
| 6 | 542.293288 | 271.650282 | 525.266739 | 263.137008 | 524.282723 | 262.645000 | T | 2653.225921 | 1327.116598 | 2636.199372 | 1318.603324 | 2635.215356 | 1318.111316 | 20 |
| 7 | 641.361702 | 321.184489 | 624.335153 | 312.671215 | 623.351137 | 312.179207 | V | 2552.178242 | 1276.592759 | 2535.151693 | 1268.079484 | 2534.167677 | 1267.587476 | 19 |
| 8 | 728.393730 | 364.700503 | 711.367181 | 356.187229 | 710.383165 | 355.695221 | S | ***2453.109828*** | 1227.058552 | 2436.083279 | 1218.545277 | 2435.099263 | 1218.053269 | 18 |
| 9 | 785.415194 | 393.211235 | 768.388645 | 384.697961 | 767.404629 | 384.205953 | G | 2366.077800 | 1183.542538 | 2349.051251 | 1175.029263 | 2348.067235 | 1174.537255 | 17 |
| 10 | 922.474106 | 461.740691 | 905.447557 | 453.227417 | 904.463541 | 452.735409 | H | 2309.056336 | 1155.031806 | 2292.029787 | 1146.518531 | 2291.045771 | 1146.026523 | 16 |
| 11 | 1023.521785 | 512.264530 | 1006.495236 | 503.751256 | 1005.511220 | 503.259248 | T | ***2171.997424*** | 1086.502350 | 2154.970875 | 1077.989075 | 2153.986859 | 1077.497067 | 15 |
| 12 | 1183.552434 | 592.279855 | 1166.525885 | 583.766581 | 1165.541869 | 583.274572 | C | 2070.949745 | 1035.978510 | 2053.923196 | 1027.465236 | 2052.939180 | 1026.973228 | 14 |
| 13 | 1622.777760 | 811.892518 | 1605.751211 | 803.379244 | 1604.767195 | 802.887236 | Q | 1910.919096 | 955.963186 | 1893.892547 | 947.449911 | 1892.908531 | 946.957903 | 13 |
| 14 | 1759.836672 | 880.421974 | 1742.810123 | 871.908700 | 1741.826107 | 871.416692 | H | ***1471.693770*** | 736.350523 | 1454.667221 | 727.837248 | 1453.683205 | 727.345240 | 12 |
| 15 | 1945.915985 | 973.461631 | 1928.889436 | 964.948356 | 1927.905420 | 964.456348 | W | 1334.634858 | 667.821067 | 1317.608309 | 659.307792 | 1316.624293 | 658.815784 | 11 |
| 16 | 2032.948013 | 1016.977645 | 2015.921464 | 1008.464370 | 2014.937448 | 1007.972362 | S | ***1148.555545*** | 574.781410 | 1131.528996 | 566.268136 | 1130.544980 | 565.776128 | 10 |
| 17 | 2103.985127 | 1052.496201 | 2086.958578 | 1043.982927 | 2085.974562 | 1043.490919 | A | ***1061.523517*** | 531.265396 | 1044.496968 | 522.752122 | 1043.512952 | 522.260114 | 9 |
| 18 | 2232.043705 | 1116.525490 | 2215.017156 | 1108.012216 | 2214.033140 | 1107.520208 | Q | 990.486403 | 495.746839 | 973.459854 | 487.233565 | 972.475838 | 486.741557 | 8 |
| 19 | 2333.091384 | 1167.049330 | 2316.064835 | 1158.536055 | 2315.080819 | 1158.044047 | T | ***862.427825*** | 431.717550 | 845.401276 | 423.204276 | 844.417260 | 422.712268 | 7 |
| 20 | 2430.144148 | 1215.575712 | 2413.117599 | 1207.062437 | 2412.133583 | 1206.570429 | P | ***761.380146*** | 381.193711 | 744.353597 | 372.680436 | 743.369581 | 372.188428 | 6 |
| 21 | 2567.203060 | 1284.105168 | 2550.176511 | 1275.591893 | 2549.192495 | 1275.099885 | H | ***664.327382*** | 332.667329 | 647.300833 | 324.154054 | 646.316817 | 323.662046 | 5 |
| 22 | 2668.250739 | 1334.629007 | 2651.224190 | 1326.115733 | 2650.240174 | 1325.623725 | T | ***527.268470*** | 264.137873 | 510.241921 | 255.624598 | 509.257905 | 255.132590 | 4 |
| 23 | 2805.309651 | 1403.158463 | 2788.283102 | 1394.645189 | 2787.299086 | 1394.153181 | H | ***426.220791*** | 213.614033 | 409.194242 | 205.100759 | | | 3 |
| 24 | 2919.352578 | 1460.179927 | 2902.326029 | 1451.666652 | 2901.342013 | 1451.174644 | N | 289.161879 | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 25 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of GNVAVTVSGHTCQHWSAQTPHTHNR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.8 | 3092.457016 | -0.007972 | GNVAVTVSGHTCQHWSAQTPHTHNR |
| 22.2 | 3092.457016 | -0.007972 | GNVAVTVSGHTCQHWSAQTPHTHNR |

**Mascot:** http://www.matrixscience.com/

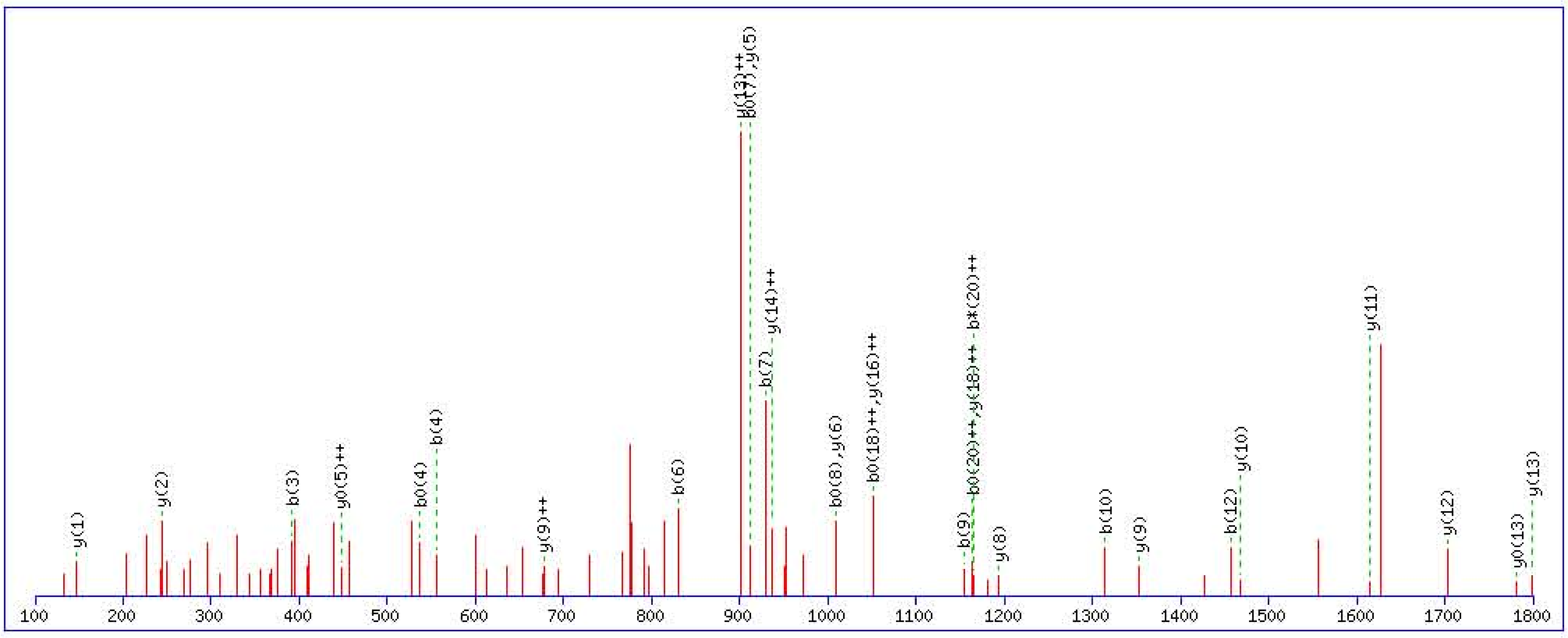
# MATRIX SCIENCE Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LYDYCDVPQCAAPSFDCGKPQVEPK**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

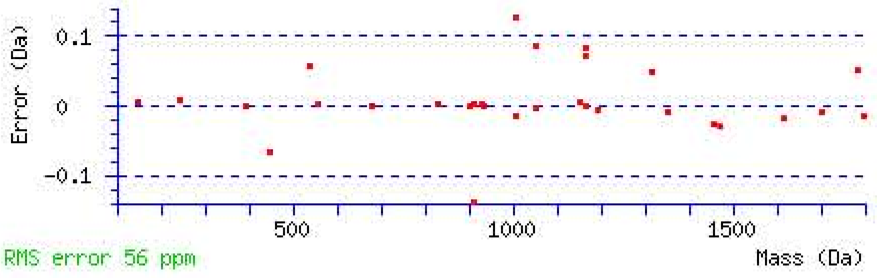
Match to Query 64976: 3254.446776 from(814.618970,4+) rtinseconds(2054) index(69136)
Title: Locus:1.1.1.1652.25 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

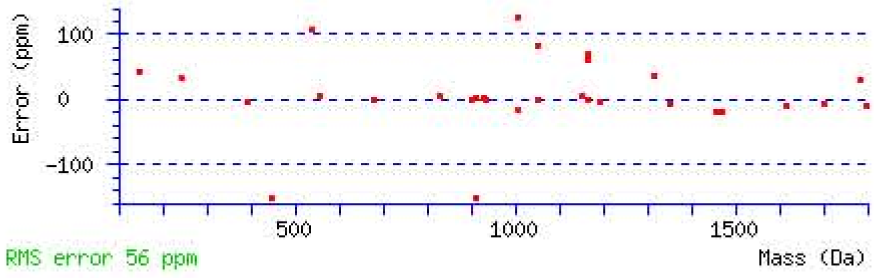
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3254.454514
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q21     : Biotin:Thermo-21345 (Q)
Ions Score: 52  Expect: 4.8e-005
Matches : 30/264 fragment ions using 52 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 25 |
| 2 | 277.154669 | 139.080973 | | | | | Y | 3142.377716 | 1571.692496 | 3125.351167 | 1563.179221 | 3124.367151 | 1562.687213 | 24 |
| 3 | ***392.181612*** | 196.594444 | | | 374.171047 | 187.589162 | D | 2979.314387 | 1490.160831 | 2962.287838 | 1481.647557 | 2961.303822 | 1481.155549 | 23 |
| 4 | ***555.244941*** | 278.126109 | | | 537.234376 | 269.120826 | Y | 2864.287444 | 1432.647360 | 2847.260895 | 1424.134085 | 2846.276879 | 1423.642077 | 22 |
| 5 | 715.275590 | 358.141433 | | | 697.265025 | 349.136151 | C | 2701.224115 | 1351.115695 | 2684.197566 | 1342.602421 | 2683.213550 | 1342.110413 | 21 |
| 6 | ***830.302533*** | 415.654905 | | | 812.291968 | 406.649622 | D | 2541.193466 | 1271.100371 | 2524.166917 | 1262.587096 | 2523.182901 | 1262.095089 | 20 |
| 7 | ***929.370947*** | 465.189112 | | | 911.360382 | 456.183829 | V | 2426.166523 | 1213.586899 | 2409.139974 | 1205.073625 | 2408.155958 | 1204.581617 | 19 |
| 8 | 1026.423711 | 513.715494 | | | 1008.413146 | 504.710211 | P | 2327.098109 | 1164.052692 | 2310.071560 | 1155.539418 | 2309.087544 | 1155.047410 | 18 |
| 9 | ***1154.482289*** | 577.744783 | 1137.455740 | 569.231508 | 1136.471724 | 568.739500 | Q | 2230.045345 | 1115.526310 | 2213.018796 | 1107.013036 | 2212.034780 | 1106.521028 | 17 |
| 10 | ***1314.512938*** | 657.760107 | 1297.486389 | 649.246833 | 1296.502373 | 648.754825 | C | 2101.986767 | 1051.497021 | 2084.960218 | 1042.983747 | 2083.976202 | 1042.491739 | 16 |
| 11 | 1385.550052 | 693.278664 | 1368.523503 | 684.765390 | 1367.539487 | 684.273382 | A | 1941.956118 | 971.481697 | 1924.929569 | 962.968423 | 1923.945553 | 962.476415 | 15 |
| 12 | ***1456.587166*** | 728.797221 | 1439.560617 | 720.283947 | 1438.576601 | 719.791939 | A | 1870.919004 | 935.963140 | 1853.892455 | 927.449866 | 1852.908439 | 926.957858 | 14 |
| 13 | 1553.639930 | 777.323603 | 1536.613381 | 768.810329 | 1535.629365 | 768.318321 | P | ***1799.881890*** | 900.444583 | 1782.855341 | 891.931309 | 1781.871325 | 891.439301 | 13 |
| 14 | 1640.671958 | 820.839617 | 1623.645409 | 812.326343 | 1622.661393 | 811.834335 | S | ***1702.829126*** | 851.918201 | 1685.802577 | 843.404927 | 1684.818561 | 842.912919 | 12 |
| 15 | 1787.740372 | 894.373824 | 1770.713823 | 885.860550 | 1769.729807 | 885.368542 | F | ***1615.797098*** | 808.402187 | 1598.770549 | 799.888913 | 1597.786533 | 799.396905 | 11 |
| 16 | 1902.767315 | 951.887296 | 1885.740766 | 943.374021 | 1884.756750 | 942.882013 | D | ***1468.728684*** | 734.867980 | 1451.702135 | 726.354706 | 1450.718119 | 725.862698 | 10 |
| 17 | 2062.797964 | 1031.902620 | 2045.771415 | 1023.389346 | 2044.787399 | 1022.897338 | C | ***1353.701741*** | 677.354509 | 1336.675192 | 668.841234 | 1335.691176 | 668.349226 | 9 |
| 18 | 2119.819428 | 1060.413352 | 2102.792879 | 1051.900078 | 2101.808863 | 1051.408070 | G | ***1193.671092*** | 597.339184 | 1176.644543 | 588.825910 | 1175.660527 | 588.333902 | 8 |
| 19 | 2247.914391 | 1124.460834 | 2230.887842 | 1115.947559 | 2229.903826 | 1115.455551 | K | 1136.649628 | 568.828452 | 1119.623079 | 560.315178 | 1118.639063 | 559.823170 | 7 |
| 20 | 2344.967155 | 1172.987216 | 2327.940606 | 1164.473941 | 2326.956590 | 1163.981933 | P | ***1008.554665*** | 504.780971 | 991.528116 | 496.267696 | 990.544100 | 495.775688 | 6 |
| 21 | 2784.192481 | 1392.599879 | 2767.165932 | 1384.086604 | 2766.181916 | 1383.594596 | Q | ***911.501901*** | 456.254589 | 894.475352 | 447.741314 | 893.491336 | 447.249306 | 5 |
| 22 | 2883.260895 | 1442.134086 | 2866.234346 | 1433.620811 | 2865.250330 | 1433.128803 | V | 472.276575 | 236.641925 | 455.250026 | 228.128651 | 454.266010 | 227.636643 | 4 |
| 23 | 3012.303488 | 1506.655382 | 2995.276939 | 1498.142108 | 2994.292923 | 1497.650100 | E | 373.208161 | 187.107719 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 24 | 3109.356252 | 1555.181764 | 3092.329703 | 1546.668490 | 3091.345687 | 1546.176482 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 25 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LYDYCDVPQCAAPSFDCGKPQVEPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.7 | 3254.454514 | -0.007738 | LYDYCDVPQCAAPSFDCGKPQVEPK |

**Mascot:** http://www.matrixscience.com/

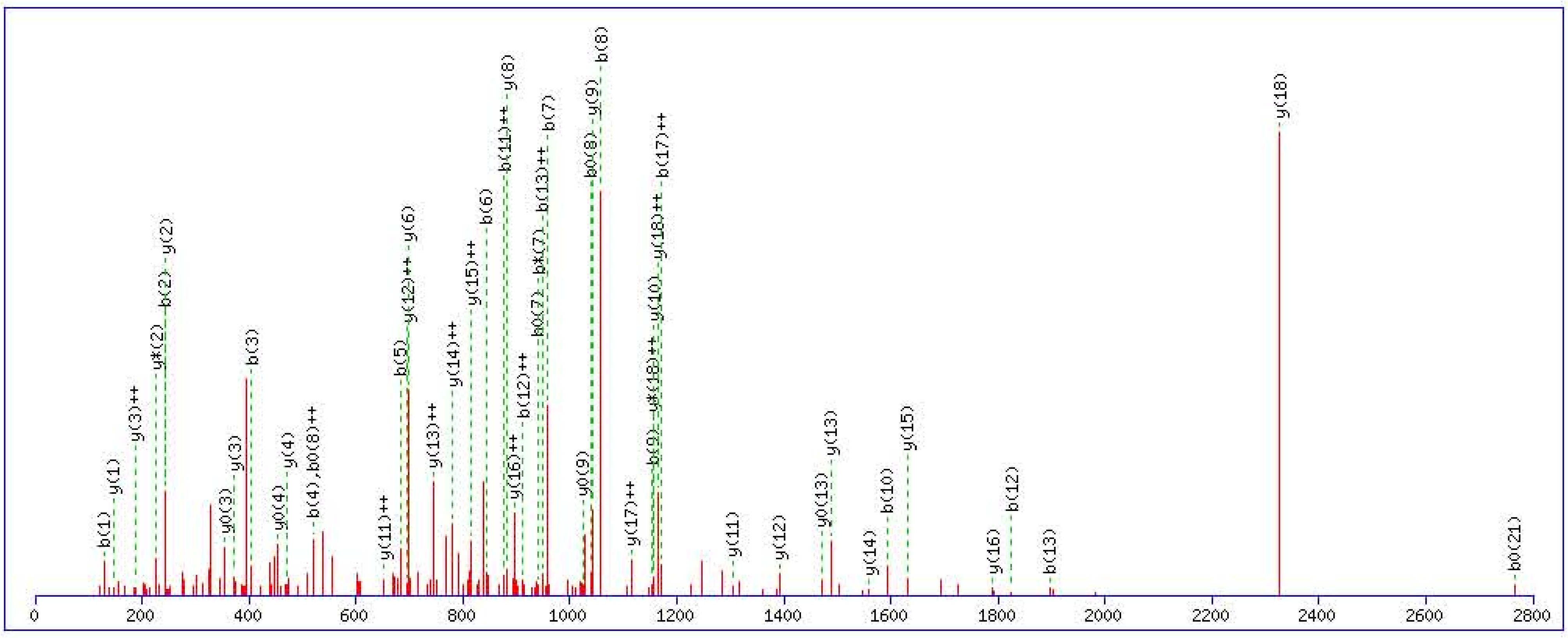
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KLYDYCDVPQCAAPSFDCGKPQVEPK**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

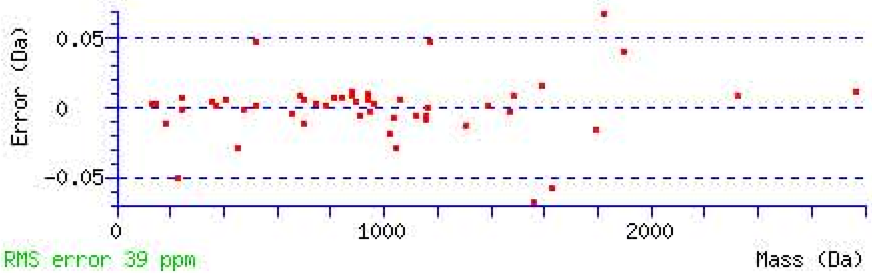
Match to Query 66110: 3382.550016 from(846.644780,4+) rtinseconds(1988) index(68710)
Title: Locus:1.1.1.1629.16 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

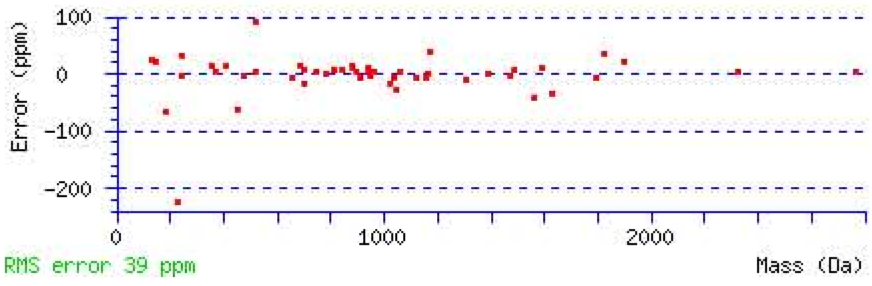


```
Monoisotopic mass of neutral peptide Mr(calc): 3382.549469
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10    : Biotin:Thermo-21345 (Q)
Ions Score: 67  Expect: 5.4e-007
Matches : 51/290 fragment ions using 133 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 26 |
| 2 | ***242.186303*** | 121.596790 | 225.159754 | 113.083515 | | | L | 3255.461780 | 1628.234528 | 3238.435231 | 1619.721253 | 3237.451215 | 1619.229245 | 25 |
| 3 | ***405.249632*** | 203.128454 | 388.223083 | 194.615180 | | | Y | 3142.377716 | 1571.692496 | 3125.351167 | 1563.179221 | 3124.367151 | 1562.687213 | 24 |
| 4 | ***520.276575*** | 260.641926 | 503.250026 | 252.128651 | 502.266010 | 251.636643 | D | 2979.314387 | 1490.160831 | 2962.287838 | 1481.647557 | 2961.303822 | 1481.155549 | 23 |
| 5 | ***683.339904*** | 342.173590 | 666.313355 | 333.660316 | 665.329339 | 333.168308 | Y | 2864.287444 | 1432.647360 | 2847.260895 | 1424.134085 | 2846.276879 | 1423.642077 | 22 |
| 6 | ***843.370553*** | 422.188915 | 826.344004 | 413.675640 | 825.359988 | 413.183632 | C | 2701.224115 | 1351.115695 | 2684.197566 | 1342.602421 | 2683.213550 | 1342.110413 | 21 |
| 7 | ***958.397496*** | 479.702386 | 941.370947 | 471.189112 | 940.386931 | 470.697104 | D | 2541.193466 | 1271.100371 | 2524.166917 | 1262.587096 | 2523.182901 | 1262.095088 | 20 |
| 8 | ***1057.465910*** | 529.236593 | 1040.439361 | 520.723319 | 1039.455345 | 520.231311 | V | 2426.166523 | 1213.586899 | 2409.139974 | 1205.073625 | 2408.155958 | 1204.581617 | 19 |
| 9 | ***1154.518674*** | 577.762975 | 1137.492125 | 569.249701 | 1136.508109 | 568.757693 | P | ***2327.098109*** | 1164.052692 | 2310.071560 | 1155.539418 | 2309.087544 | 1155.047410 | 18 |
| 10 | ***1593.744000*** | 797.375638 | 1576.717451 | 788.862364 | 1575.733435 | 788.370356 | Q | 2230.045345 | 1115.526310 | 2213.018796 | 1107.013036 | 2212.034780 | 1106.521028 | 17 |
| 11 | 1753.774649 | **877.390963** | 1736.748100 | 868.877688 | 1735.764084 | 868.385680 | C | ***1790.820019*** | 895.913647 | 1773.793470 | 887.400373 | 1772.809454 | 886.908365 | 16 |
| 12 | ***1824.811763*** | **912.909520** | 1807.785214 | 904.396245 | 1806.801198 | 903.904237 | A | ***1630.789370*** | 815.898323 | 1613.762821 | 807.385048 | 1612.778805 | 806.893040 | 15 |
| 13 | ***1895.848877*** | **948.428077** | 1878.822328 | 939.914802 | 1877.838312 | 939.422794 | A | ***1559.752256*** | 780.379766 | 1542.725707 | 771.866491 | 1541.741691 | 771.374483 | 14 |
| 14 | 1992.901641 | 996.954459 | 1975.875092 | 988.441184 | 1974.891076 | 987.949176 | P | ***1488.715142*** | 744.861209 | 1471.688593 | 736.347934 | 1470.704577 | 735.855926 | 13 |
| 15 | 2079.933669 | 1040.470472 | 2062.907120 | 1031.957198 | 2061.923104 | 1031.465190 | S | ***1391.662378*** | 696.334827 | 1374.635829 | 687.821552 | 1373.651813 | 687.329544 | 12 |
| 16 | 2227.002083 | 1114.004679 | 2209.975534 | 1105.491405 | 2208.991518 | 1104.999397 | F | ***1304.630350*** | 652.818813 | 1287.603801 | 644.305538 | 1286.619785 | 643.813530 | 11 |
| 17 | 2342.029026 | **1171.518151** | 2325.002477 | 1163.004876 | 2324.018461 | 1162.512868 | D | ***1157.561936*** | 579.284606 | 1140.535387 | 570.771331 | 1139.551371 | 570.279323 | 10 |
| 18 | 2502.059675 | 1251.533475 | 2485.033126 | 1243.020201 | 2484.049110 | 1242.528193 | C | ***1042.534993*** | 521.771135 | 1025.508444 | 513.257860 | 1024.524428 | 512.765852 | 9 |
| 19 | 2559.081139 | 1280.044207 | 2542.054590 | 1271.530933 | 2541.070574 | 1271.038925 | G | ***882.504344*** | 441.755810 | 865.477795 | 433.242536 | 864.493779 | 432.750528 | 8 |
| 20 | 2687.176102 | 1344.091689 | 2670.149553 | 1335.578414 | 2669.165537 | 1335.086406 | K | 825.482880 | 413.245078 | 808.456331 | 404.731804 | 807.472315 | 404.239796 | 7 |
| 21 | 2784.228866 | 1392.618071 | 2767.202317 | 1384.104796 | 2766.218301 | 1383.612788 | P | ***697.387917*** | 349.197597 | 680.361368 | 340.684322 | 679.377352 | 340.192314 | 6 |
| 22 | 2912.287444 | 1456.647360 | 2895.260895 | 1448.134085 | 2894.276879 | 1447.642077 | Q | 600.335153 | 300.671215 | 583.308604 | 292.157940 | 582.324588 | 291.665932 | 5 |
| 23 | 3011.355858 | 1506.181567 | 2994.329309 | 1497.668292 | 2993.345293 | 1497.176284 | V | ***472.276575*** | 236.641925 | 455.250026 | 228.128651 | 454.266010 | 227.636643 | 4 |
| 24 | 3140.398451 | 1570.702863 | 3123.371902 | 1562.189589 | 3122.387886 | 1561.697581 | E | ***373.208161*** | 187.107719 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 25 | 3237.451215 | 1619.229245 | 3220.424666 | 1610.715971 | 3219.440650 | 1610.223963 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 26 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 39 ppm



RMS error 39 ppm

NCBI **BLAST** search of KLYDYCDVPQCAAPSFDCGKPQVEPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.9 | 3382.549469 | 0.000547 | KLYDYCDVPQCAAPSFDCGKPQVEPK |
| 8.0 | 3382.549469 | 0.000547 | KLYDYCDVPQCAAPSFDCGKPQVEPK |
| 0.1 | 3382.580414 | -0.030398 | HLYPNTPYAYTFWTYMMNARSKNVGWR |
| 0.1 | 3382.580414 | -0.030398 | HLYPNTPYAYTFWTYMMNARSKNVGWR |

**Mascot:** http://www.matrixscience.com/

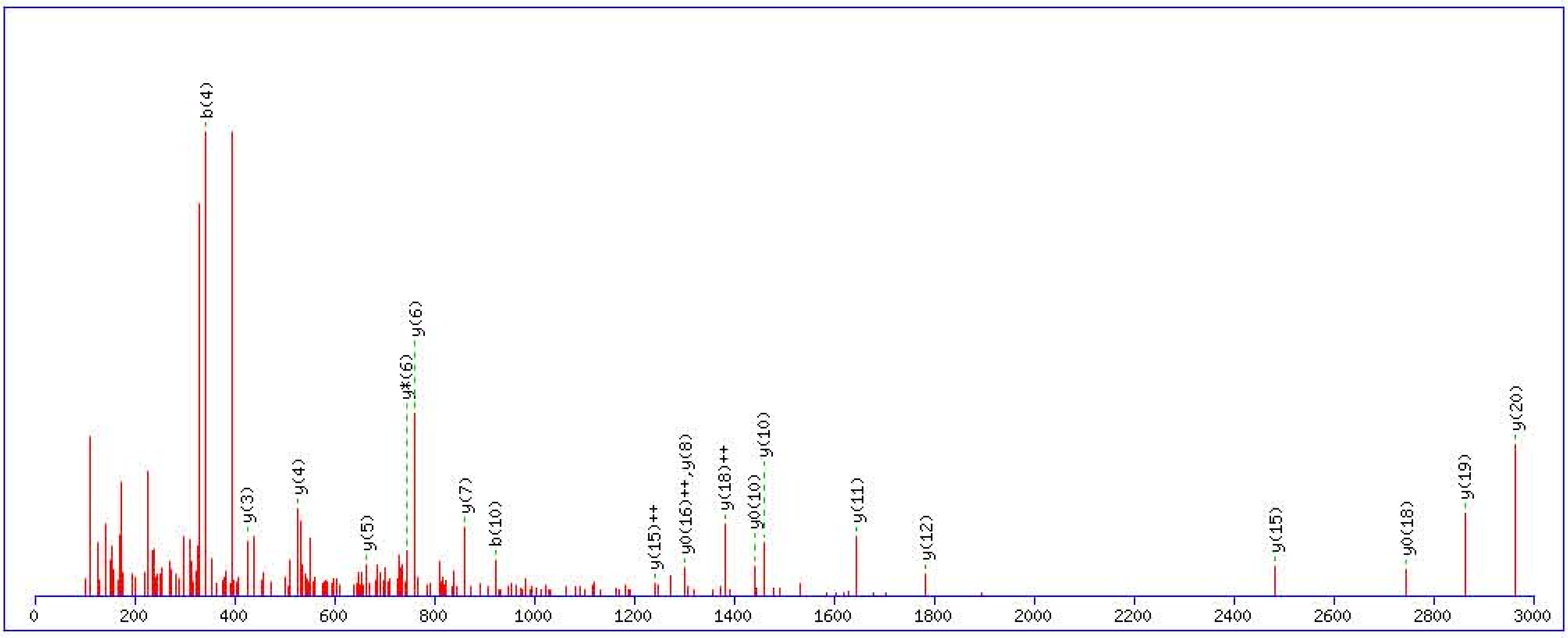
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GNVAVTVSGHTCQHWSAQTPHTHNR**
Found in **PLMN_HUMAN**, Plasminogen OS=Homo sapiens GN=PLG PE=1 SV=2

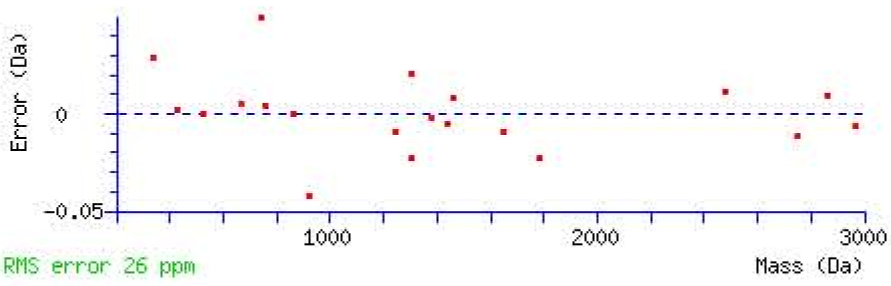
Match to Query 66349: 3403.614324 from(568.276330,6+) rtinseconds(1654) index(66674)
Title: Locus:1.1.1.1513.8 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

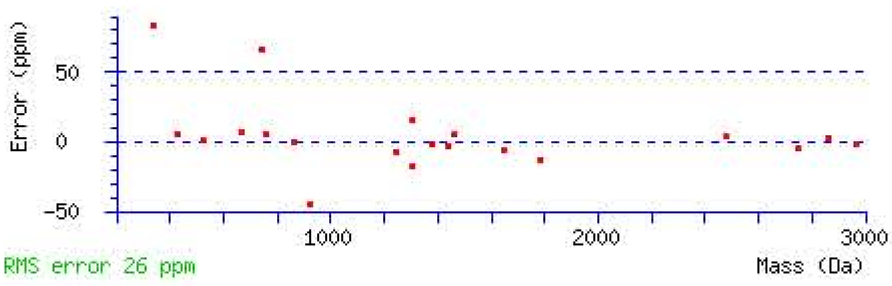
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] 0 to 3000 Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3403.623764
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
Q18     : Biotin:Thermo-21345 (Q)
Ions Score: 56  Expect: 7.7e-006
Matches : 20/270 fragment ions using 39 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 25 |
| 2 | 172.071667 | 86.539471 | 155.045118 | 78.026197 | | | N | 3347.609538 | 1674.308407 | 3330.582989 | 1665.795132 | 3329.598973 | 1665.303124 | 24 |
| 3 | 271.140081 | 136.073679 | 254.113532 | 127.560404 | | | V | 3233.566611 | 1617.286943 | 3216.540062 | 1608.773669 | 3215.556046 | 1608.281661 | 23 |
| 4 | **342.177195** | 171.592236 | 325.150646 | 163.078961 | | | A | 3134.498197 | 1567.752736 | 3117.471648 | 1559.239462 | 3116.487632 | 1558.747454 | 22 |
| 5 | 441.245609 | 221.126443 | 424.219060 | 212.613168 | | | V | 3063.461083 | 1532.234179 | 3046.434534 | 1523.720905 | 3045.450518 | 1523.228897 | 21 |
| 6 | 542.293288 | 271.650282 | 525.266739 | 263.137008 | 524.282723 | 262.645000 | T | ***2964.392669*** | 1482.699972 | 2947.366120 | 1474.186698 | 2946.382104 | 1473.694690 | 20 |
| 7 | 641.361702 | 321.184489 | 624.335153 | 312.671215 | 623.351137 | 312.179207 | V | ***2863.344990*** | 1432.176133 | 2846.318441 | 1423.662858 | 2845.334425 | 1423.170850 | 19 |
| 8 | 728.393730 | 364.700503 | 711.367181 | 356.187229 | 710.383165 | 355.695221 | S | 2764.276576 | 1382.641926 | 2747.250027 | 1374.128651 | 2746.266011 | 1373.636643 | 18 |
| 9 | 785.415194 | 393.211235 | 768.388645 | 384.697961 | 767.404629 | 384.205953 | G | 2677.244548 | 1339.125912 | 2660.217999 | 1330.612637 | 2659.233983 | 1330.120629 | 17 |
| 10 | **922.474106** | 461.740691 | 905.447557 | 453.227417 | 904.463541 | 452.735409 | H | 2620.223084 | 1310.615180 | 2603.196535 | 1302.101905 | 2602.212519 | 1301.609897 | 16 |
| 11 | 1023.521785 | 512.264530 | 1006.495236 | 503.751256 | 1005.511220 | 503.259248 | T | ***2483.164172*** | 1242.085724 | 2466.137623 | 1233.572449 | 2465.153607 | 1233.080441 | 15 |
| 12 | 1183.552434 | 592.279855 | 1166.525885 | 583.766581 | 1165.541869 | 583.274572 | C | 2382.116493 | 1191.561884 | 2365.089944 | 1183.048610 | 2364.105928 | 1182.556602 | 14 |
| 13 | 1622.777760 | 811.892518 | 1605.751211 | 803.379244 | 1604.767195 | 802.887236 | Q | 2222.085844 | 1111.546560 | 2205.059295 | 1103.033285 | 2204.075279 | 1102.541277 | 13 |
| 14 | 1759.836672 | 880.421974 | 1742.810123 | 871.908700 | 1741.826107 | 871.416692 | H | ***1782.860518*** | 891.933897 | 1765.833969 | 883.420622 | 1764.849953 | 882.928614 | 12 |
| 15 | 1945.915985 | 973.461631 | 1928.889436 | 964.948356 | 1927.905420 | 964.456348 | W | ***1645.801606*** | 823.404441 | 1628.775057 | 814.891166 | 1627.791041 | 814.399158 | 11 |
| 16 | 2032.948013 | 1016.977645 | 2015.921464 | 1008.464370 | 2014.937448 | 1007.972362 | S | ***1459.722293*** | 730.364784 | 1442.695744 | 721.851510 | 1441.711728 | 721.359502 | 10 |
| 17 | 2103.985127 | 1052.496201 | 2086.958578 | 1043.982927 | 2085.974562 | 1043.490919 | A | 1372.690265 | 686.848770 | 1355.663716 | 678.335496 | 1354.679700 | 677.843488 | 9 |
| 18 | 2543.210453 | 1272.108865 | 2526.183904 | 1263.595590 | 2525.199888 | 1263.103582 | Q | ***1301.653151*** | 651.330213 | 1284.626602 | 642.816939 | 1283.642586 | 642.324931 | 8 |
| 19 | 2644.258132 | 1322.632704 | 2627.231583 | 1314.119429 | 2626.247567 | 1313.627421 | T | ***862.427825*** | 431.717550 | 845.401276 | 423.204276 | 844.417260 | 422.712268 | 7 |
| 20 | 2741.310896 | 1371.159086 | 2724.284347 | 1362.645811 | 2723.300331 | 1362.153803 | P | ***761.380146*** | 381.193711 | 744.353597 | 372.680436 | 743.369581 | 372.188428 | 6 |
| 21 | 2878.369808 | 1439.688542 | 2861.343259 | 1431.175267 | 2860.359243 | 1430.683259 | H | ***664.327382*** | 332.667329 | 647.300833 | 324.154054 | 646.316817 | 323.662046 | 5 |
| 22 | 2979.417487 | 1490.212381 | 2962.390938 | 1481.699107 | 2961.406922 | 1481.207099 | T | ***527.268470*** | 264.137873 | 510.241921 | 255.624598 | 509.257905 | 255.132590 | 4 |
| 23 | 3116.476399 | 1558.741837 | 3099.449850 | 1550.228563 | 3098.465834 | 1549.736555 | H | ***426.220791*** | 213.614033 | 409.194242 | 205.100759 | | | 3 |
| 24 | 3230.519326 | 1615.763301 | 3213.492777 | 1607.250026 | 3212.508761 | 1606.758018 | N | 289.161879 | 145.084577 | 272.135330 | 136.571303 | | | 2 |
| 25 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GNVAVTVSGHTCQHWSAQTPHTHNR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.8 | 3403.623764 | -0.009440 | GNVAVTVSGHTCQHWSAQTPHTHNR |
| 1.3 | 3403.604858 | 0.009466 | TQVPMVVMPHGGPHSSFVTAWMLFPAMLCK |
| 0.7 | 3403.604858 | 0.009466 | TQVPMVVMPHGGPHSSFVTAWMLFPAMLCK |

**Mascot:** http://www.matrixscience.com/

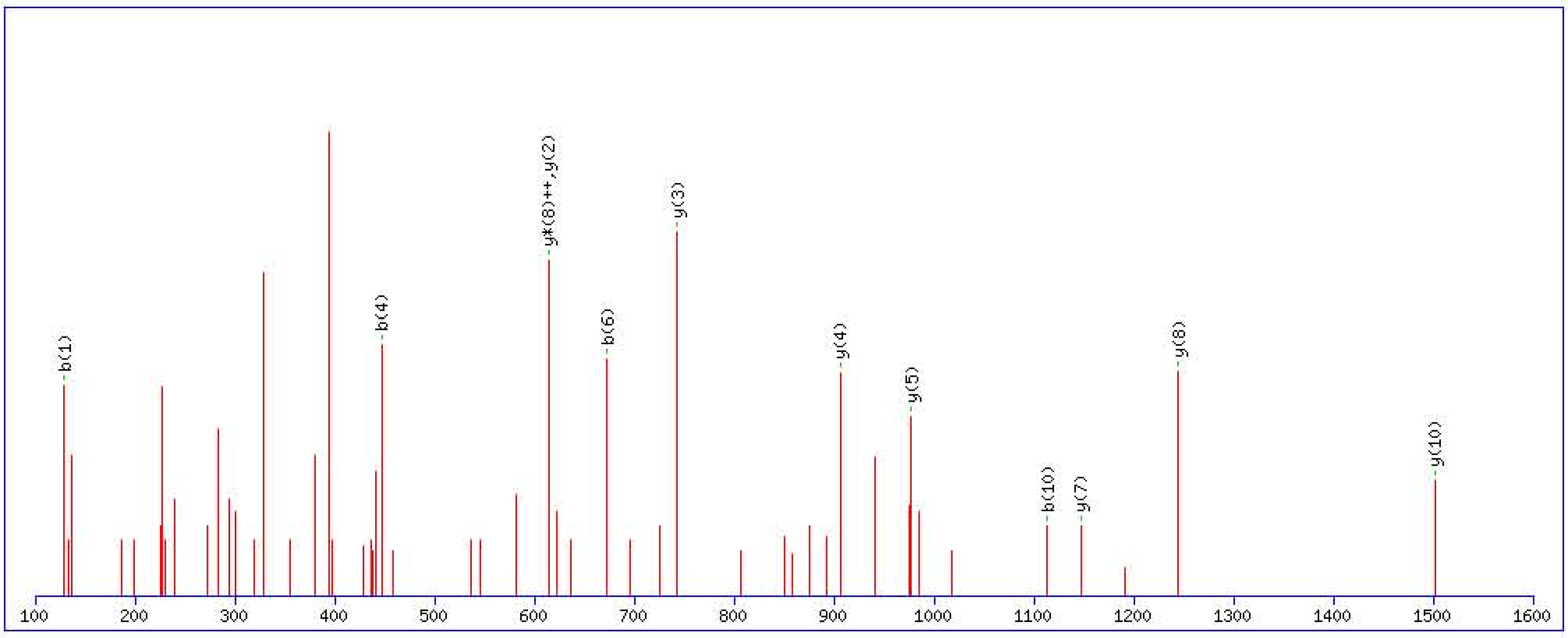
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KCSAPEPSQKPPGKPCPGLAYEQR**
Found in **PROP_HUMAN**, Properdin OS=Homo sapiens GN=CFP PE=1 SV=2

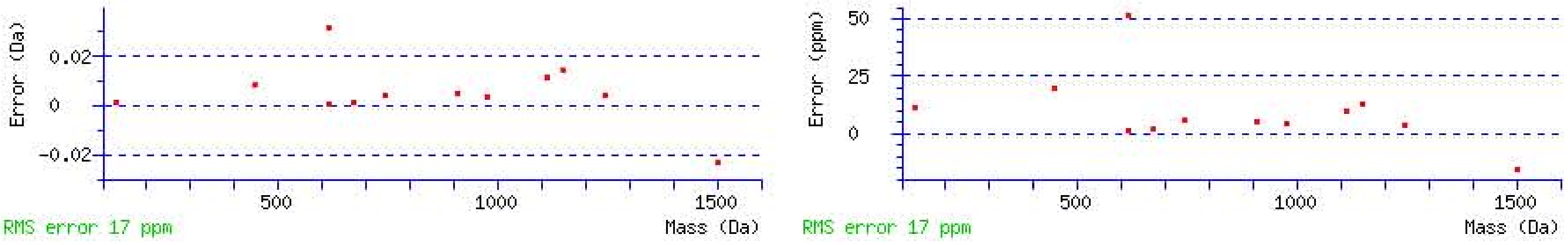
Match to Query 61642: 2992.466020 from(599.500480,5+) rtinseconds(1445) index(65442)
Title: Locus:1.1.1.1440.23 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2992.472107
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q23    : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 4.7e-006
Matches : 12/268 fragment ions using 13 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 24 |
| 2 | 289.132888 | 145.070082 | 272.106339 | 136.556808 | | | C | 2865.384455 | 1433.195865 | 2848.357906 | 1424.682591 | 2847.373890 | 1424.190583 | 23 |
| 3 | 376.164916 | 188.586096 | 359.138367 | 180.072822 | 358.154351 | 179.580814 | S | 2705.353806 | 1353.180541 | 2688.327257 | 1344.667266 | 2687.343241 | 1344.175258 | 22 |
| 4 | ***447.202030*** | 224.104653 | 430.175481 | 215.591378 | 429.191465 | 215.099370 | A | 2618.321778 | 1309.664527 | 2601.295229 | 1301.151252 | 2600.311213 | 1300.659244 | 21 |
| 5 | 544.254794 | 272.631035 | 527.228245 | 264.117761 | 526.244229 | 263.625753 | P | 2547.284664 | 1274.145970 | 2530.258115 | 1265.632695 | 2529.274099 | 1265.140687 | 20 |
| 6 | ***673.297387*** | 337.152332 | 656.270838 | 328.639057 | 655.286822 | 328.147049 | E | 2450.231900 | 1225.619588 | 2433.205351 | 1217.106313 | 2432.221335 | 1216.614305 | 19 |
| 7 | 770.350151 | 385.678714 | 753.323602 | 377.165439 | 752.339586 | 376.673431 | P | 2321.189307 | 1161.098292 | 2304.162758 | 1152.585017 | 2303.178742 | 1152.093009 | 18 |
| 8 | 857.382179 | 429.194728 | 840.355630 | 420.681453 | 839.371614 | 420.189445 | S | 2224.136543 | 1112.571909 | 2207.109994 | 1104.058635 | 2206.125978 | 1103.566627 | 17 |
| 9 | 985.440757 | 493.224017 | 968.414208 | 484.710742 | 967.430192 | 484.218734 | Q | 2137.104515 | 1069.055895 | 2120.077966 | 1060.542621 | 2119.093950 | 1060.050613 | 16 |
| 10 | ***1113.535720*** | 557.271498 | 1096.509171 | 548.758224 | 1095.525155 | 548.266216 | K | 2009.045937 | 1005.026607 | 1992.019388 | 996.513332 | 1991.035372 | 996.021324 | 15 |
| 11 | 1210.588484 | 605.797880 | 1193.561935 | 597.284606 | 1192.577919 | 596.792598 | P | 1880.950974 | 940.979125 | 1863.924425 | 932.465851 | 1862.940409 | 931.973843 | 14 |
| 12 | 1307.641248 | 654.324262 | 1290.614699 | 645.810988 | 1289.630683 | 645.318980 | P | 1783.898210 | 892.452743 | 1766.871661 | 883.939469 | 1765.887645 | 883.447461 | 13 |
| 13 | 1364.662712 | 682.834994 | 1347.636163 | 674.321720 | 1346.652147 | 673.829712 | G | 1686.845446 | 843.926361 | 1669.818897 | 835.413087 | 1668.834881 | 834.921079 | 12 |
| 14 | 1492.757675 | 746.882476 | 1475.731126 | 738.369201 | 1474.747110 | 737.877193 | K | 1629.823982 | 815.415629 | 1612.797433 | 806.902355 | 1611.813417 | 806.410347 | 11 |
| 15 | 1589.810439 | 795.408858 | 1572.783890 | 786.895583 | 1571.799874 | 786.403575 | P | ***1501.729019*** | 751.368148 | 1484.702470 | 742.854873 | 1483.718454 | 742.362865 | 10 |
| 16 | 1749.841088 | 875.424182 | 1732.814539 | 866.910908 | 1731.830523 | 866.418900 | C | 1404.676255 | 702.841766 | 1387.649706 | 694.328491 | 1386.665690 | 693.836483 | 9 |
| 17 | 1846.893852 | 923.950564 | 1829.867303 | 915.437290 | 1828.883287 | 914.945282 | P | ***1244.645606*** | 622.826441 | 1227.619057 | 614.313167 | 1226.635041 | 613.821159 | 8 |
| 18 | 1903.915316 | 952.461296 | 1886.888767 | 943.948022 | 1885.904751 | 943.456014 | G | ***1147.592842*** | 574.300059 | 1130.566293 | 565.786785 | 1129.582277 | 565.294777 | 7 |
| 19 | 2016.999380 | 1009.003328 | 1999.972831 | 1000.490054 | 1998.988815 | 999.998045 | L | 1090.571378 | 545.789327 | 1073.544829 | 537.276053 | 1072.560813 | 536.784045 | 6 |
| 20 | 2088.036494 | 1044.521885 | 2071.009945 | 1036.008610 | 2070.025929 | 1035.516602 | A | ***977.487314*** | 489.247295 | 960.460765 | 480.734021 | 959.476749 | 480.242013 | 5 |
| 21 | 2251.099823 | 1126.053549 | 2234.073274 | 1117.540275 | 2233.089258 | 1117.048267 | Y | ***906.450200*** | 453.728738 | 889.423651 | 445.215464 | 888.439635 | 444.723456 | 4 |
| 22 | 2380.142416 | 1190.574846 | 2363.115867 | 1182.061571 | 2362.131851 | 1181.569564 | E | ***743.386871*** | 372.197074 | 726.360322 | 363.683799 | 725.376306 | 363.191791 | 3 |
| 23 | 2819.367742 | 1410.187509 | 2802.341193 | 1401.674235 | 2801.357177 | 1401.182227 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 24 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of KCSAPEPSQKPPGKPCPGLAYEQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 57.3 | 2992.472107 | -0.006087 | KCSAPEPSQKPPGKPCPGLAYEQR |
| 0.4 | 2992.422989 | 0.043031 | MPSTASLTRKSNVNQQCPASTPSSEVIS |

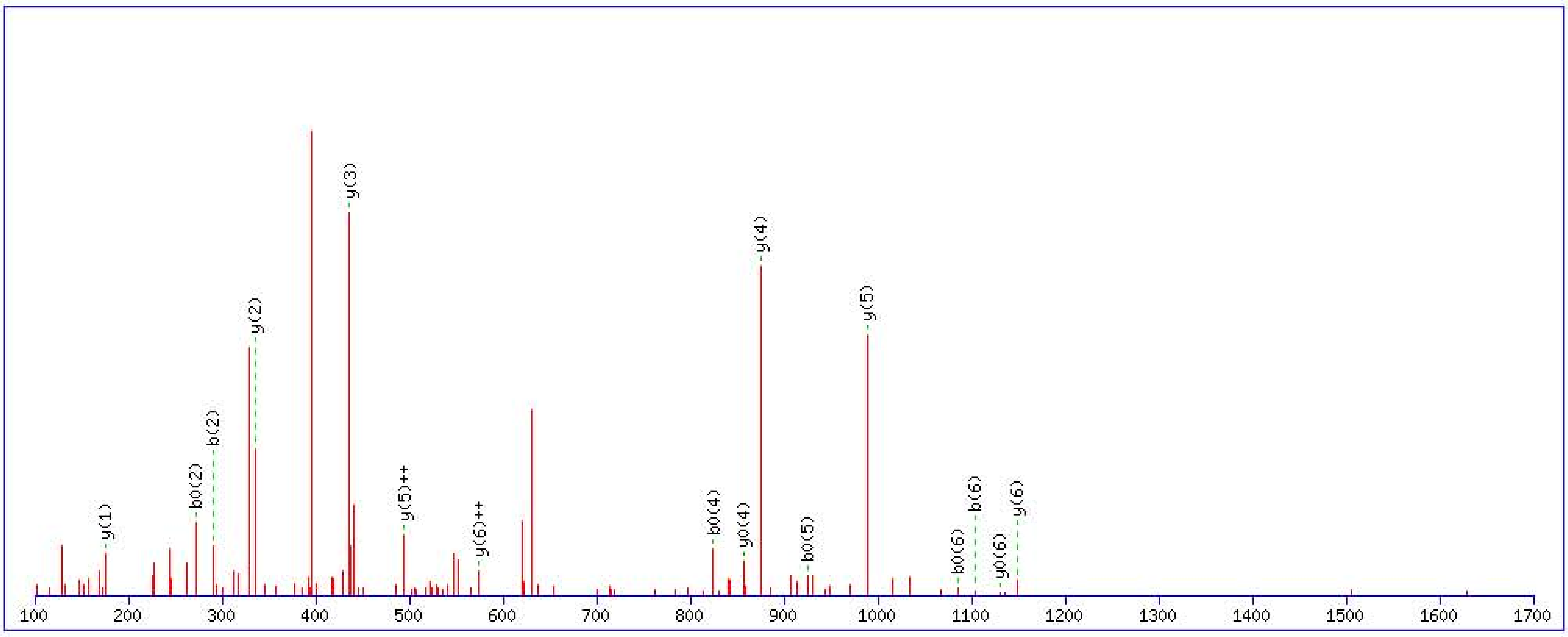
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **ECLQTCR**
Found in **AMBP_HUMAN**, Protein AMBP OS=Homo sapiens GN=AMBP PE=1 SV=1

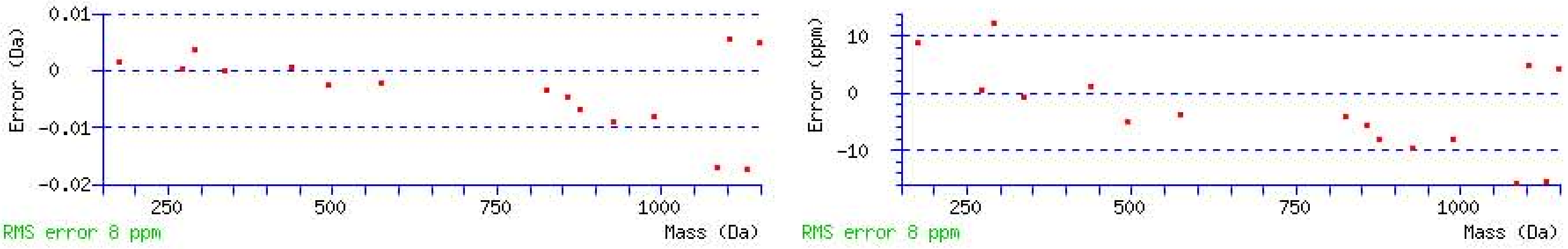
Match to Query 25483: 1276.567968 from(639.291260,2+) rtinseconds(1454) index(32957)
Title: Locus:1.1.1.2925.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1276.572632
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.0031
Matches : 16/62 fragment ions using 33 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 7 |
| 2 | **290.080518** | 145.543897 | | | 272.069953 | 136.538615 | C | ***1148.537319*** | 574.772298 | 1131.510770 | 566.259023 | 1130.526754 | 565.767015 | 6 |
| 3 | 403.164582 | 202.085929 | | | 385.154017 | 193.080647 | L | ***988.506670*** | 494.756973 | 971.480121 | 486.243699 | 970.496105 | 485.751691 | 5 |
| 4 | 842.389908 | 421.698592 | 825.363359 | 413.185318 | 824.379343 | 412.693310 | Q | ***875.422606*** | 438.214941 | 858.396057 | 429.701667 | 857.412041 | 429.209659 | 4 |
| 5 | 943.437587 | 472.222432 | 926.411038 | 463.709157 | 925.427022 | 463.217149 | T | ***436.197280*** | 218.602278 | 419.170731 | 210.089003 | 418.186715 | 209.596995 | 3 |
| 6 | **1103.468236** | 552.237756 | 1086.441687 | 543.724482 | 1085.457671 | 543.232474 | C | ***335.149601*** | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 7 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of ECLQTCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.8 | 1276.572632 | -0.004664 | ECLQTCR |
| 11.9 | 1276.553116 | 0.014852 | EDLDNASKDDR |
| 7.1 | 1276.583862 | -0.015894 | KMSLSCHVCR |
| 6.4 | 1276.579605 | -0.011637 | EEQRSPFNDR |
| 5.8 | 1276.587006 | -0.019038 | EDGTWAPMRSK |
| 5.2 | 1276.571762 | -0.003794 | AGAESPTMSVDGR |
| 3.8 | 1276.569275 | -0.001307 | MPMWAGGVGSPR |
| 3.0 | 1276.569229 | -0.001261 | MTGRYEMYAR |
| 0.5 | 1276.560516 | 0.007452 | DEAEMSPVVER |
| 0.3 | 1276.579132 | -0.011164 | MPMNAALGEPSK |

**Mascot:** http://www.matrixscience.com/

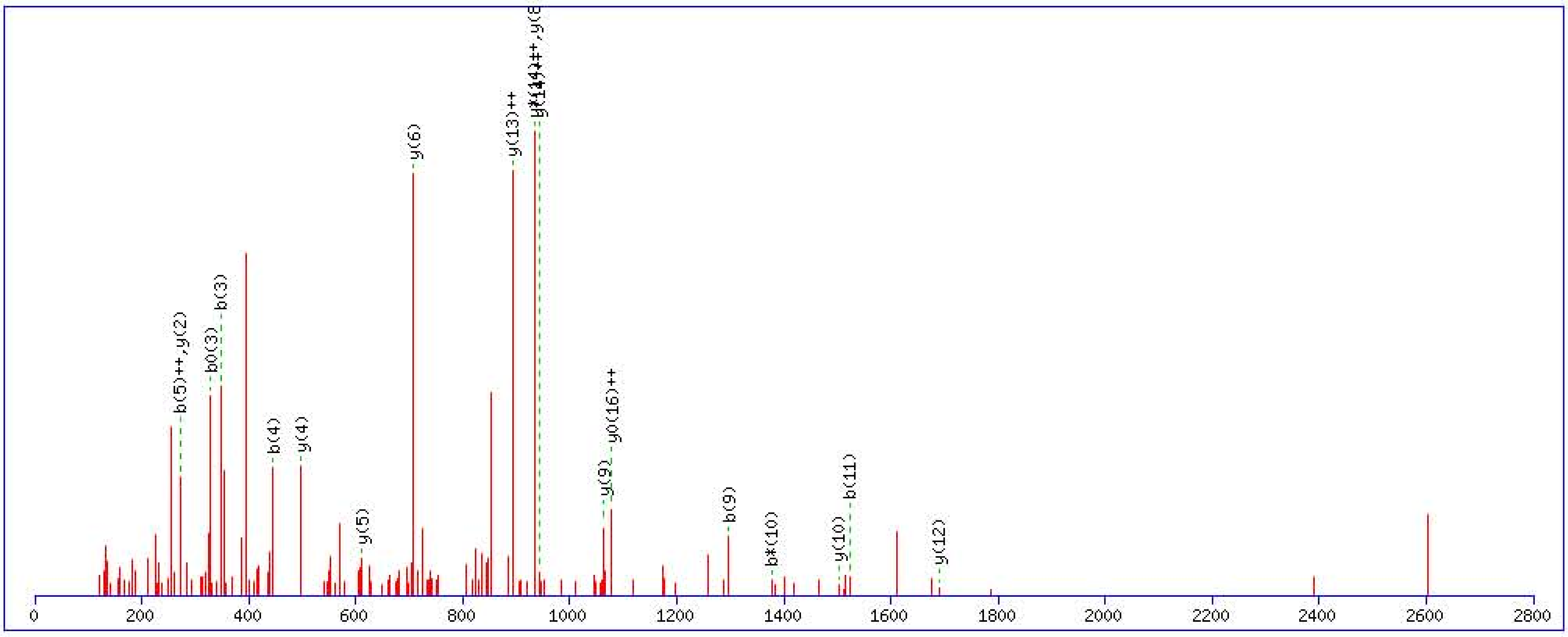
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GECVPGEQEPEPILIPR**
Found in **AMBP_HUMAN**, Protein AMBP OS=Homo sapiens GN=AMBP PE=1 SV=1

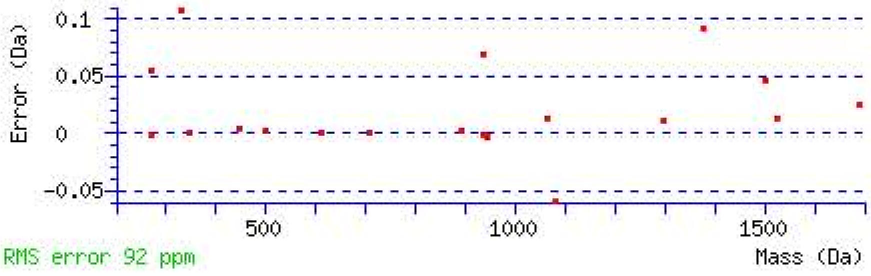
Match to Query 51672: 2230.117572 from(744.379800,3+) rtinseconds(2285) index(38156)
Title: Locus:1.1.1.3215.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

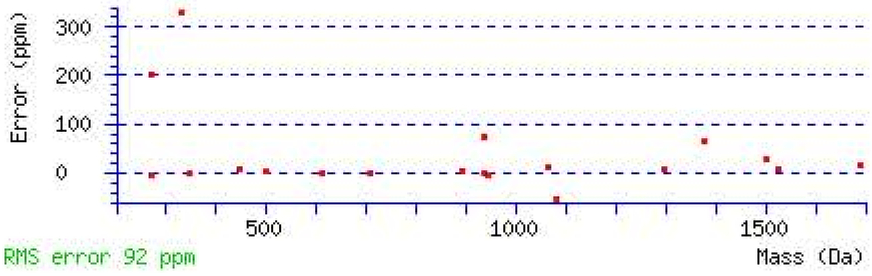
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2230.112595
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 25  Expect: 0.093
Matches : 19/164 fragment ions using 47 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 17 |
| 2 | 187.071333 | 94.039305 | | | 169.060768 | 85.034022 | E | 2174.098425 | 1087.552850 | 2157.071876 | 1079.039576 | 2156.087860 | 1078.547568 | 16 |
| 3 | **347.101982** | 174.054629 | | | 329.091417 | 165.049347 | C | 2045.055832 | 1023.031554 | 2028.029283 | 1014.518279 | 2027.045267 | 1014.026271 | 15 |
| 4 | **446.170396** | 223.588836 | | | 428.159831 | 214.583554 | V | 1885.025183 | 943.016229 | 1867.998634 | 934.502955 | 1867.014618 | 934.010947 | 14 |
| 5 | 543.223160 | 272.115218 | | | 525.212595 | 263.109936 | P | 1785.956769 | 893.482022 | 1768.930220 | 884.968748 | 1767.946204 | 884.476740 | 13 |
| 6 | 600.244624 | 300.625950 | | | 582.234059 | 291.620668 | G | ***1688.904005*** | 844.955640 | 1671.877456 | 836.442366 | 1670.893440 | 835.950358 | 12 |
| 7 | 729.287217 | 365.147247 | | | 711.276652 | 356.141964 | E | 1631.882541 | 816.444908 | 1614.855992 | 807.931634 | 1613.871976 | 807.439626 | 11 |
| 8 | 1168.512543 | 584.759910 | 1151.485994 | 576.246635 | 1150.501978 | 575.754627 | Q | ***1502.839948*** | 751.923612 | 1485.813399 | 743.410337 | 1484.829383 | 742.918329 | 10 |
| 9 | **1297.555136** | 649.281206 | 1280.528587 | 640.767932 | 1279.544571 | 640.275924 | E | ***1063.614622*** | 532.310949 | 1046.588073 | 523.797674 | 1045.604057 | 523.305666 | 9 |
| 10 | 1394.607900 | 697.807588 | 1377.581351 | 689.294314 | 1376.597335 | 688.802306 | P | ***934.572029*** | 467.789652 | 917.545480 | 459.276378 | 916.561464 | 458.784370 | 8 |
| 11 | **1523.650493** | 762.328885 | 1506.623944 | 753.815610 | 1505.639928 | 753.323602 | E | 837.519265 | 419.263270 | 820.492716 | 410.749996 | 819.508700 | 410.257988 | 7 |
| 12 | 1620.703257 | 810.855267 | 1603.676708 | 802.341992 | 1602.692692 | 801.849984 | P | ***708.476672*** | 354.741974 | 691.450123 | 346.228699 | | | 6 |
| 13 | 1733.787321 | 867.397299 | 1716.760772 | 858.884024 | 1715.776756 | 858.392016 | I | ***611.423908*** | 306.215592 | 594.397359 | 297.702317 | | | 5 |
| 14 | 1846.871385 | 923.939331 | 1829.844836 | 915.426056 | 1828.860820 | 914.934048 | L | ***498.339844*** | 249.673560 | 481.313295 | 241.160285 | | | 4 |
| 15 | 1959.955449 | 980.481363 | 1942.928900 | 971.968088 | 1941.944884 | 971.476080 | I | 385.255780 | 193.131528 | 368.229231 | 184.618253 | | | 3 |
| 16 | 2057.008213 | 1029.007744 | 2039.981664 | 1020.494470 | 2038.997648 | 1020.002462 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 17 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GECVPGEQEPEPILIPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.1 | 2230.112595 | 0.004977 | GECVPGEQEPEPILIPR |

**Mascot:** http://www.matrixscience.com/

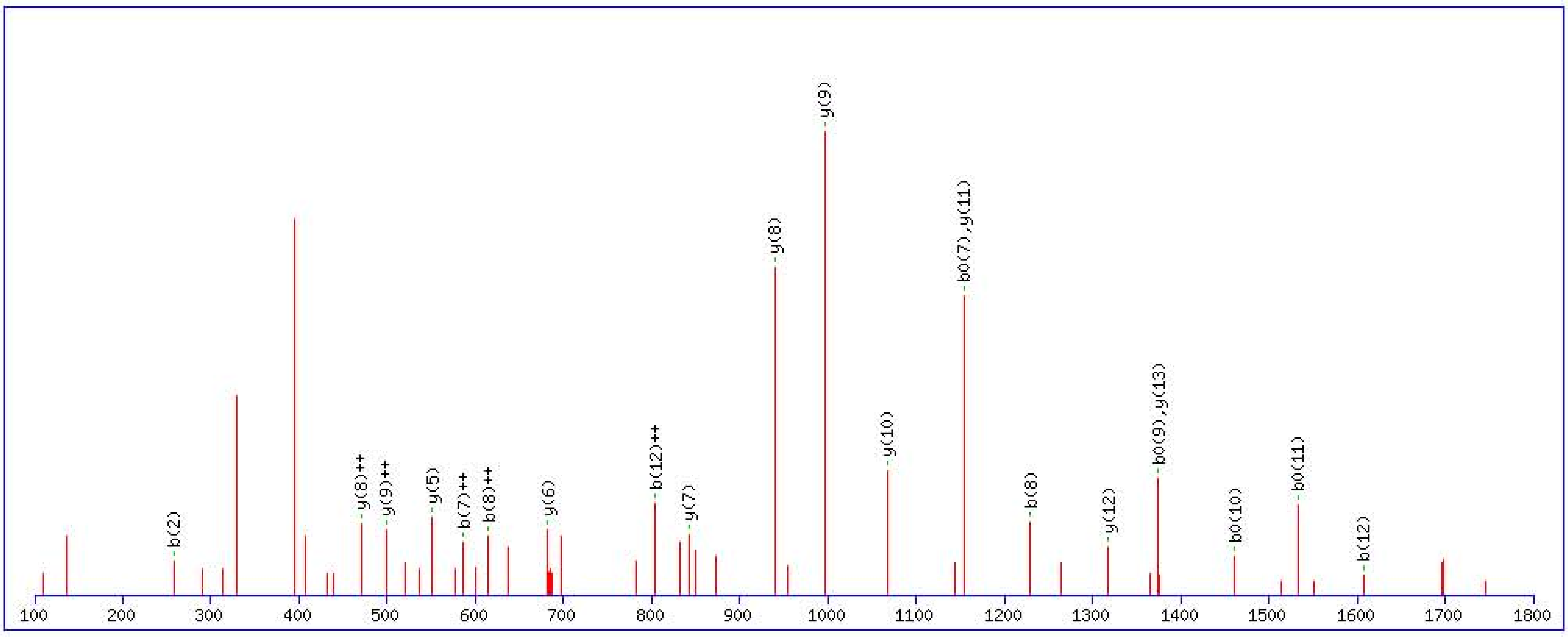
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KEDSCQLGYSAGPCMGMTSR**
Found in **AMBP_HUMAN**, Protein AMBP OS=Homo sapiens GN=AMBP PE=1 SV=1

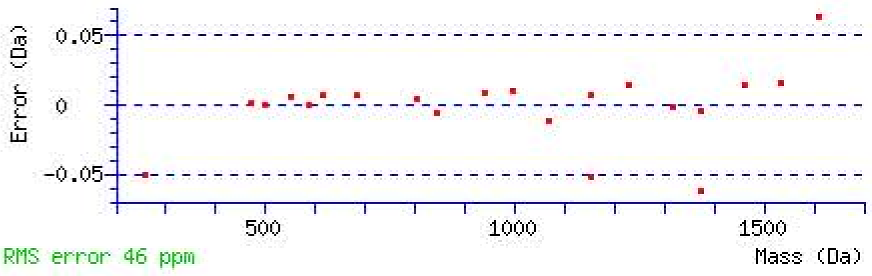
Match to Query 57202: 2545.106742 from(849.376190,3+) rtinseconds(1926) index(52273)
Title: Locus:1.1.1.1286.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

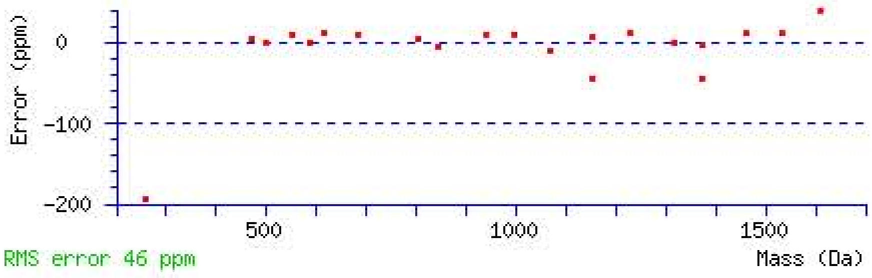
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2545.089188
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 1.9e-005
Matches : 21/224 fragment ions using 31 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.102239 | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 20 |
| 2 | **258.144832** | 129.576054 | 241.118283 | 121.062780 | 240.134267 | 120.570772 | E | 2418.001508 | 1209.504392 | 2400.974959 | 1200.991117 | 2399.990943 | 1200.499109 | 19 |
| 3 | 373.171775 | 187.089526 | 356.145226 | 178.576251 | 355.161210 | 178.084243 | D | 2288.958915 | 1144.983095 | 2271.932366 | 1136.469821 | 2270.948350 | 1135.977813 | 18 |
| 4 | 460.203803 | 230.605540 | 443.177254 | 222.092265 | 442.193238 | 221.600257 | S | 2173.931972 | 1087.469624 | 2156.905423 | 1078.956349 | 2155.921407 | 1078.464341 | 17 |
| 5 | 620.234452 | 310.620864 | 603.207903 | 302.107590 | 602.223887 | 301.615582 | C | 2086.899944 | 1043.953610 | 2069.873395 | 1035.440335 | 2068.889379 | 1034.948327 | 16 |
| 6 | 1059.459778 | 530.233527 | 1042.433229 | 521.720253 | 1041.449213 | 521.228245 | Q | 1926.869295 | 963.938286 | 1909.842746 | 955.425011 | 1908.858730 | 954.933003 | 15 |
| 7 | 1172.543842 | **586.775559** | 1155.517293 | 578.262285 | 1154.533277 | 577.770277 | L | 1487.643969 | 744.325623 | 1470.617420 | 735.812348 | 1469.633404 | 735.320340 | 14 |
| 8 | **1229.565306** | **615.286291** | 1212.538757 | 606.773017 | 1211.554741 | 606.281008 | G | ***1374.559905*** | 687.783591 | 1357.533356 | 679.270316 | 1356.549340 | 678.778308 | 13 |
| 9 | 1392.628635 | 696.817956 | 1375.602086 | 688.304681 | 1374.618070 | 687.812673 | Y | ***1317.538441*** | 659.272859 | 1300.511892 | 650.759584 | 1299.527876 | 650.267576 | 12 |
| 10 | 1479.660663 | 740.333970 | 1462.634114 | 731.820695 | 1461.650098 | 731.328687 | S | ***1154.475112*** | 577.741194 | 1137.448563 | 569.227920 | 1136.464547 | 568.735912 | 11 |
| 11 | 1550.697777 | 775.852527 | 1533.671228 | 767.339252 | 1532.687212 | 766.847244 | A | ***1067.443084*** | 534.225180 | 1050.416535 | 525.711906 | 1049.432519 | 525.219898 | 10 |
| 12 | **1607.719241** | **804.363259** | 1590.692692 | 795.849984 | 1589.708676 | 795.357976 | G | ***996.405970*** | 498.706623 | 979.379421 | 490.193349 | 978.395405 | 489.701341 | 9 |
| 13 | 1704.772005 | 852.889641 | 1687.745456 | 844.376366 | 1686.761440 | 843.884358 | P | ***939.384506*** | 470.195891 | 922.357957 | 461.682617 | 921.373941 | 461.190609 | 8 |
| 14 | 1864.802654 | 932.904965 | 1847.776105 | 924.391691 | 1846.792089 | 923.899683 | C | ***842.331742*** | 421.669509 | 825.305193 | 413.156235 | 824.321177 | 412.664227 | 7 |
| 15 | 1995.843139 | 998.425208 | 1978.816590 | 989.911933 | 1977.832574 | 989.419925 | M | ***682.301093*** | 341.654185 | 665.274544 | 333.140910 | 664.290528 | 332.648902 | 6 |
| 16 | 2052.864603 | 1026.935939 | 2035.838054 | 1018.422665 | 2034.854038 | 1017.930657 | G | ***551.260608*** | 276.133942 | 534.234059 | 267.620668 | 533.250043 | 267.128660 | 5 |
| 17 | 2183.905088 | 1092.456182 | 2166.878539 | 1083.942907 | 2165.894523 | 1083.450899 | M | 494.239144 | 247.623210 | 477.212595 | 239.109935 | 476.228579 | 238.617927 | 4 |
| 18 | 2284.952767 | 1142.980021 | 2267.926218 | 1134.466747 | 2266.942202 | 1133.974739 | T | 363.198659 | 182.102967 | 346.172110 | 173.589693 | 345.188094 | 173.097685 | 3 |
| 19 | 2371.984795 | 1186.496035 | 2354.958246 | 1177.982761 | 2353.974230 | 1177.490753 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 20 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KEDSCQLGYSAGPCMGMTSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.1 | 2545.089188 | 0.017554 | KEDSCQLGYSAGPCMGMTSR |

**Mascot:** http://www.matrixscience.com/

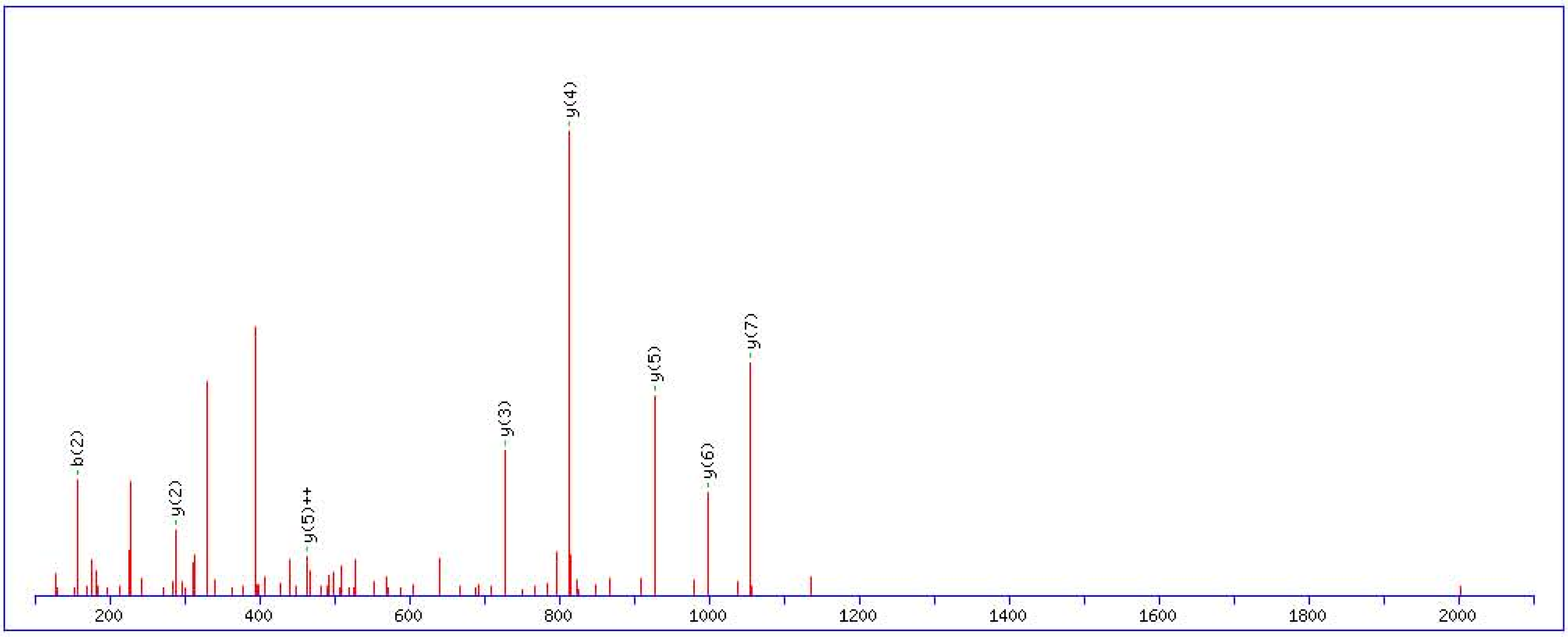
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VGALSQLR**
Found in **MENT_HUMAN**, Protein MENT OS=Homo sapiens GN=MENT PE=2 SV=1

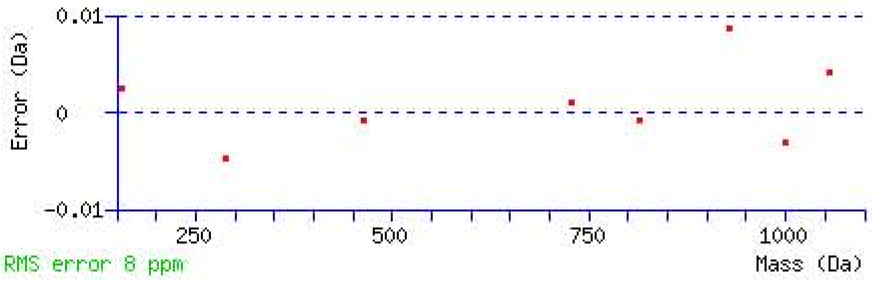
Match to Query 21773: 1153.660648 from(577.837600,2+) rtinseconds(1917) index(35812)
Title: Locus:1.1.1.3087.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

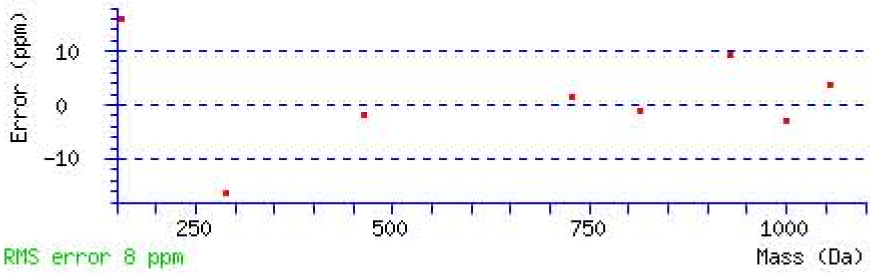
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1153.664139
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Ions Score: 57  Expect: 3.3e-005
Matches : 8/60 fragment ions using 11 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 8 |
| 2 | 157.097154 | 79.052215 | | | | | G | *1055.603012* | 528.305144 | 1038.576463 | 519.791870 | 1037.592447 | 519.299862 | 7 |
| 3 | 228.134268 | 114.570772 | | | | | A | *998.581548* | 499.794412 | 981.554999 | 491.281138 | 980.570983 | 490.789130 | 6 |
| 4 | 341.218332 | 171.112804 | | | | | L | *927.544434* | 464.275855 | 910.517885 | 455.762581 | 909.533869 | 455.270573 | 5 |
| 5 | 428.250360 | 214.628818 | | | 410.239795 | 205.623535 | S | *814.460370* | 407.733823 | 797.433821 | 399.220549 | 796.449805 | 398.728541 | 4 |
| 6 | 867.475686 | 434.241481 | 850.449137 | 425.728207 | 849.465121 | 425.236199 | Q | *727.428342* | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 7 | 980.559750 | 490.783513 | 963.533201 | 482.270239 | 962.549185 | 481.778231 | L | *288.203016* | 144.605146 | 271.176467 | 136.091872 | | | 2 |
| 8 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549840 | | | 1 |





NCBI **BLAST** search of VGALSQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 56.7 | 1153.664139 | -0.003491 | VGALSQLR |
| 23.6 | 1153.667953 | -0.007305 | RANPNSIRVK |
| 20.9 | 1153.645477 | 0.015171 | RALAAPVAEEK |
| 14.2 | 1153.675354 | -0.014706 | RALLSQR |
| 14.2 | 1153.675369 | -0.014721 | RALTVQR |
| 13.1 | 1153.664124 | -0.003476 | VKQEALR |
| 7.2 | 1153.675369 | -0.014721 | QTVRALR |
| 6.5 | 1153.656723 | 0.003925 | RPSADPGKKAK |
| 4.3 | 1153.645493 | 0.015155 | NLLKLDPADR |
| 3.1 | 1153.664124 | -0.003476 | LKVEQAR |

**Mascot:** http://www.matrixscience.com/

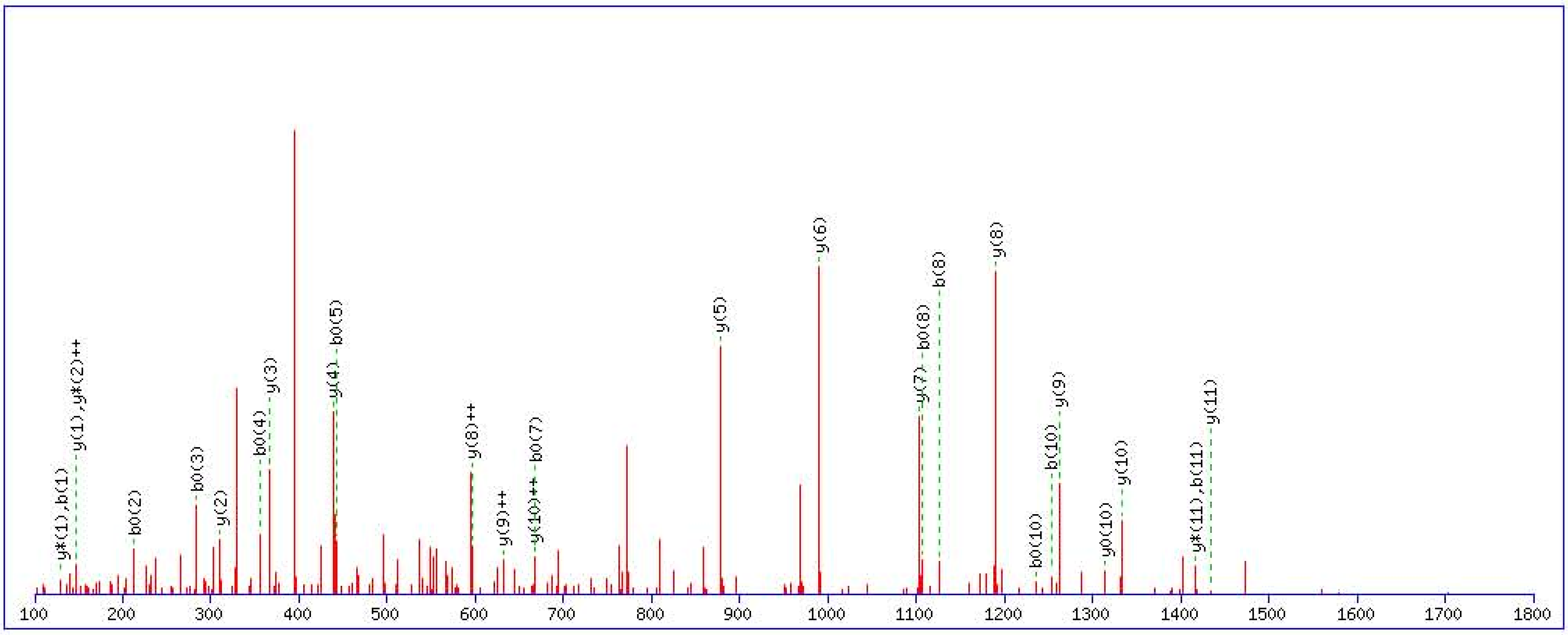
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ETAASLLQAGYK**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

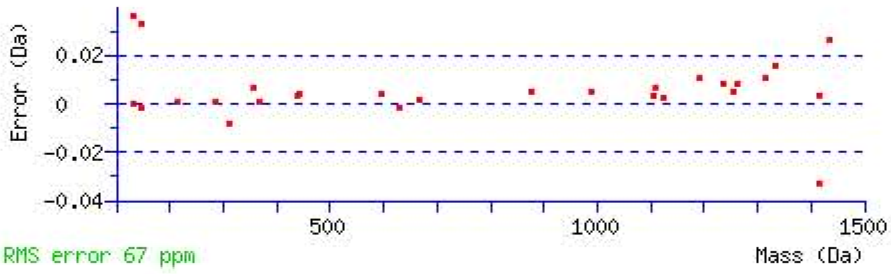
Match to Query 35366: 1561.829268 from(781.921910,2+) rtinseconds(2161) index(53983)
Title: Locus:1.1.1.1367.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

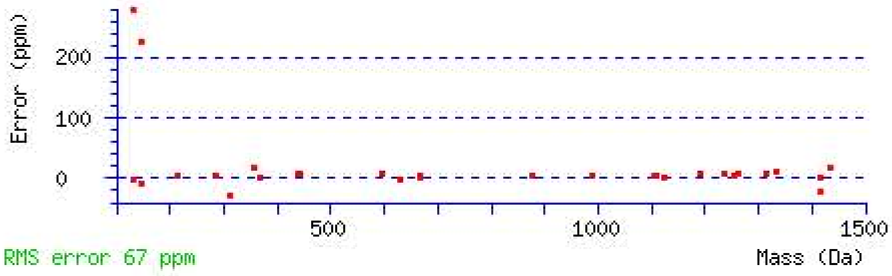


```
Monoisotopic mass of neutral peptide Mr(calc): 1561.817383
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 54  Expect: 1.8e-005
Matches : 29/104 fragment ions using 71 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **130.049869** | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 12 |
| 2 | 231.097548 | 116.052412 | | | 213.086983 | 107.047130 | T | ***1433.782100*** | 717.394688 | 1416.755551 | 708.881414 | 1415.771535 | 708.389406 | 11 |
| 3 | 302.134662 | 151.570969 | | | 284.124097 | 142.565687 | A | ***1332.734421*** | 666.870848 | 1315.707872 | 658.357574 | 1314.723856 | 657.865566 | 10 |
| 4 | 373.171776 | 187.089526 | | | 355.161211 | 178.084243 | A | ***1261.697307*** | 631.352292 | 1244.670758 | 622.839017 | 1243.686742 | 622.347009 | 9 |
| 5 | 460.203804 | 230.605540 | | | 442.193239 | 221.600257 | S | ***1190.660193*** | 595.833734 | 1173.633644 | 587.320460 | 1172.649628 | 586.828452 | 8 |
| 6 | 573.287868 | 287.147572 | | | 555.277303 | 278.142290 | L | ***1103.628165*** | 552.317721 | 1086.601616 | 543.804446 | | | 7 |
| 7 | 686.371932 | 343.689604 | | | 668.361367 | 334.684322 | L | ***990.544101*** | 495.775689 | 973.517552 | 487.262414 | | | 6 |
| 8 | **1125.597258** | 563.302267 | 1108.570709 | 554.788993 | 1107.586693 | 554.296985 | Q | ***877.460037*** | 439.233657 | 860.433488 | 430.720382 | | | 5 |
| 9 | 1196.634372 | 598.820824 | 1179.607823 | 590.307550 | 1178.623807 | 589.815541 | A | ***438.234711*** | 219.620993 | 421.208162 | 211.107719 | | | 4 |
| 10 | **1253.655836** | 627.331556 | 1236.629287 | 618.818282 | 1235.645271 | 618.326273 | G | ***367.197597*** | 184.102436 | 350.171048 | 175.589162 | | | 3 |
| 11 | **1416.719165** | 708.863221 | 1399.692616 | 700.349946 | 1398.708600 | 699.857938 | Y | ***310.176133*** | 155.591705 | 293.149584 | 147.078430 | | | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 67 ppm



RMS error 67 ppm

NCBI **BLAST** search of ETAASLLQAGYK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 54.0 | 1561.817383 | 0.011885 | ETAASLLQAGYK |
| 3.4 | 1561.817398 | 0.011870 | VLPEVLEKQCGYK |

**Mascot:** http://www.matrixscience.com/

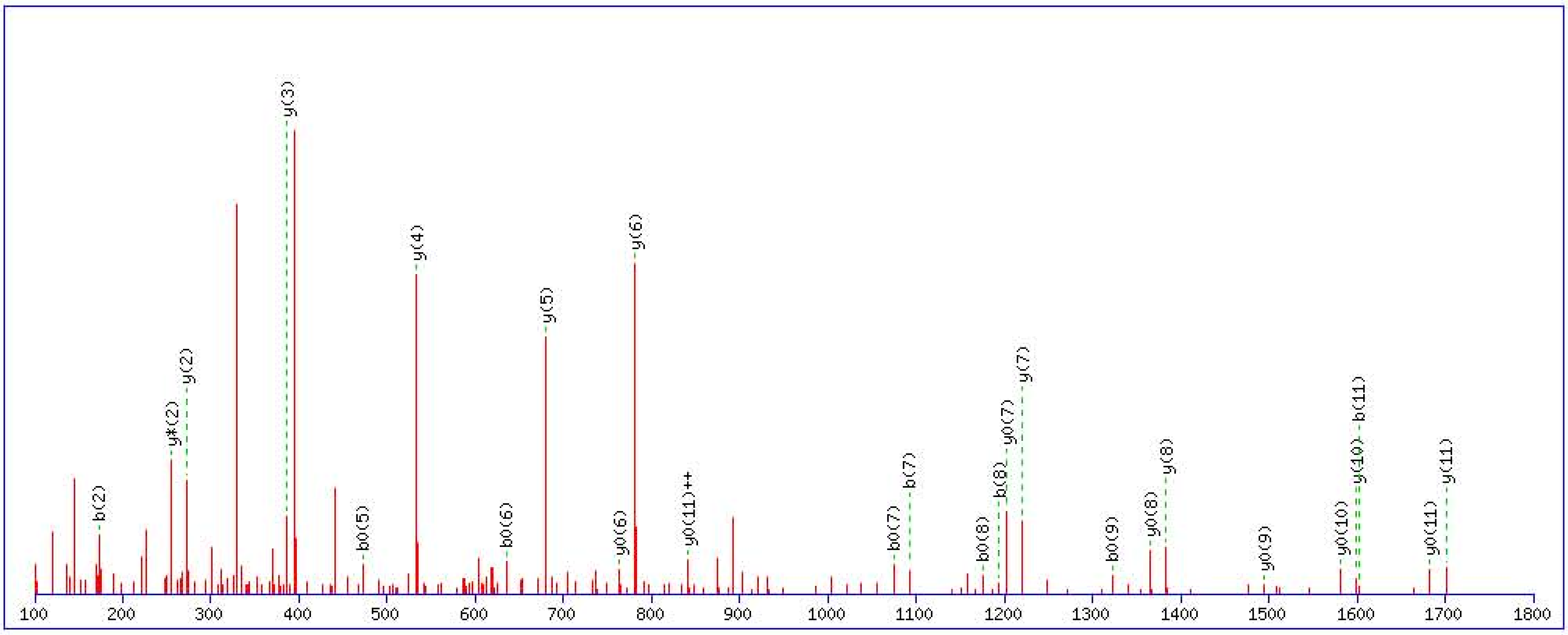
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TATSEYQTFFNPR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

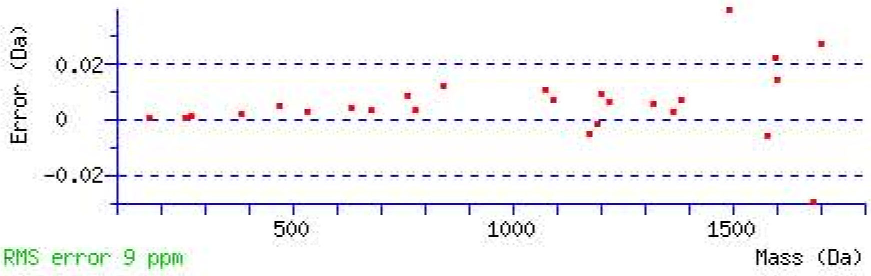
Match to Query 44163: 1871.894352 from(624.972060,3+) rtinseconds(2281) index(54733)
Title: Locus:1.1.1.1409.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

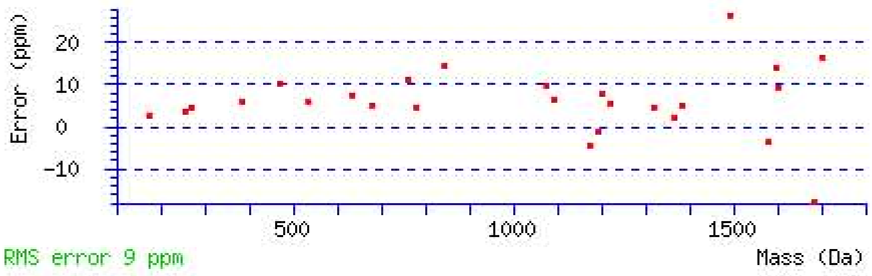
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1800] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1871.887619
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 0.00038
Matches : 26/122 fragment ions using 48 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 13 |
| 2 | **173.092069** | 87.049672 | | | 155.081504 | 78.044390 | A | 1771.847219 | 886.427248 | 1754.820670 | 877.913973 | 1753.836654 | 877.421965 | 12 |
| 3 | 274.139748 | 137.573512 | | | 256.129183 | 128.568230 | T | ***1700.810105*** | 850.908691 | 1683.783556 | 842.395416 | 1682.799540 | 841.903408 | 11 |
| 4 | 361.171776 | 181.089526 | | | 343.161211 | 172.084243 | S | ***1599.762426*** | 800.384851 | 1582.735877 | 791.871577 | 1581.751861 | 791.379569 | 10 |
| 5 | 490.214369 | 245.610822 | | | 472.203804 | 236.605540 | E | 1512.730398 | 756.868837 | 1495.703849 | 748.355563 | 1494.719833 | 747.863555 | 9 |
| 6 | 653.277698 | 327.142487 | | | 635.267133 | 318.137205 | Y | ***1383.687805*** | 692.347541 | 1366.661256 | 683.834266 | 1365.677240 | 683.342258 | 8 |
| 7 | **1092.503024** | 546.755150 | 1075.476475 | 538.241876 | 1074.492459 | 537.749868 | Q | ***1220.624476*** | 610.815876 | 1203.597927 | 602.302602 | 1202.613911 | 601.810594 | 7 |
| 8 | **1193.550703** | 597.278990 | 1176.524154 | 588.765715 | 1175.540138 | 588.273707 | T | ***781.399150*** | 391.203213 | 764.372601 | 382.689939 | 763.388585 | 382.197931 | 6 |
| 9 | 1340.619117 | 670.813197 | 1323.592568 | 662.299922 | 1322.608552 | 661.807914 | F | ***680.351471*** | 340.679374 | 663.324922 | 332.166099 | | | 5 |
| 10 | 1487.687531 | 744.347404 | 1470.660982 | 735.834129 | 1469.676966 | 735.342121 | F | ***533.283057*** | 267.145167 | 516.256508 | 258.631892 | | | 4 |
| 11 | **1601.730458** | 801.368867 | 1584.703909 | 792.855593 | 1583.719893 | 792.363585 | N | ***386.214643*** | 193.610959 | 369.188094 | 185.097685 | | | 3 |
| 12 | 1698.783222 | 849.895249 | 1681.756673 | 841.381975 | 1680.772657 | 840.889967 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 13 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of TATSEYQTFFNPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.8 | 1871.887619 | 0.006733 | TATSEYQTFFNPR |

**Mascot:** http://www.matrixscience.com/

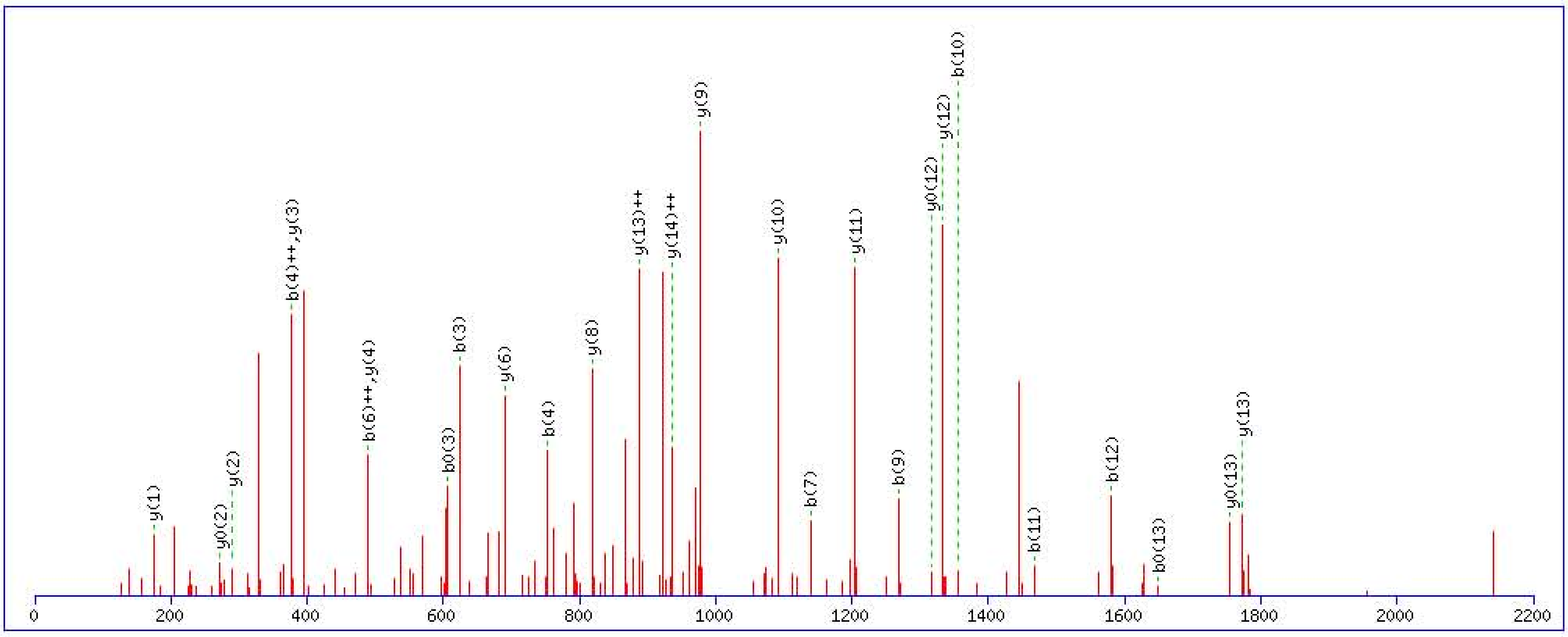
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SPQELLCGASLISDR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

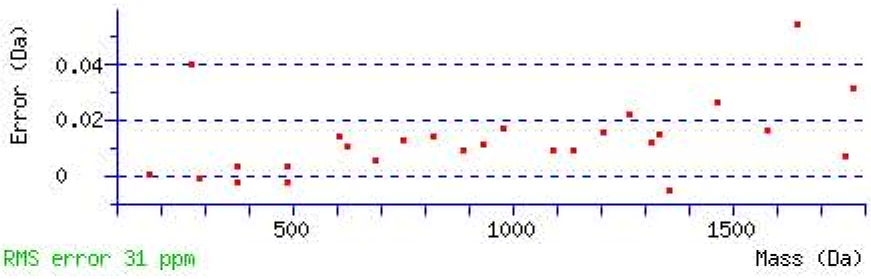
Match to Query 45649: 1956.003388 from(979.008970,2+) rtinseconds(2515) index(55984)
Title: Locus:1.1.1.1490.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

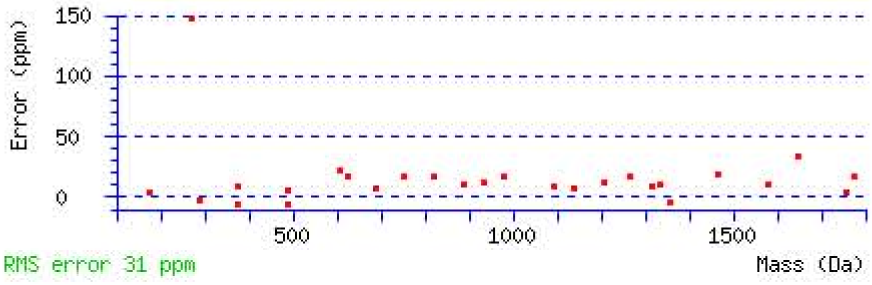
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1955.980850
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3     : Biotin:Thermo-21345 (Q)
Ions Score: 86  Expect: 6.9e-008
Matches : 27/162 fragment ions using 34 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 15 |
| 2 | 185.092068 | 93.049672 | | | 167.081503 | 84.044389 | P | 1869.956117 | 935.481697 | 1852.929568 | 926.968422 | 1851.945552 | 926.476414 | 14 |
| 3 | **624.317394** | 312.662335 | 607.290845 | 304.149061 | 606.306829 | 303.657053 | Q | ***1772.903353*** | 886.955314 | 1755.876804 | 878.442040 | 1754.892788 | 877.950032 | 13 |
| 4 | **753.359987** | **377.183632** | 736.333438 | 368.670357 | 735.349422 | 368.178349 | E | ***1333.678027*** | 667.342652 | 1316.651478 | 658.829377 | 1315.667462 | 658.337369 | 12 |
| 5 | 866.444051 | 433.725664 | 849.417502 | 425.212389 | 848.433486 | 424.720381 | L | ***1204.635434*** | 602.821355 | 1187.608885 | 594.308081 | 1186.624869 | 593.816073 | 11 |
| 6 | 979.528115 | **490.267696** | 962.501566 | 481.754421 | 961.517550 | 481.262413 | L | ***1091.551370*** | 546.279323 | 1074.524821 | 537.766049 | 1073.540805 | 537.274040 | 10 |
| 7 | **1139.558764** | 570.283020 | 1122.532215 | 561.769746 | 1121.548199 | 561.277738 | C | ***978.467306*** | 489.737291 | 961.440757 | 481.224017 | 960.456741 | 480.732009 | 9 |
| 8 | 1196.580228 | 598.793752 | 1179.553679 | 590.280478 | 1178.569663 | 589.788470 | G | ***818.436657*** | 409.721967 | 801.410108 | 401.208692 | 800.426092 | 400.716684 | 8 |
| 9 | **1267.617342** | 634.312309 | 1250.590793 | 625.799035 | 1249.606777 | 625.307027 | A | 761.415193 | 381.211235 | 744.388644 | 372.697960 | 743.404628 | 372.205952 | 7 |
| 10 | **1354.649370** | 677.828323 | 1337.622821 | 669.315049 | 1336.638805 | 668.823041 | S | ***690.378079*** | 345.692678 | 673.351530 | 337.179403 | 672.367514 | 336.687395 | 6 |
| 11 | **1467.733434** | 734.370355 | 1450.706885 | 725.857081 | 1449.722869 | 725.365073 | L | 603.346051 | 302.176664 | 586.319502 | 293.663389 | 585.335486 | 293.171381 | 5 |
| 12 | **1580.817498** | 790.912387 | 1563.790949 | 782.399113 | 1562.806933 | 781.907104 | I | ***490.261987*** | 245.634631 | 473.235438 | 237.121357 | 472.251422 | 236.629349 | 4 |
| 13 | 1667.849526 | 834.428401 | 1650.822977 | 825.915127 | 1649.838961 | 825.423118 | S | ***377.177923*** | 189.092600 | 360.151374 | 180.579325 | 359.167358 | 180.087317 | 3 |
| 14 | 1782.876469 | 891.941873 | 1765.849920 | 883.428598 | 1764.865904 | 882.936590 | D | ***290.145895*** | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 15 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SPQELLCGASLISDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 86.2 | 1955.980850 | 0.022538 | SPQELLCGASLISDR |
| 17.8 | 1956.006470 | -0.003082 | AILRVAELSSDDFHLDR |
| 2.4 | 1955.975464 | 0.027924 | QHSLHSAQWFAGAFTLR |

**Mascot:** http://www.matrixscience.com/

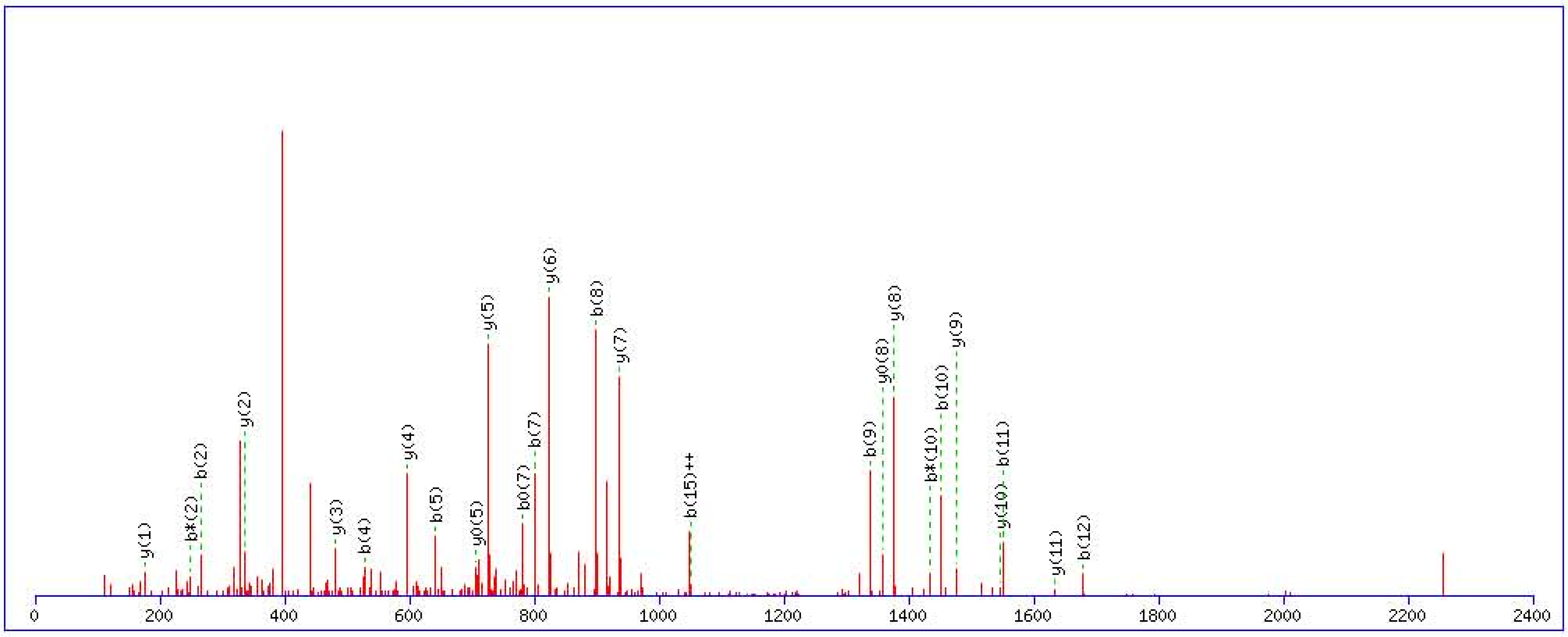
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HQDFNSAVQLVENFCR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

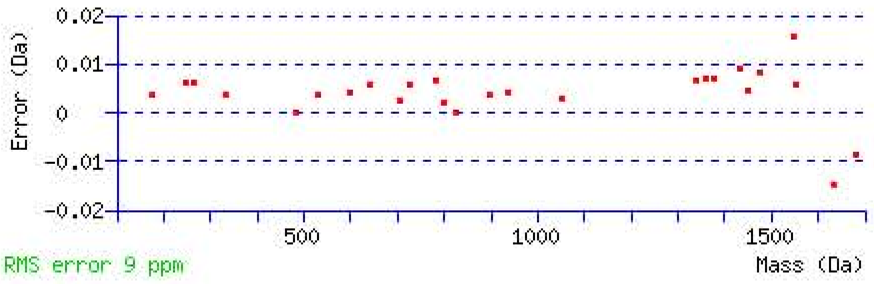
Match to Query 52519: 2274.074502 from(759.032110,3+) rtinseconds(2457) index(71300)
Title: Locus:1.1.1.1793.6 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

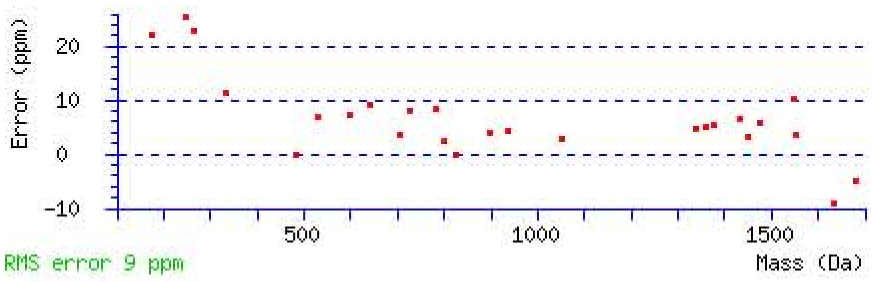
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [0] to [2400] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2274.067398
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 55  Expect: 5.7e-005
Matches : 26/166 fragment ions using 55 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 16 |
| 2 | *266.124766* | 133.566021 | 249.098217 | 125.052746 | | | Q | 2138.015757 | 1069.511516 | 2120.989208 | 1060.998242 | 2120.005192 | 1060.506234 | 15 |
| 3 | 381.151709 | 191.079492 | 364.125160 | 182.566218 | 363.141144 | 182.074210 | D | 2009.957179 | 1005.482228 | 1992.930630 | 996.968953 | 1991.946614 | 996.476945 | 14 |
| 4 | *528.220123* | 264.613700 | 511.193574 | 256.100425 | 510.209558 | 255.608417 | F | 1894.930236 | 947.968756 | 1877.903687 | 939.455482 | 1876.919671 | 938.963474 | 13 |
| 5 | *642.263050* | 321.635163 | 625.236501 | 313.121889 | 624.252485 | 312.629881 | N | 1747.861822 | 874.434549 | 1730.835273 | 865.921275 | 1729.851257 | 865.429267 | 12 |
| 6 | 729.295078 | 365.151177 | 712.268529 | 356.637903 | 711.284513 | 356.145895 | S | *1633.818895* | 817.413086 | 1616.792346 | 808.899811 | 1615.808330 | 808.407803 | 11 |
| 7 | *800.332192* | 400.669734 | 783.305643 | 392.156459 | 782.321627 | 391.664451 | A | *1546.786867* | 773.897072 | 1529.760318 | 765.383797 | 1528.776302 | 764.891789 | 10 |
| 8 | *899.400606* | 450.203941 | 882.374057 | 441.690666 | 881.390041 | 441.198658 | V | *1475.749753* | 738.378515 | 1458.723204 | 729.865240 | 1457.739188 | 729.373232 | 9 |
| 9 | *1338.625932* | 669.816604 | 1321.599383 | 661.303330 | 1320.615367 | 660.811322 | Q | *1376.681339* | 688.844308 | 1359.654790 | 680.331033 | 1358.670774 | 679.839025 | 8 |
| 10 | *1451.709996* | 726.358636 | 1434.683447 | 717.845362 | 1433.699431 | 717.353354 | L | *937.456013* | 469.231645 | 920.429464 | 460.718370 | 919.445448 | 460.226362 | 7 |
| 11 | *1550.778410* | 775.892843 | 1533.751861 | 767.379569 | 1532.767845 | 766.887561 | V | *824.371949* | 412.689613 | 807.345400 | 404.176338 | 806.361384 | 403.684330 | 6 |
| 12 | *1679.821003* | 840.414140 | 1662.794454 | 831.900865 | 1661.810438 | 831.408857 | E | *725.303535* | 363.155406 | 708.276986 | 354.642131 | 707.292970 | 354.150123 | 5 |
| 13 | 1793.863930 | 897.435603 | 1776.837381 | 888.922329 | 1775.853365 | 888.430321 | N | *596.260942* | 298.634109 | 579.234393 | 290.120835 | | | 4 |
| 14 | 1940.932344 | 970.969810 | 1923.905795 | 962.456536 | 1922.921779 | 961.964528 | F | *482.218015* | 241.612646 | 465.191466 | 233.099371 | | | 3 |
| 15 | 2100.962993 | 1050.985135 | 2083.936444 | 1042.471860 | 2082.952428 | 1041.979852 | C | *335.149601* | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 16 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of HQDFNSAVQLVENFCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.3 | 2274.067398 | 0.007104 | HQDFNSAVQLVENFCR |
| 17.6 | 2274.067398 | 0.007104 | HQDFNSAVQLVENFCR |

**Mascot:** http://www.matrixscience.com/

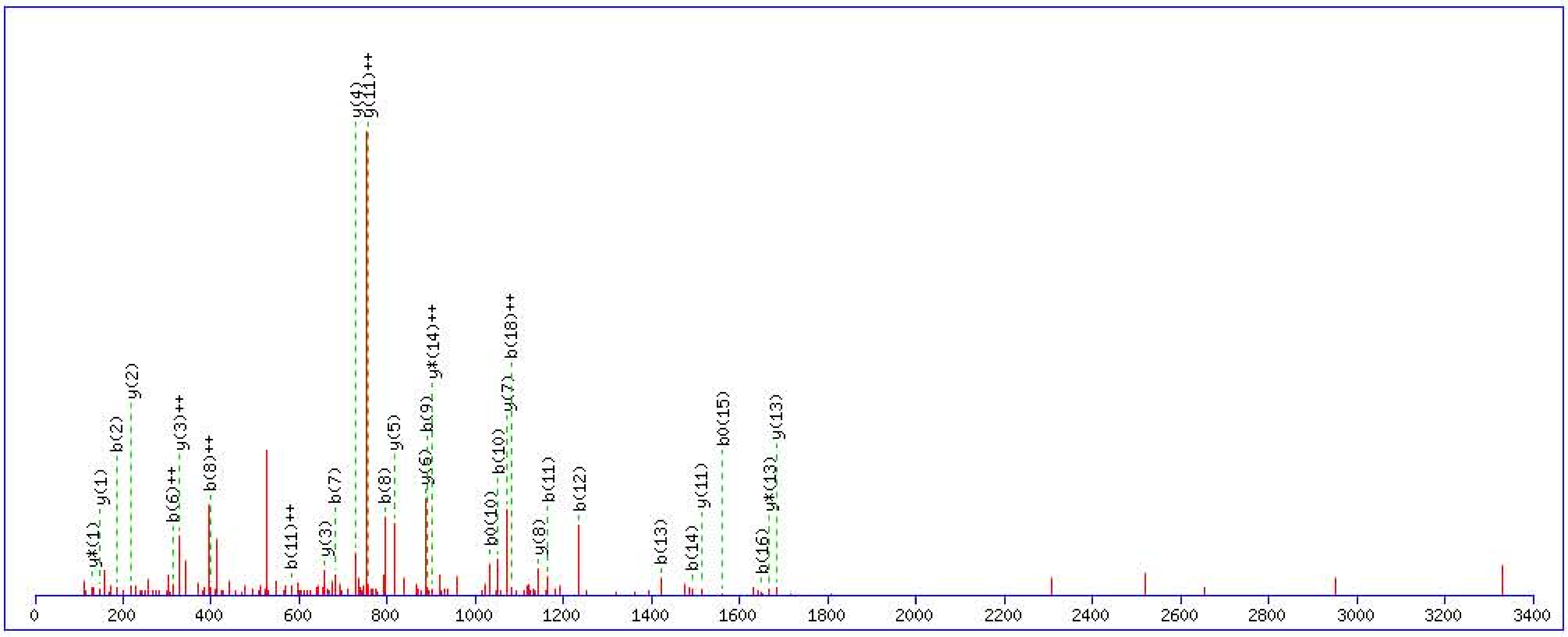
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LAVTTHGLPCLAWASAQAK**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

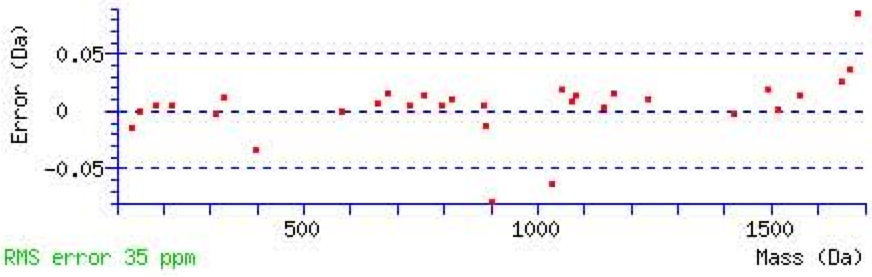
Match to Query 53098: 2305.229082 from(769.416970,3+) rtinseconds(2417) index(55489)
Title: Locus:1.1.1.1456.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

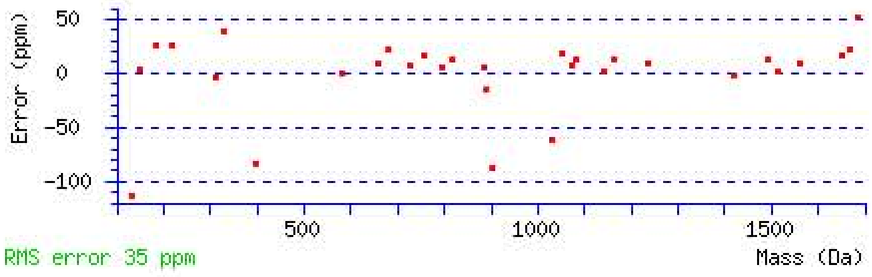
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2305.207504
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q17     : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.009
Matches : 31/170 fragment ions using 98 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 19 |
| 2 | ***185.128454*** | 93.067865 | | | | | A | 2193.130730 | 1097.069003 | 2176.104181 | 1088.555728 | 2175.120165 | 1088.063720 | 18 |
| 3 | 284.196868 | 142.602072 | | | | | V | 2122.093616 | 1061.550446 | 2105.067067 | 1053.037171 | 2104.083051 | 1052.545163 | 17 |
| 4 | 385.244547 | 193.125912 | | | 367.233982 | 184.120629 | T | 2023.025202 | 1012.016239 | 2005.998653 | 1003.502965 | 2005.014637 | 1003.010957 | 16 |
| 5 | 486.292226 | 243.649751 | | | 468.281661 | 234.644469 | T | 1921.977523 | 961.492400 | 1904.950974 | 952.979125 | 1903.966958 | 952.487117 | 15 |
| 6 | 623.351138 | **312.179207** | | | 605.340573 | 303.173925 | H | 1820.929844 | 910.968560 | 1803.903295 | 902.455286 | 1802.919279 | 901.963278 | 14 |
| 7 | ***680.372602*** | 340.689939 | | | 662.362037 | 331.684657 | G | ***1683.870932*** | 842.439104 | 1666.844383 | 833.925830 | 1665.860367 | 833.433822 | 13 |
| 8 | ***793.456666*** | **397.231971** | | | 775.446101 | 388.226689 | L | 1626.849468 | 813.928372 | 1609.822919 | 805.415098 | 1608.838903 | 804.923090 | 12 |
| 9 | ***890.509430*** | 445.758353 | | | 872.498865 | 436.753071 | P | ***1513.765404*** | 757.386340 | 1496.738855 | 748.873066 | 1495.754839 | 748.381058 | 11 |
| 10 | ***1050.540079*** | 525.773678 | | | 1032.529514 | 516.768395 | C | 1416.712640 | 708.859958 | 1399.686091 | 700.346684 | 1398.702075 | 699.854675 | 10 |
| 11 | ***1163.624143*** | **582.315710** | | | 1145.613578 | 573.310427 | L | 1256.681991 | 628.844634 | 1239.655442 | 620.331359 | 1238.671426 | 619.839351 | 9 |
| 12 | ***1234.661257*** | 617.834267 | | | 1216.650692 | 608.828984 | A | ***1143.597927*** | 572.302602 | 1126.571378 | 563.789327 | 1125.587362 | 563.297319 | 8 |
| 13 | ***1420.740570*** | 710.873923 | | | 1402.730005 | 701.868640 | W | ***1072.560813*** | 536.784045 | 1055.534264 | 528.270770 | 1054.550248 | 527.778762 | 7 |
| 14 | ***1491.777684*** | 746.392480 | | | 1473.767119 | 737.387197 | A | ***886.481500*** | 443.744388 | 869.454951 | 435.231114 | 868.470935 | 434.739106 | 6 |
| 15 | 1578.809712 | 789.908494 | | | 1560.799147 | 780.903212 | S | ***815.444386*** | 408.225831 | 798.417837 | 399.712557 | 797.433821 | 399.220549 | 5 |
| 16 | ***1649.846826*** | 825.427051 | | | 1631.836261 | 816.421768 | A | ***728.412358*** | 364.709817 | 711.385809 | 356.196543 | | | 4 |
| 17 | 2089.072152 | 1045.039714 | 2072.045603 | 1036.526439 | 2071.061587 | 1036.034431 | Q | ***657.375244*** | 329.191260 | 640.348695 | 320.677986 | | | 3 |
| 18 | 2160.109266 | **1080.558271** | 2143.082717 | 1072.044996 | 2142.098701 | 1071.552988 | A | ***218.149918*** | 109.578597 | 201.123369 | 101.065323 | | | 2 |
| 19 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LAVTTHGLPCLAWASAQAK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 34.0 | 2305.207504 | 0.021578 | LAVTTHGLPCLAWASAQAK |

**Mascot:** http://www.matrixscience.com/

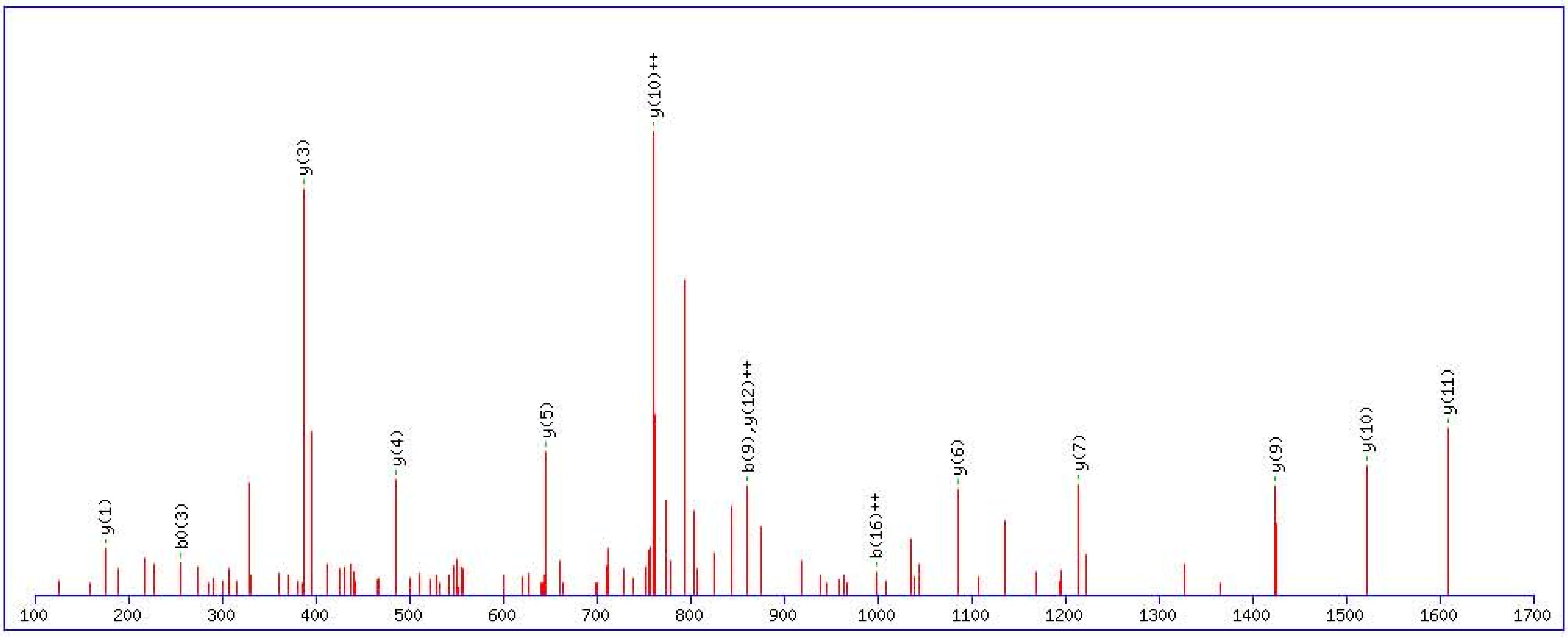
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SEGSSVNLSPPLEQCVPDR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

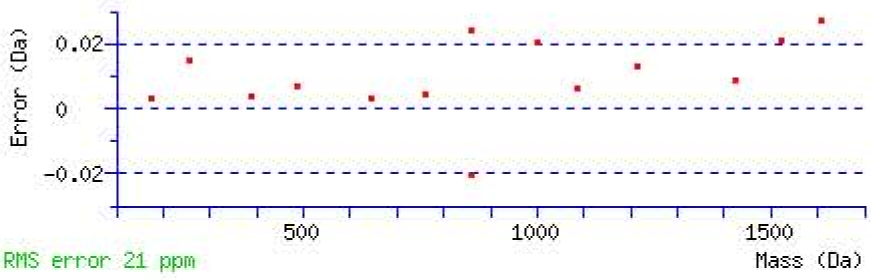
Match to Query 54037: 2381.154012 from(794.725280,3+) rtinseconds(2216) index(54364)
Title: Locus:1.1.1.1386.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

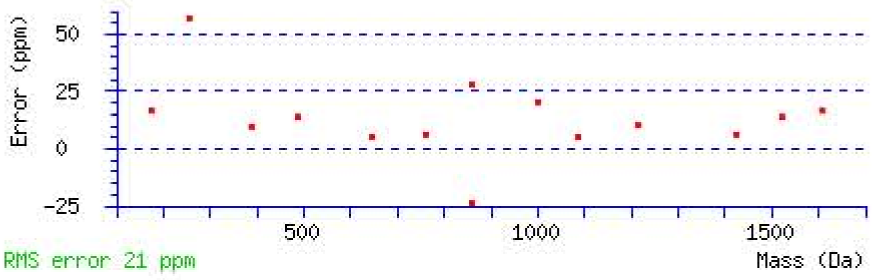
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2381.135529
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q14** : Biotin:Thermo-21345 (Q)
**Ions Score:** 80 **Expect:** 2.5e-007
**Matches :** 14/202 fragment ions using 14 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 19 |
| 2 | 217.081897 | 109.044586 | | | 199.071332 | 100.039304 | E | 2295.110779 | 1148.059027 | 2278.084230 | 1139.545753 | 2277.100214 | 1139.053745 | 18 |
| 3 | 274.103361 | 137.555319 | | | 256.092796 | 128.550036 | G | 2166.068186 | 1083.537731 | 2149.041637 | 1075.024456 | 2148.057621 | 1074.532448 | 17 |
| 4 | 361.135389 | 181.071332 | | | 343.124824 | 172.066050 | S | 2109.046722 | 1055.026999 | 2092.020173 | 1046.513724 | 2091.036157 | 1046.021716 | 16 |
| 5 | 448.167417 | 224.587346 | | | 430.156852 | 215.582064 | S | 2022.014694 | 1011.510985 | 2004.988145 | 1002.997711 | 2004.004129 | 1002.505703 | 15 |
| 6 | 547.235831 | 274.121554 | | | 529.225266 | 265.116271 | V | 1934.982666 | 967.994971 | 1917.956117 | 959.481697 | 1916.972101 | 958.989689 | 14 |
| 7 | 661.278758 | 331.143017 | 644.252209 | 322.629742 | 643.268193 | 322.137734 | N | 1835.914252 | 918.460764 | 1818.887703 | 909.947490 | 1817.903687 | 909.455482 | 13 |
| 8 | 774.362822 | 387.685049 | 757.336273 | 379.171774 | 756.352257 | 378.679766 | L | 1721.871325 | 861.439301 | 1704.844776 | 852.926026 | 1703.860760 | 852.434018 | 12 |
| 9 | **861.394850** | 431.201063 | 844.368301 | 422.687788 | 843.384285 | 422.195780 | S | ***1608.787261*** | 804.897269 | 1591.760712 | 796.383994 | 1590.776696 | 795.891986 | 11 |
| 10 | 958.447614 | 479.727445 | 941.421065 | 471.214170 | 940.437049 | 470.722162 | P | ***1521.755233*** | 761.381255 | 1504.728684 | 752.867980 | 1503.744668 | 752.375972 | 10 |
| 11 | 1055.500378 | 528.253827 | 1038.473829 | 519.740553 | 1037.489813 | 519.248544 | P | ***1424.702469*** | 712.854873 | 1407.675920 | 704.341598 | 1406.691904 | 703.849590 | 9 |
| 12 | 1168.584442 | 584.795859 | 1151.557893 | 576.282584 | 1150.573877 | 575.790576 | L | 1327.649705 | 664.328491 | 1310.623156 | 655.815216 | 1309.639140 | 655.323208 | 8 |
| 13 | 1297.627035 | 649.317155 | 1280.600486 | 640.803881 | 1279.616470 | 640.311873 | E | ***1214.565641*** | 607.786459 | 1197.539092 | 599.273184 | 1196.555076 | 598.781176 | 7 |
| 14 | 1736.852361 | 868.929819 | 1719.825812 | 860.416544 | 1718.841796 | 859.924536 | Q | ***1085.523048*** | 543.265162 | 1068.496499 | 534.751888 | 1067.512483 | 534.259880 | 6 |
| 15 | 1896.883010 | 948.945143 | 1879.856461 | 940.431869 | 1878.872445 | 939.939861 | C | ***646.297722*** | 323.652499 | 629.271173 | 315.139225 | 628.287157 | 314.647217 | 5 |
| 16 | 1995.951424 | **998.479350** | 1978.924875 | 989.966076 | 1977.940859 | 989.474068 | V | ***486.267073*** | 243.637174 | 469.240524 | 235.123900 | 468.256508 | 234.631892 | 4 |
| 17 | 2093.004188 | 1047.005732 | 2075.977639 | 1038.492457 | 2074.993623 | 1038.000449 | P | ***387.198659*** | 194.102967 | 370.172110 | 185.589693 | 369.188094 | 185.097685 | 3 |
| 18 | 2208.031131 | 1104.519203 | 2191.004582 | 1096.005929 | 2190.020566 | 1095.513921 | D | 290.145895 | 145.576585 | 273.119346 | 137.063311 | 272.135330 | 136.571303 | 2 |
| 19 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SEGSSVNLSPPLEQCVPDR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 79.8 | 2381.135529 | 0.018483 | SEGSSVNLSPPLEQCVPDR |

**Mascot:** http://www.matrixscience.com/

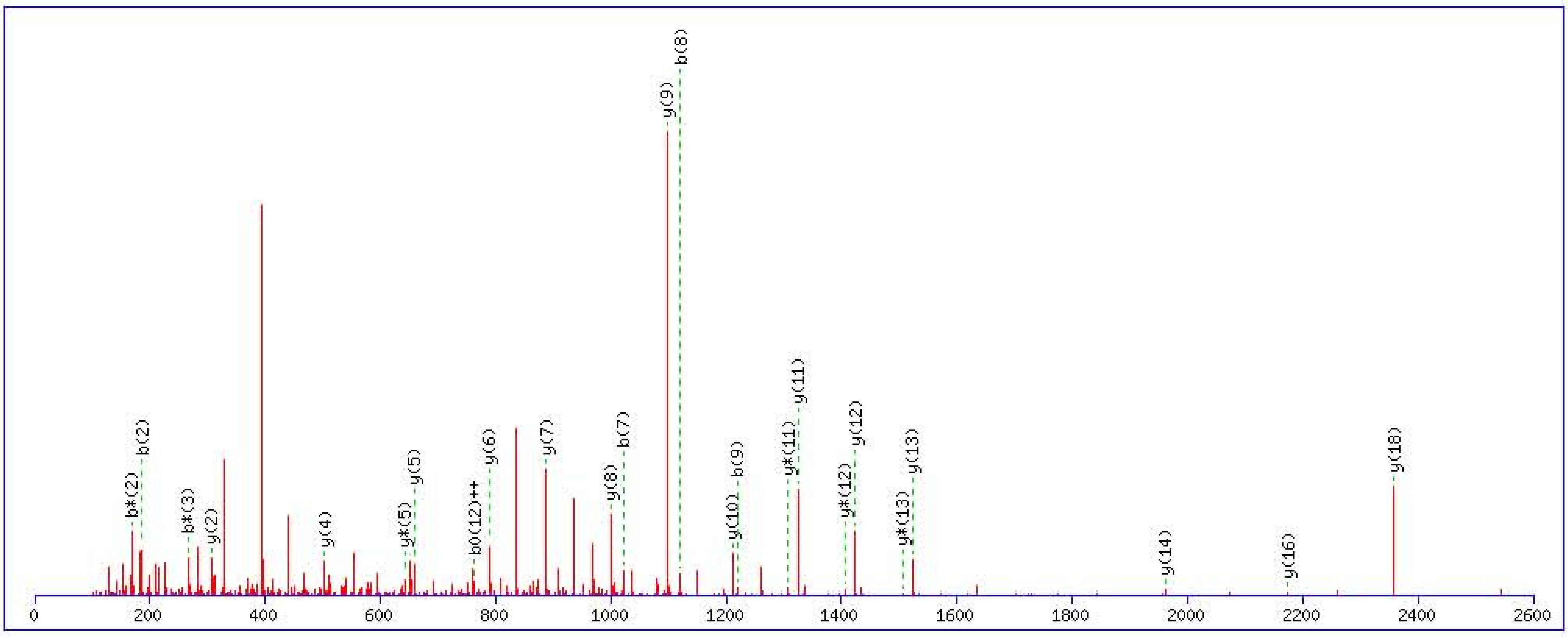
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GQPSVLQVVNLPIVERPVCK**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

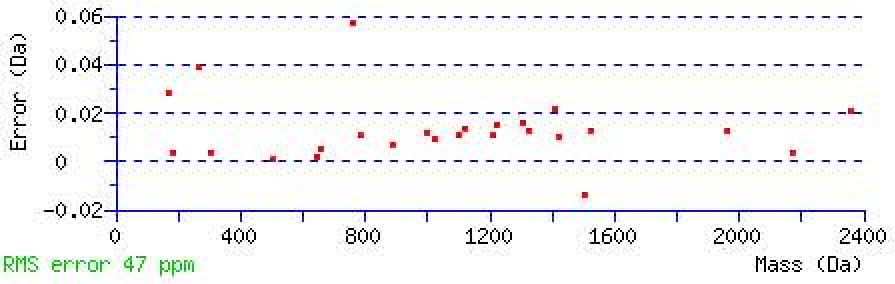
Match to Query 57176: 2542.431656 from(636.615190,4+) rtinseconds(2562) index(56325)
Title: Locus:1.1.1.1507.4 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

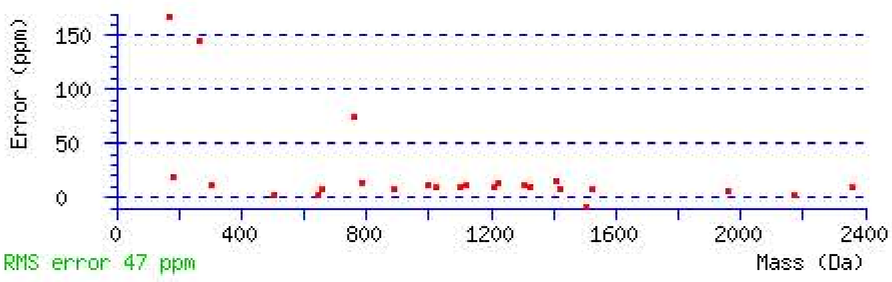
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2542.412766
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 71  Expect: 5e-007
Matches : 25/210 fragment ions using 58 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 20 |
| 2 | **186.087318** | 93.547297 | 169.060769 | 85.034023 | | | Q | 2486.398570 | 1243.702923 | 2469.372021 | 1235.189648 | 2468.388005 | 1234.697640 | 19 |
| 3 | 283.140082 | 142.073679 | 266.113533 | 133.560405 | | | P | ***2358.339992*** | 1179.673634 | 2341.313443 | 1171.160359 | 2340.329427 | 1170.668351 | 18 |
| 4 | 370.172110 | 185.589693 | 353.145561 | 177.076419 | 352.161545 | 176.584411 | S | 2261.287228 | 1131.147252 | 2244.260679 | 1122.633977 | 2243.276663 | 1122.141969 | 17 |
| 5 | 469.240524 | 235.123900 | 452.213975 | 226.610626 | 451.229959 | 226.118618 | V | ***2174.255200*** | 1087.631238 | 2157.228651 | 1079.117963 | 2156.244635 | 1078.625955 | 16 |
| 6 | 582.324588 | 291.665932 | 565.298039 | 283.152658 | 564.314023 | 282.660650 | L | 2075.186786 | 1038.097031 | 2058.160237 | 1029.583756 | 2057.176221 | 1029.091748 | 15 |
| 7 | **1021.549914** | 511.278595 | 1004.523365 | 502.765321 | 1003.539349 | 502.273313 | Q | ***1962.102722*** | 981.554999 | 1945.076173 | 973.041724 | 1944.092157 | 972.549716 | 14 |
| 8 | **1120.618328** | 560.812802 | 1103.591779 | 552.299528 | 1102.607763 | 551.807520 | V | ***1522.877396*** | 761.942336 | 1505.850847 | 753.429061 | 1504.866831 | 752.937053 | 13 |
| 9 | **1219.686742** | 610.347009 | 1202.660193 | 601.833735 | 1201.676177 | 601.341727 | V | ***1423.808982*** | 712.408129 | 1406.782433 | 703.894854 | 1405.798417 | 703.402846 | 12 |
| 10 | 1333.729669 | 667.368473 | 1316.703120 | 658.855198 | 1315.719104 | 658.363190 | N | ***1324.740568*** | 662.873922 | 1307.714019 | 654.360647 | 1306.730003 | 653.868639 | 11 |
| 11 | 1446.813733 | 723.910505 | 1429.787184 | 715.397230 | 1428.803168 | 714.905222 | L | ***1210.697641*** | 605.852458 | 1193.671092 | 597.339184 | 1192.687076 | 596.847176 | 10 |
| 12 | 1543.866497 | 772.436887 | 1526.839948 | 763.923612 | 1525.855932 | 763.431604 | P | ***1097.613577*** | 549.310426 | 1080.587028 | 540.797152 | 1079.603012 | 540.305144 | 9 |
| 13 | 1656.950561 | 828.978918 | 1639.924012 | 820.465644 | 1638.939996 | 819.973636 | I | ***1000.560813*** | 500.784044 | 983.534264 | 492.270770 | 982.550248 | 491.778762 | 8 |
| 14 | 1756.018975 | 878.513126 | 1738.992426 | 869.999851 | 1738.008410 | 869.507843 | V | ***887.476749*** | 444.242012 | 870.450200 | 435.728738 | 869.466184 | 435.236730 | 7 |
| 15 | 1885.061568 | 943.034422 | 1868.035019 | 934.521147 | 1867.051003 | 934.029139 | E | ***788.408335*** | 394.707805 | 771.381786 | 386.194531 | 770.397770 | 385.702523 | 6 |
| 16 | 2041.162679 | 1021.084977 | 2024.136130 | 1012.571703 | 2023.152114 | 1012.079695 | R | ***659.365742*** | 330.186509 | 642.339193 | 321.673234 | | | 5 |
| 17 | 2138.215443 | 1069.611359 | 2121.188894 | 1061.098085 | 2120.204878 | 1060.606077 | P | ***503.264631*** | 252.135953 | 486.238082 | 243.622679 | | | 4 |
| 18 | 2237.283857 | 1119.145566 | 2220.257308 | 1110.632292 | 2219.273292 | 1110.140284 | V | 406.211867 | 203.609571 | 389.185318 | 195.096297 | | | 3 |
| 19 | 2397.314506 | 1199.160891 | 2380.287957 | 1190.647616 | 2379.303941 | 1190.155608 | C | ***307.143453*** | 154.075364 | 290.116904 | 145.562090 | | | 2 |
| 20 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GQPSVLQVVNLPIVERPVCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 71.2 | 2542.412766 | 0.018890 | GQPSVLQVVNLPIVERPVCK |
| 38.0 | 2542.412766 | 0.018890 | GQPSVLQVVNLPIVERPVCK |

**Mascot:** http://www.matrixscience.com/

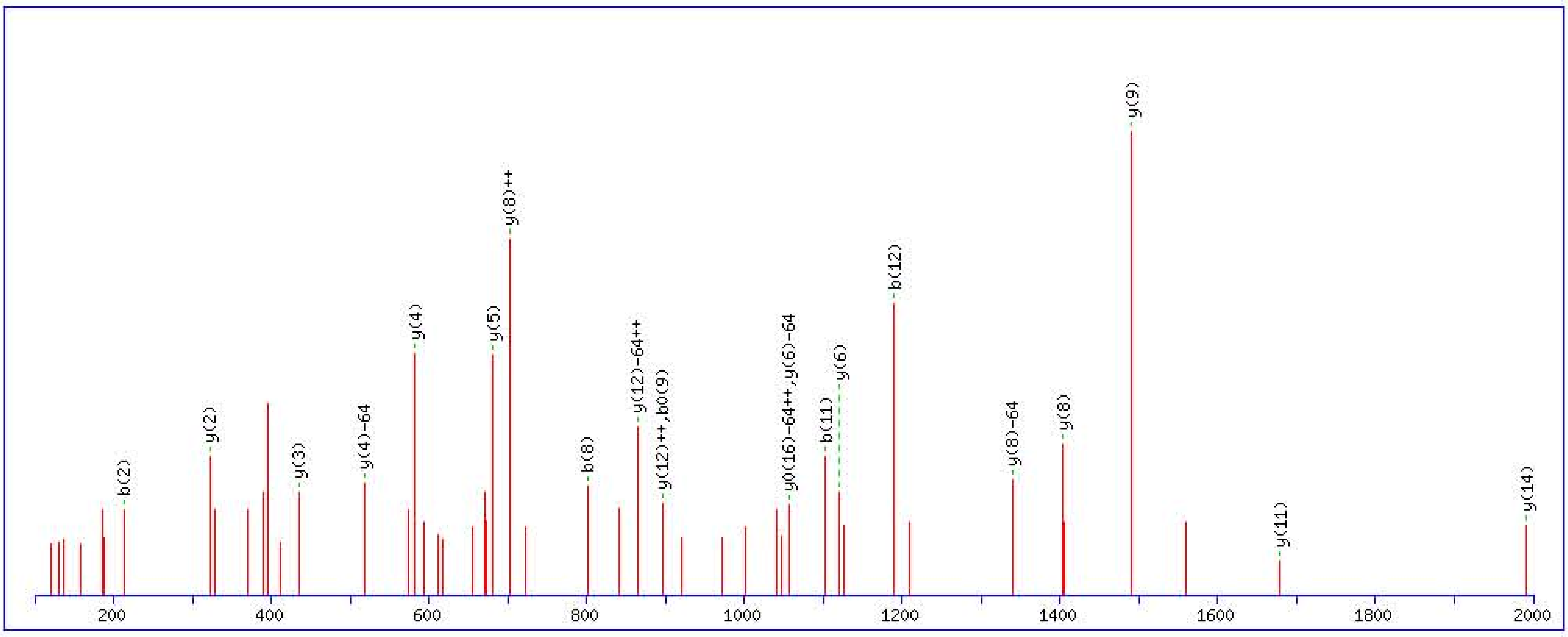
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IVEGSDAEIGMSPWQVMLFR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

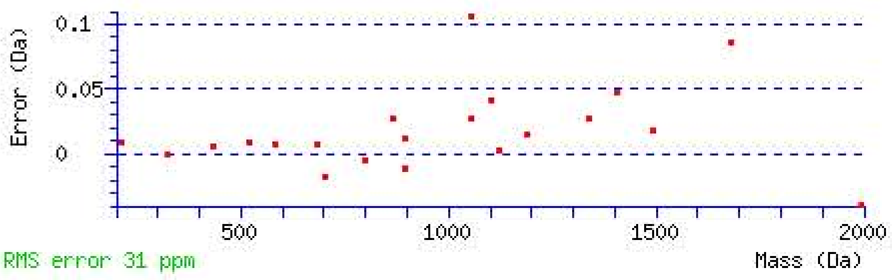
Match to Query 57515: 2591.285442 from(864.769090,3+) rtinseconds(2882) index(58542)
Title: Locus:1.1.1.1616.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

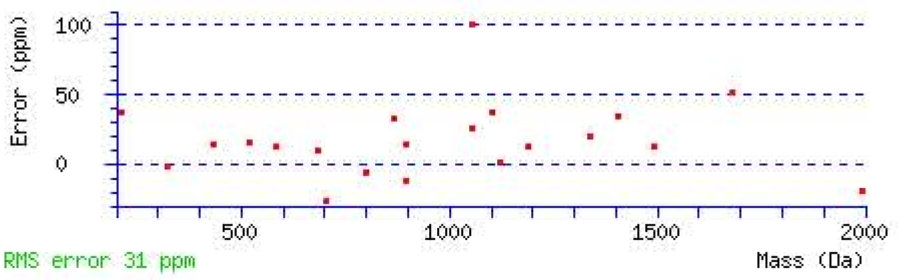
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2591.258621
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q15    : Biotin:Thermo-21345 (Q)
M17    : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
Ions Score: 61  Expect: 2.6e-006
Matches : 21/284 fragment ions using 26 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 20 |
| 2 | **213.159754** | 107.083515 | | | | | V | 2479.181837 | 1240.094556 | 2462.155288 | 1231.581282 | 2461.171272 | 1231.089274 | 19 |
| 3 | 342.202347 | 171.604811 | | | 324.191782 | 162.599529 | E | 2380.113423 | 1190.560349 | 2363.086874 | 1182.047075 | 2362.102858 | 1181.555067 | 18 |
| 4 | 399.223811 | 200.115543 | | | 381.213246 | 191.110261 | G | 2251.070830 | 1126.039053 | 2234.044281 | 1117.525778 | 2233.060265 | 1117.033770 | 17 |
| 5 | 486.255839 | 243.631557 | | | 468.245274 | 234.626275 | S | 2194.049366 | 1097.528321 | 2177.022817 | 1089.015046 | 2176.038801 | 1088.523038 | 16 |
| 6 | 601.282782 | 301.145029 | | | 583.272217 | 292.139747 | D | 2107.017338 | 1054.012307 | 2089.990789 | 1045.499032 | 2089.006773 | 1045.007024 | 15 |
| 7 | 672.319896 | 336.663586 | | | 654.309331 | 327.658303 | A | ***1991.990395*** | 996.498836 | 1974.963846 | 987.985561 | 1973.979830 | 987.493553 | 14 |
| 8 | **801.362489** | 401.184883 | | | 783.351924 | 392.179600 | E | 1920.953281 | 960.980279 | 1903.926732 | 952.467004 | 1902.942716 | 951.974996 | 13 |
| 9 | 914.446553 | 457.726915 | | | 896.435988 | 448.721632 | I | 1791.910688 | 896.458982 | 1774.884139 | 887.945708 | 1773.900123 | 887.453700 | 12 |
| 10 | 971.468017 | 486.237647 | | | 953.457452 | 477.232364 | G | ***1678.826624*** | 839.916950 | 1661.800075 | 831.403676 | 1660.816059 | 830.911668 | 11 |
| 11 | **1102.508502** | 551.757889 | | | 1084.497937 | 542.752606 | M | 1621.805160 | 811.406218 | 1604.778611 | 802.892944 | 1603.794595 | 802.400936 | 10 |
| 12 | **1189.540530** | 595.273903 | | | 1171.529965 | 586.268621 | S | ***1490.764675*** | 745.885976 | 1473.738126 | 737.372701 | 1472.754110 | 736.880693 | 9 |
| 13 | 1286.593294 | 643.800285 | | | 1268.582729 | 634.795003 | P | ***1403.732647*** | 702.369962 | 1386.706098 | 693.856687 | | | 8 |
| 14 | 1472.672607 | 736.839942 | | | 1454.662042 | 727.834659 | W | 1306.679883 | 653.843580 | 1289.653334 | 645.330305 | | | 7 |
| 15 | 1911.897933 | 956.452605 | 1894.871384 | 947.939330 | 1893.887368 | 947.447322 | Q | ***1120.600570*** | 560.803923 | 1103.574021 | 552.290649 | | | 6 |
| 16 | 2010.966347 | 1005.986812 | 1993.939798 | 997.473537 | 1992.955782 | 996.981529 | V | ***681.375244*** | 341.191260 | 664.348695 | 332.677986 | | | 5 |
| 17 | 2158.001747 | 1079.504511 | 2140.975198 | 1070.991237 | 2139.991182 | 1070.499229 | M | ***582.306830*** | 291.657053 | 565.280281 | 283.143779 | | | 4 |
| 18 | 2271.085811 | 1136.046543 | 2254.059262 | 1127.533269 | 2253.075246 | 1127.041261 | L | ***435.271430*** | 218.139353 | 418.244881 | 209.626078 | | | 3 |
| 19 | 2418.154225 | 1209.580750 | 2401.127676 | 1201.067476 | 2400.143660 | 1200.575468 | F | ***322.187366*** | 161.597321 | 305.160817 | 153.084046 | | | 2 |
| 20 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of IVEGSDAEIGMSPWQVMLFR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 60.8 | 2591.258621 | 0.026821 | IVEGSDAEIGMSPWQVMLFR |
| 3.5 | 2591.258621 | 0.026821 | IVEGSDAEIGMSPWQVMLFR |
| 1.2 | 2591.315231 | -0.029789 | FLASDKPQEMANASLTLETPLTSK |

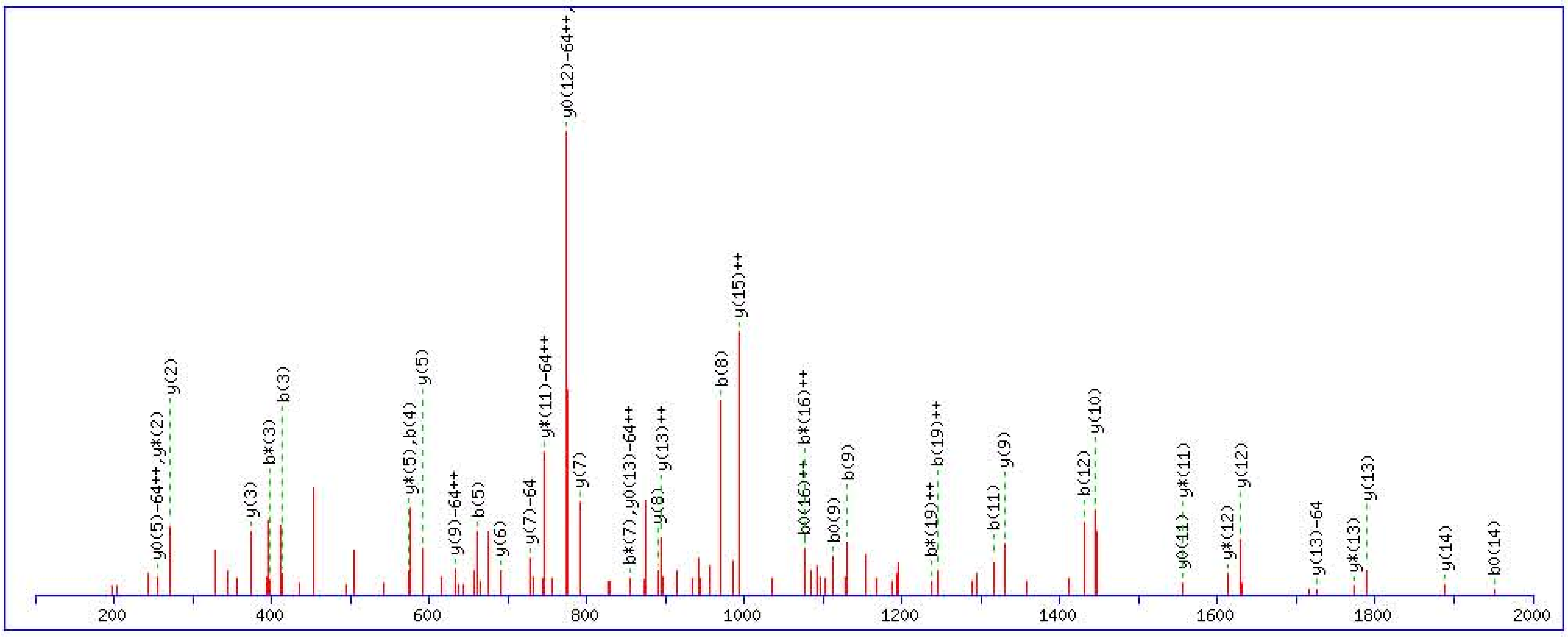
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RQECSIPVCGQDQVTVAMTPR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

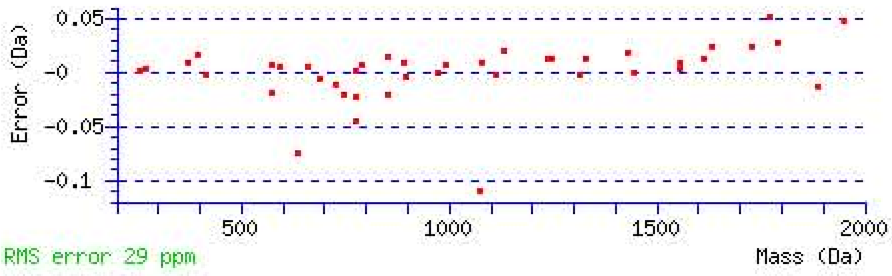
Match to Query 58963: 2758.319652 from(920.447160,3+) rtinseconds(1855) index(51875)
Title: Locus:1.1.1.1261.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

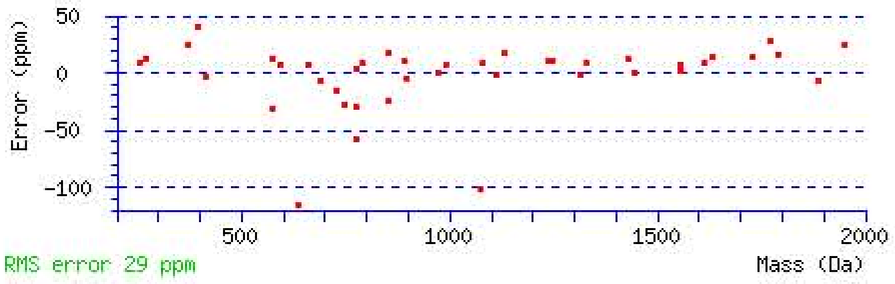
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2758.302322
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13     : Biotin:Thermo-21345 (Q)
M18     : Oxidation (M), with neutral losses 0.000000(shown in table), 63.998285
Ions Score: 50  Expect: 0.0002
Matches : 43/352 fragment ions using 75 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 21 |
| 2 | 285.166965 | 143.087121 | 268.140416 | 134.573846 | | | Q | 2603.208466 | 1302.107871 | 2586.181917 | 1293.594596 | 2585.197901 | 1293.102588 | 20 |
| 3 | ***414.209558*** | 207.608417 | 397.183009 | 199.095143 | 396.198993 | 198.603135 | E | 2475.149888 | 1238.078582 | 2458.123339 | 1229.565307 | 2457.139323 | 1229.073299 | 19 |
| 4 | ***574.240207*** | 287.623742 | 557.213658 | 279.110467 | 556.229642 | 278.618459 | C | 2346.107295 | 1173.557285 | 2329.080746 | 1165.044011 | 2328.096730 | 1164.552003 | 18 |
| 5 | ***661.272235*** | 331.139756 | 644.245686 | 322.626481 | 643.261670 | 322.134473 | S | 2186.076646 | 1093.541961 | 2169.050097 | 1085.028686 | 2168.066081 | 1084.536678 | 17 |
| 6 | ***774.356299*** | 387.681788 | 757.329750 | 379.168513 | 756.345734 | 378.676505 | I | 2099.044618 | 1050.025947 | 2082.018069 | 1041.512672 | 2081.034053 | 1041.020664 | 16 |
| 7 | 871.409063 | 436.208170 | 854.382514 | 427.694895 | 853.398498 | 427.202887 | P | 1985.960554 | 993.483915 | 1968.934005 | 984.970641 | 1967.949989 | 984.478633 | 15 |
| 8 | ***970.477477*** | 485.742377 | 953.450928 | 477.229102 | 952.466912 | 476.737094 | V | ***1888.907790*** | 944.957533 | 1871.881241 | 936.444259 | 1870.897225 | 935.952251 | 14 |
| 9 | ***1130.508126*** | 565.757701 | 1113.481577 | 557.244427 | 1112.497561 | 556.752418 | C | ***1789.839376*** | 895.423326 | 1772.812827 | 886.910052 | 1771.828811 | 886.418044 | 13 |
| 10 | 1187.529590 | 594.268433 | 1170.503041 | 585.755158 | 1169.519025 | 585.263150 | G | ***1629.808727*** | 815.408002 | 1612.782178 | 806.894727 | 1611.798162 | 806.402719 | 12 |
| 11 | ***1315.588168*** | 658.297722 | 1298.561619 | 649.784448 | 1297.577603 | 649.292440 | Q | 1572.787263 | 786.897270 | 1555.760714 | 778.383995 | 1554.776698 | 777.891987 | 11 |
| 12 | ***1430.615111*** | 715.811194 | 1413.588562 | 707.297919 | 1412.604546 | 706.805911 | D | ***1444.728685*** | 722.867981 | 1427.702136 | 714.354706 | 1426.718120 | 713.862698 | 10 |
| 13 | 1869.840437 | 935.423857 | 1852.813888 | 926.910582 | 1851.829872 | 926.418574 | Q | ***1329.701742*** | 665.354509 | 1312.675193 | 656.841235 | 1311.691177 | 656.349227 | 9 |
| 14 | 1968.908851 | 984.958064 | 1951.882302 | 976.444789 | 1950.898286 | 975.952781 | V | ***890.476416*** | 445.741846 | 873.449867 | 437.228572 | 872.465851 | 436.736564 | 8 |
| 15 | 2069.956530 | 1035.481903 | 2052.929981 | 1026.968628 | 2051.945965 | 1026.476620 | T | ***791.408002*** | 396.207639 | 774.381453 | 387.694365 | 773.397437 | 387.202357 | 7 |
| 16 | 2169.024944 | 1085.016110 | 2151.998395 | 1076.502835 | 2151.014379 | 1076.010827 | V | ***690.360323*** | 345.683800 | 673.333774 | 337.170525 | 672.349758 | 336.678517 | 6 |
| 17 | 2240.062058 | 1120.534667 | 2223.035509 | 1112.021392 | 2222.051493 | 1111.529384 | A | ***591.291909*** | 296.149593 | 574.265360 | 287.636318 | 573.281344 | 287.144310 | 5 |
| 18 | 2387.097458 | 1194.052367 | 2370.070909 | 1185.539092 | 2369.086893 | 1185.047085 | M | 520.254795 | 260.631036 | 503.228246 | 252.117761 | 502.244230 | 251.625753 | 4 |
| 19 | 2488.145137 | 1244.576206 | 2471.118588 | 1236.062932 | 2470.134572 | 1235.570924 | T | ***373.219395*** | 187.113335 | 356.192846 | 178.600061 | 355.208830 | 178.108053 | 3 |
| 20 | 2585.197901 | 1293.102588 | 2568.171352 | 1284.589314 | 2567.187336 | 1284.097306 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 21 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RQECSIPVCGQDQVTVAMTPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.5 | 2758.302322 | 0.017330 | RQECSIPVCGQDQVTVAMTPR |
| 31.7 | 2758.302322 | 0.017330 | RQECSIPVCGQDQVTVAMTPR |

**Mascot:** http://www.matrixscience.com/

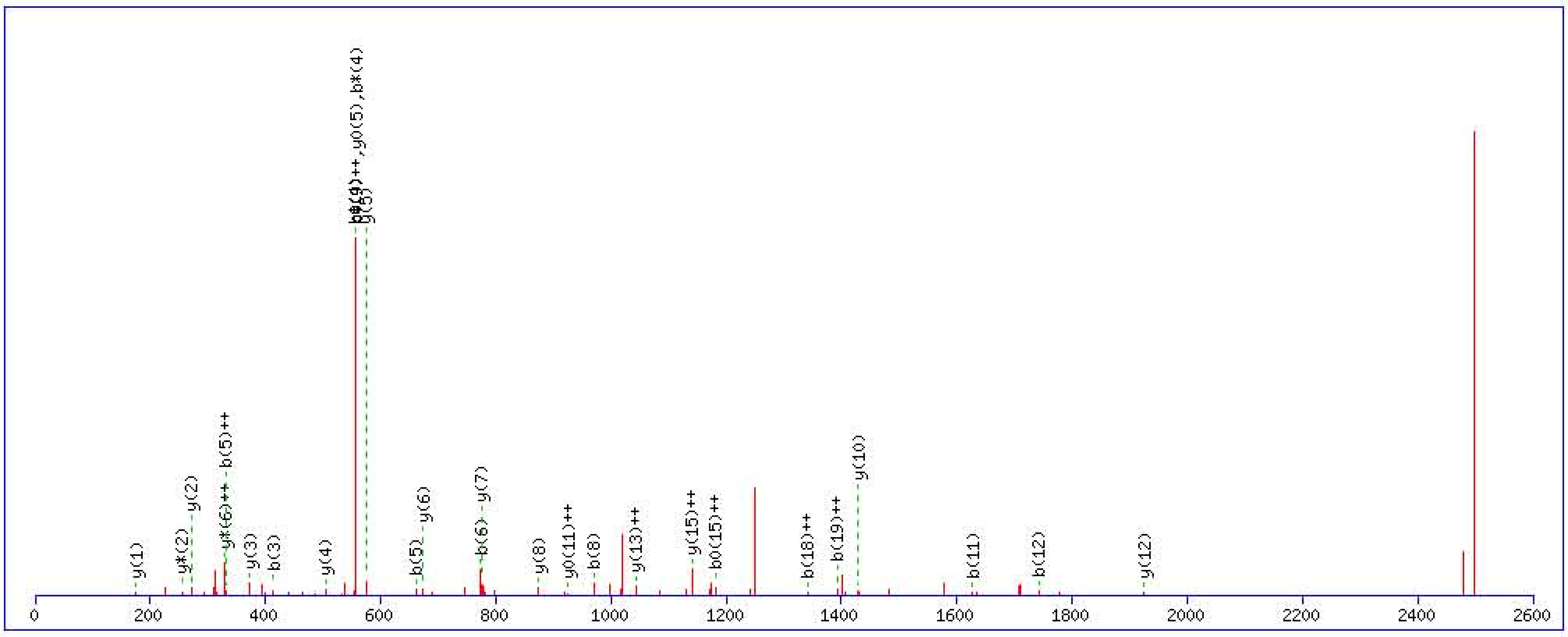
{MATRIX SCIENCE} 
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **RQECSIPVCGQDQVTVAMTPR**
Found in **THRB_HUMAN**, Prothrombin OS=Homo sapiens GN=F2 PE=1 SV=2

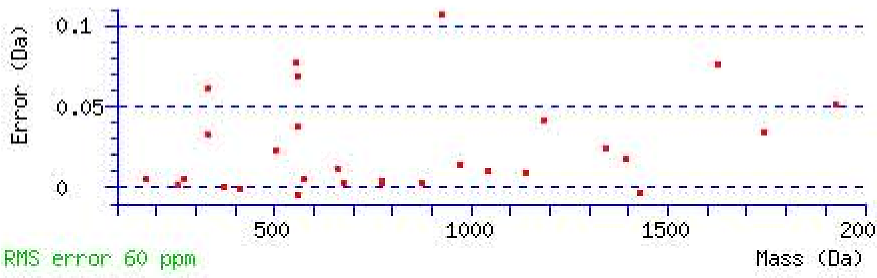
Match to Query 62077: 3053.508732 from(1018.843520,3+) rtinseconds(2233) index(54449)
Title: Locus:1.1.1.1392.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

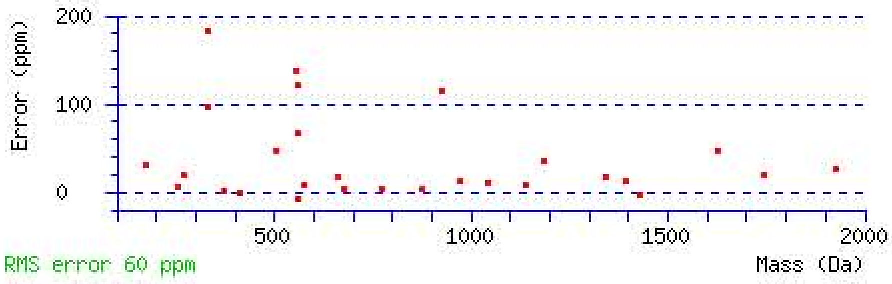
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3053.474152
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11     : Biotin:Thermo-21345 (Q)
Q13     : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.012
Matches : 29/232 fragment ions using 67 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 157.108387 | 79.057831 | 140.081838 | 70.544557 | | | R | | | | | | | 21 |
| 2 | 285.166965 | 143.087121 | 268.140416 | 134.573846 | | | Q | 2898.380299 | 1449.693787 | 2881.353750 | 1441.180513 | 2880.369734 | 1440.688505 | 20 |
| 3 | ***414.209558*** | 207.608417 | 397.183009 | 199.095143 | 396.198993 | 198.603135 | E | 2770.321721 | 1385.664498 | 2753.295172 | 1377.151224 | 2752.311156 | 1376.659216 | 19 |
| 4 | 574.240207 | 287.623742 | 557.213658 | 279.110467 | 556.229642 | 278.618459 | C | 2641.279128 | 1321.143202 | 2624.252579 | 1312.629927 | 2623.268563 | 1312.137919 | 18 |
| 5 | ***661.272235*** | **331.139756** | 644.245686 | 322.626481 | 643.261670 | 322.134473 | S | 2481.248479 | 1241.127877 | 2464.221930 | 1232.614603 | 2463.237914 | 1232.122595 | 17 |
| 6 | ***774.356299*** | 387.681788 | 757.329750 | 379.168513 | 756.345734 | 378.676505 | I | 2394.216451 | 1197.611863 | 2377.189902 | 1189.098589 | 2376.205886 | 1188.606581 | 16 |
| 7 | 871.409063 | 436.208170 | 854.382514 | 427.694895 | 853.398498 | 427.202887 | P | 2281.132387 | 1141.069831 | 2264.105838 | 1132.556557 | 2263.121822 | 1132.064549 | 15 |
| 8 | ***970.477477*** | 485.742377 | 953.450928 | 477.229102 | 952.466912 | 476.737094 | V | 2184.079623 | 1092.543449 | 2167.053074 | 1084.030175 | 2166.069058 | 1083.538167 | 14 |
| 9 | 1130.508126 | 565.757701 | 1113.481577 | 557.244427 | 1112.497561 | 556.752418 | C | 2085.011209 | 1043.009242 | 2067.984660 | 1034.495968 | 2067.000644 | 1034.003960 | 13 |
| 10 | 1187.529590 | 594.268433 | 1170.503041 | 585.755158 | 1169.519025 | 585.263150 | G | ***1924.980560*** | 962.993918 | 1907.954011 | 954.480643 | 1906.969995 | 953.988635 | 12 |
| 11 | ***1626.754916*** | 813.881096 | 1609.728367 | 805.367822 | 1608.744351 | 804.875814 | Q | 1867.959096 | 934.483186 | 1850.932547 | 925.969911 | 1849.948531 | 925.477903 | 11 |
| 12 | ***1741.781859*** | 871.394568 | 1724.755310 | 862.881293 | 1723.771294 | 862.389285 | D | ***1428.733770*** | 714.870523 | 1411.707221 | 706.357248 | 1410.723205 | 705.865240 | 10 |
| 13 | 2181.007185 | 1091.007230 | 2163.980636 | 1082.493956 | 2162.996620 | 1082.001948 | Q | 1313.706827 | 657.357051 | 1296.680278 | 648.843777 | 1295.696262 | 648.351769 | 9 |
| 14 | 2280.075599 | 1140.541437 | 2263.049050 | 1132.028163 | 2262.065034 | 1131.536155 | V | ***874.481501*** | 437.744388 | 857.454952 | 429.231114 | 856.470936 | 428.739106 | 8 |
| 15 | 2381.123278 | 1191.065277 | 2364.096729 | 1182.552002 | 2363.112713 | 1182.059994 | T | ***775.413087*** | 388.210181 | 758.386538 | 379.696907 | 757.402522 | 379.204899 | 7 |
| 16 | 2480.191692 | 1240.599484 | 2463.165143 | 1232.086209 | 2462.181127 | 1231.594201 | V | ***674.365408*** | 337.686342 | 657.338859 | 329.173067 | 656.354843 | 328.681059 | 6 |
| 17 | 2551.228806 | 1276.118041 | 2534.202257 | 1267.604766 | 2533.218241 | 1267.112758 | A | ***575.296994*** | 288.152135 | 558.270445 | 279.638861 | 557.286429 | 279.146853 | 5 |
| 18 | 2682.269291 | **1341.638283** | 2665.242742 | 1333.125009 | 2664.258726 | 1332.633001 | M | ***504.259880*** | 252.633578 | 487.233331 | 244.120303 | 486.249315 | 243.628295 | 4 |
| 19 | 2783.316970 | **1392.162123** | 2766.290421 | 1383.648848 | 2765.306405 | 1383.156840 | T | ***373.219395*** | 187.113335 | 356.192846 | 178.600061 | 355.208830 | 178.108053 | 3 |
| 20 | 2880.369734 | 1440.688505 | 2863.343185 | 1432.175230 | 2862.359169 | 1431.683222 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 21 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of RQECSIPVCGQDQVTVAMTPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.9 | 3053.474152 | 0.034580 | RQECSIPVCGQDQVTVAMTPR |
| 12.0 | 3053.474152 | 0.034580 | RQECSIPVCGQDQVTVAMTPR |
| 1.0 | 3053.474152 | 0.034580 | RQECSIPVCGQDQVTVAMTPR |

**Mascot:** http://www.matrixscience.com/

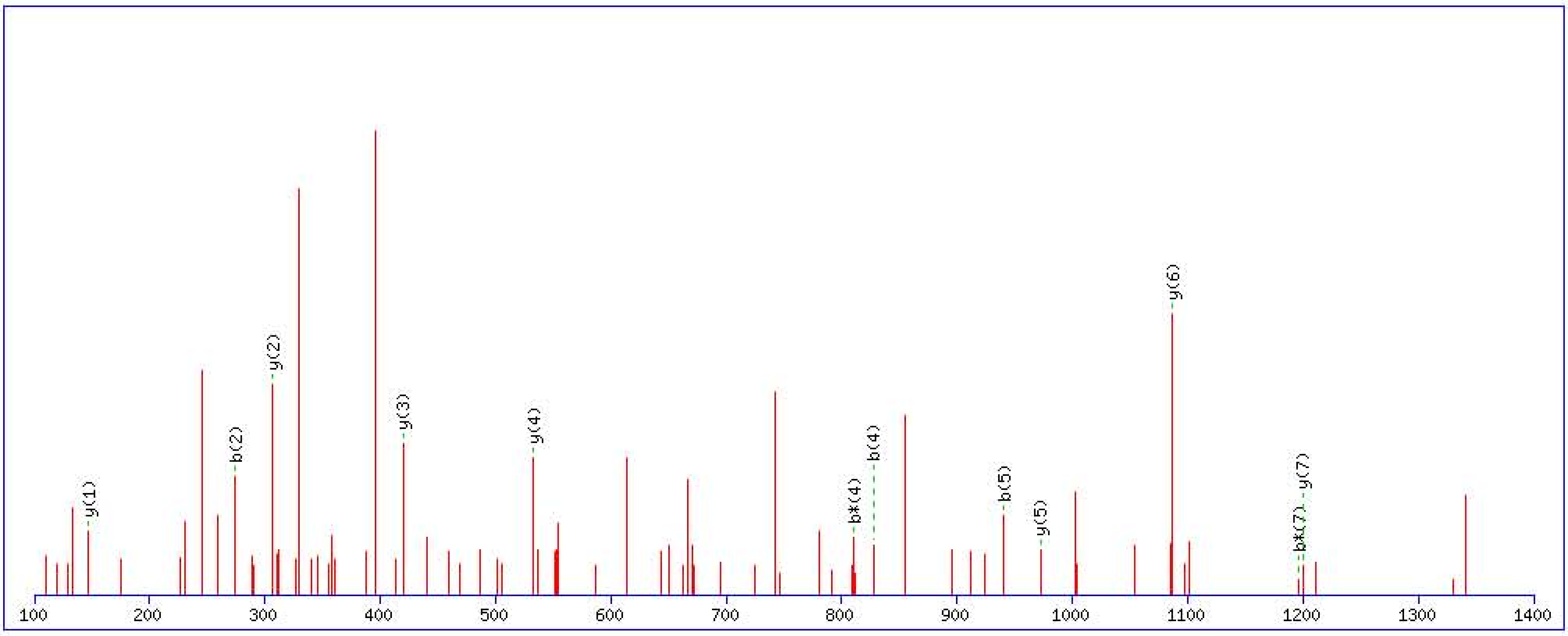
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **CINQLLCK**
Found in **SEPP1_HUMAN**, Selenoprotein P OS=Homo sapiens GN=SEPP1 PE=1 SV=3

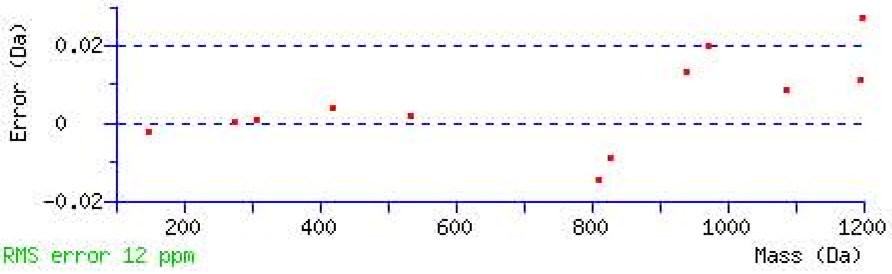
Match to Query 28694: 1358.700428 from(680.357490,2+) rtinseconds(2019) index(53061)
Title: Locus:1.1.1.1318.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

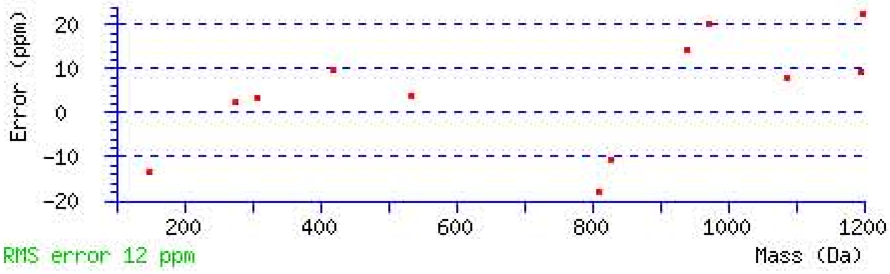
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1358.687256
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 27  Expect: 0.043
Matches : 12/52 fragment ions using 35 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | Seq. | y | y++ | y* | y*++ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | C | | | | | 8 |
| 2 | **274.121989** | 137.564632 | | | I | ***1199.663898*** | 600.335587 | 1182.637349 | 591.822313 | 7 |
| 3 | 388.164916 | 194.586096 | 371.138367 | 186.072822 | N | ***1086.579834*** | 543.793555 | 1069.553285 | 535.280281 | 6 |
| 4 | **827.390242** | 414.198759 | 810.363693 | 405.685485 | Q | ***972.536907*** | 486.772092 | 955.510358 | 478.258817 | 5 |
| 5 | **940.474306** | 470.740791 | 923.447757 | 462.227517 | L | ***533.311581*** | 267.159429 | 516.285032 | 258.646154 | 4 |
| 6 | 1053.558370 | 527.282823 | 1036.531821 | 518.769549 | L | ***420.227517*** | 210.617396 | 403.200968 | 202.104122 | 3 |
| 7 | 1213.589019 | 607.298148 | 1196.562470 | 598.784873 | C | ***307.143453*** | 154.075365 | 290.116904 | 145.562090 | 2 |
| 8 | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | 1 |





NCBI **BLAST** search of CINQLLCK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.2 | 1358.687256 | 0.013172 | CINQLLCK |
| 11.9 | 1358.701645 | -0.001217 | EEVFIQQR |
| 5.6 | 1358.701645 | -0.001217 | EEVFIQQR |
| 2.7 | 1358.687744 | 0.012684 | FVKKDGHCNVR |

**Mascot:** http://www.matrixscience.com/

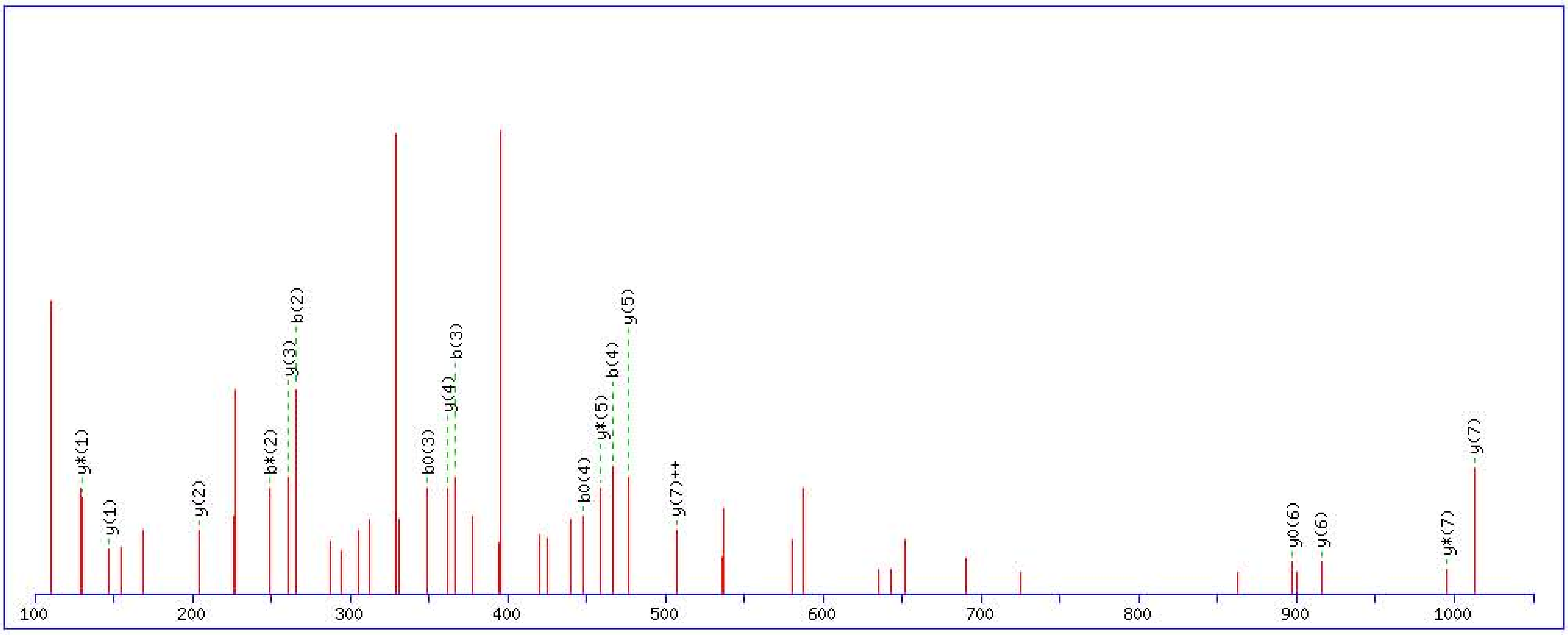
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **HQTVPQNTGGK**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

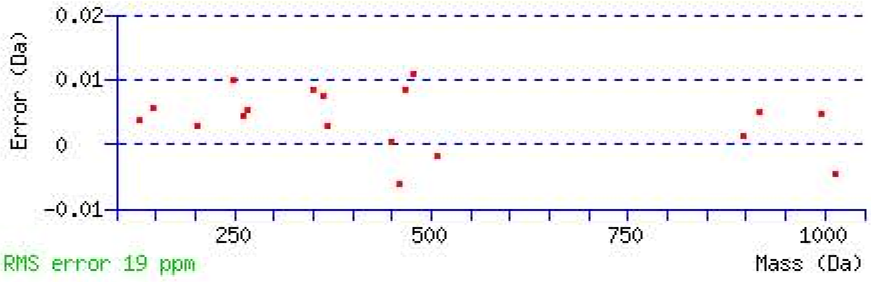
Match to Query 33219: 1476.747852 from(493.256560,3+) rtinseconds(1192) index(1133)
Title: Locus:1.1.1.1224.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●

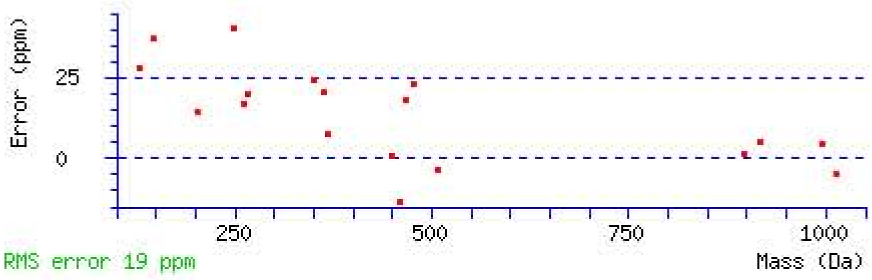


**Monoisotopic mass of neutral peptide Mr(calc):** 1476.750748
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.017
**Matches :** 18/108 fragment ions using 43 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 11 |
| 2 | **266.124766** | 133.566021 | 249.098217 | 125.052746 | | | Q | 1340.699099 | 670.853187 | 1323.672550 | 662.339913 | 1322.688534 | 661.847905 | 10 |
| 3 | **367.172445** | 184.089860 | 350.145896 | 175.576586 | 349.161880 | 175.084578 | T | 1212.640521 | 606.823899 | 1195.613972 | 598.310624 | 1194.629956 | 597.818616 | 9 |
| 4 | **466.240859** | 233.624068 | 449.214310 | 225.110793 | 448.230294 | 224.618785 | V | 1111.592842 | 556.300059 | 1094.566293 | 547.786784 | 1093.582277 | 547.294776 | 8 |
| 5 | 563.293623 | 282.150450 | 546.267074 | 273.637175 | 545.283058 | 273.145167 | P | ***1012.524428*** | 506.765852 | 995.497879 | 498.252577 | 994.513863 | 497.760569 | 7 |
| 6 | 1002.518949 | 501.763113 | 985.492400 | 493.249838 | 984.508384 | 492.757830 | Q | ***915.471664*** | 458.239470 | 898.445115 | 449.726195 | 897.461099 | 449.234187 | 6 |
| 7 | 1116.561876 | 558.784576 | 1099.535327 | 550.271302 | 1098.551311 | 549.779293 | N | ***476.246338*** | 238.626807 | 459.219789 | 230.113532 | 458.235773 | 229.621524 | 5 |
| 8 | 1217.609555 | 609.308416 | 1200.583006 | 600.795141 | 1199.598990 | 600.303133 | T | ***362.203411*** | 181.605343 | 345.176862 | 173.092069 | 344.192846 | 172.600061 | 4 |
| 9 | 1274.631019 | 637.819147 | 1257.604470 | 629.305873 | 1256.620454 | 628.813865 | G | ***261.155732*** | 131.081504 | 244.129183 | 122.568229 | | | 3 |
| 10 | 1331.652483 | 666.329879 | 1314.625934 | 657.816605 | 1313.641918 | 657.324597 | G | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 11 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



RMS error 19 ppm



RMS error 19 ppm

NCBI **BLAST** search of HQTVPQNTGGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 26.7 | 1476.750748 | -0.002896 | HQTVPQNTGGK |
| 7.7 | 1476.736115 | 0.011737 | HQEALIGQSFYGK |
| 3.5 | 1476.750748 | -0.002896 | HQTVPQNTGGK |

**Mascot:** http://www.matrixscience.com/

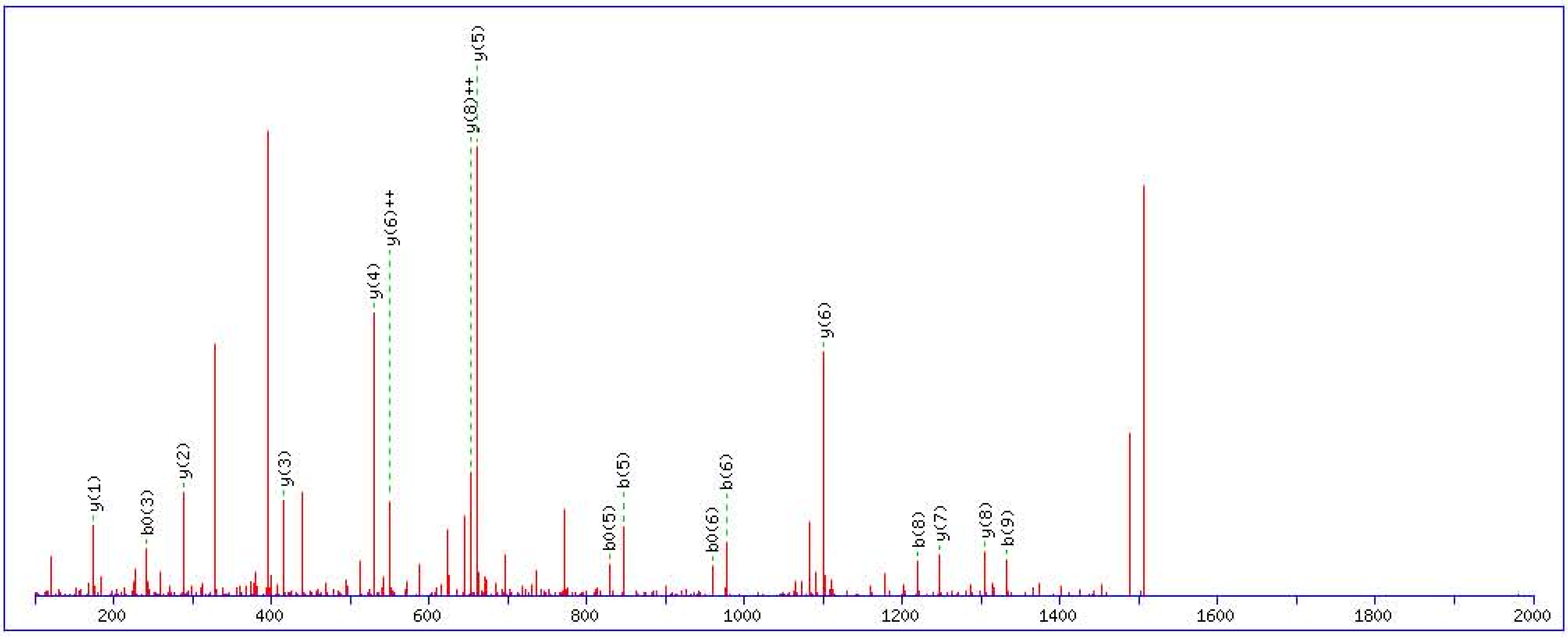
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **DSGFQMNQLR**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

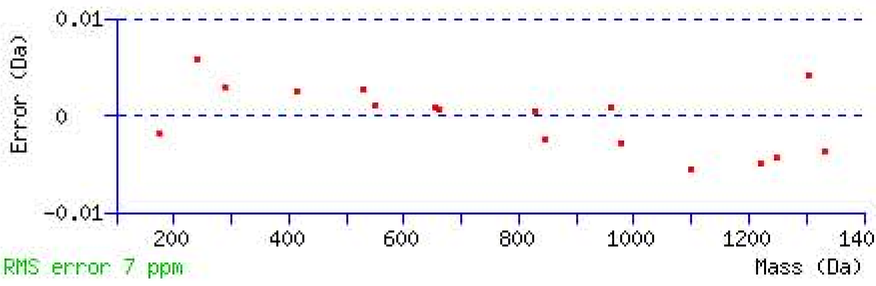
Match to Query 34006: 1505.709588 from(753.862070,2+) rtinseconds(2054) index(69133)
Title: Locus:1.1.1.1652.22 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

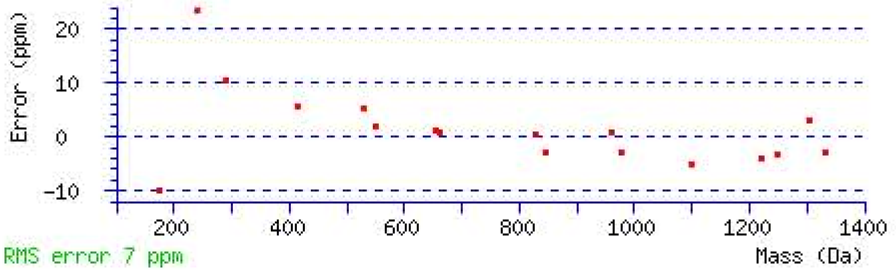
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1505.711899
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q5 : Biotin:Thermo-21345 (Q)
**Ions Score:** 55 **Expect:** 4.6e-005
**Matches :** 17/84 fragment ions using 29 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 10 |
| 2 | 203.066247 | 102.036761 | | | 185.055682 | 93.031479 | S | 1391.692238 | 696.349757 | 1374.665689 | 687.836482 | 1373.681673 | 687.344474 | 9 |
| 3 | 260.087711 | 130.547493 | | | 242.077146 | 121.542211 | G | ***1304.660210*** | 652.833743 | 1287.633661 | 644.320469 | | | 8 |
| 4 | 407.156125 | 204.081700 | | | 389.145560 | 195.076418 | F | ***1247.638746*** | 624.323011 | 1230.612197 | 615.809736 | | | 7 |
| 5 | **846.381451** | 423.694364 | 829.354902 | 415.181089 | 828.370886 | 414.689081 | Q | ***1100.570332*** | 550.788804 | 1083.543783 | 542.275530 | | | 6 |
| 6 | **977.421936** | 489.214606 | 960.395387 | 480.701331 | 959.411371 | 480.209323 | M | ***661.345006*** | 331.176141 | 644.318457 | 322.662867 | | | 5 |
| 7 | 1091.464863 | 546.236069 | 1074.438314 | 537.722795 | 1073.454298 | 537.230787 | N | ***530.304521*** | 265.655899 | 513.277972 | 257.142624 | | | 4 |
| 8 | **1219.523441** | 610.265359 | 1202.496892 | 601.752084 | 1201.512876 | 601.260076 | Q | ***416.261594*** | 208.634435 | 399.235045 | 200.121160 | | | 3 |
| 9 | **1332.607505** | 666.807391 | 1315.580956 | 658.294116 | 1314.596940 | 657.802108 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DSGFQMNQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.0 | 1505.711899 | -0.002311 | DSGFQMNQLR |
| 17.6 | 1505.711899 | -0.002311 | DSGFQMNQLR |
| 15.0 | 1505.703140 | 0.006448 | DETMEEQDIKLR |
| 7.1 | 1505.704025 | 0.005563 | MQMEIDQLR |
| 1.0 | 1505.691910 | 0.017678 | MEDLLDLDEELR |

**Mascot:** http://www.matrixscience.com/

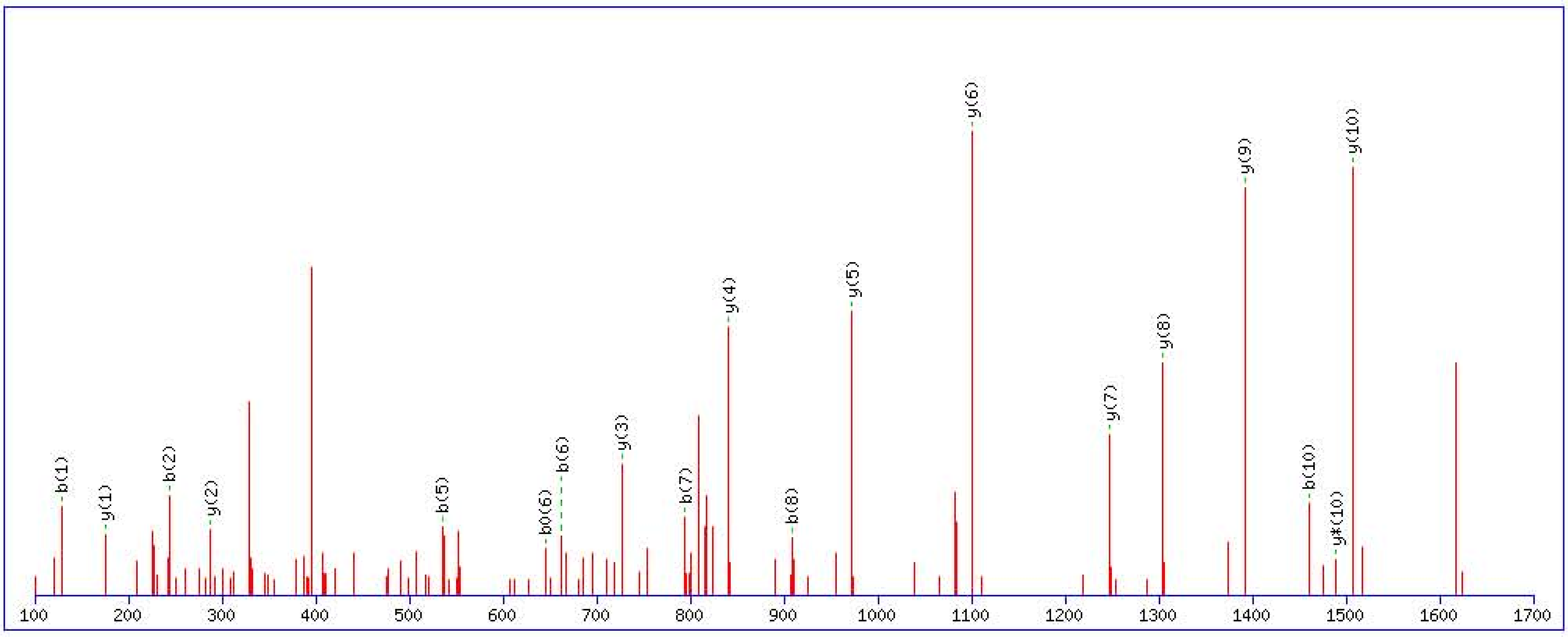
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KDSGFQMNQLR**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

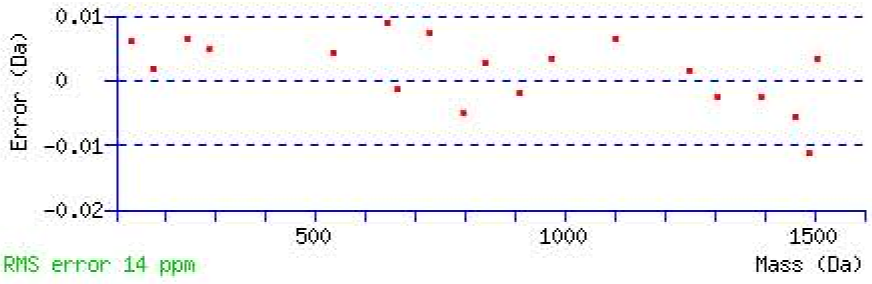
Match to Query 38970: 1633.802428 from(817.908490,2+) rtinseconds(1858) index(67725)
Title: Locus:1.1.1.1584.9 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

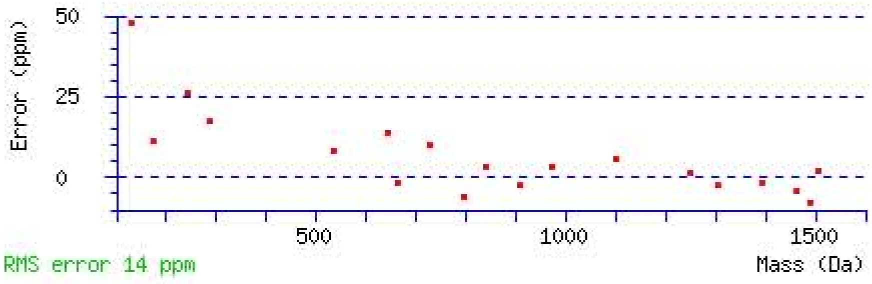
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1633.806854
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 75  Expect: 7e-007
Matches : 19/102 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 11 |
| 2 | **244.129182** | 122.568229 | 227.102633 | 114.054955 | 226.118617 | 113.562947 | D | ***1506.719181*** | 753.863228 | 1489.692632 | 745.349954 | 1488.708616 | 744.857946 | 10 |
| 3 | 331.161210 | 166.084243 | 314.134661 | 157.570969 | 313.150645 | 157.078961 | S | ***1391.692238*** | 696.349757 | 1374.665689 | 687.836482 | 1373.681673 | 687.344474 | 9 |
| 4 | 388.182674 | 194.594975 | 371.156125 | 186.081701 | 370.172109 | 185.589693 | G | ***1304.660210*** | 652.833743 | 1287.633661 | 644.320468 | | | 8 |
| 5 | **535.251088** | 268.129182 | 518.224539 | 259.615908 | 517.240523 | 259.123900 | F | ***1247.638746*** | 624.323011 | 1230.612197 | 615.809736 | | | 7 |
| 6 | **663.309666** | 332.158471 | 646.283117 | 323.645197 | 645.299101 | 323.153189 | Q | ***1100.570332*** | 550.788804 | 1083.543783 | 542.275530 | | | 6 |
| 7 | **794.350151** | 397.678714 | 777.323602 | 389.165439 | 776.339586 | 388.673431 | M | ***972.511754*** | 486.759515 | 955.485205 | 478.246240 | | | 5 |
| 8 | **908.393078** | 454.700177 | 891.366529 | 446.186903 | 890.382513 | 445.694895 | N | ***841.471269*** | 421.239272 | 824.444720 | 412.725998 | | | 4 |
| 9 | 1347.618404 | 674.312840 | 1330.591855 | 665.799566 | 1329.607839 | 665.307558 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704534 | | | 3 |
| 10 | **1460.702468** | 730.854872 | 1443.675919 | 722.341598 | 1442.691903 | 721.849589 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KDSGFQMNQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 74.9 | 1633.806854 | -0.004426 | KDSGFQMNQLR |
| 30.9 | 1633.806854 | -0.004426 | KDSGFQMNQLR |
| 13.7 | 1633.822128 | -0.019700 | QFMKGQVSWGR |
| 11.2 | 1633.798096 | 0.004332 | QDQEKDNMIEKLK |
| 9.3 | 1633.795609 | 0.006819 | KFMEDEQQLR |
| 8.7 | 1633.799454 | 0.002974 | DANSFKSRDQR |
| 8.1 | 1633.810699 | -0.008271 | DQTIRIWSCSRGR |
| 5.5 | 1633.784180 | 0.018248 | QEESVQKQEAMRR |
| 3.6 | 1633.803482 | -0.001054 | QLFERDWSSR |
| 2.6 | 1633.795609 | 0.006819 | KFMEDEQQLR |

**Mascot:** http://www.matrixscience.com/

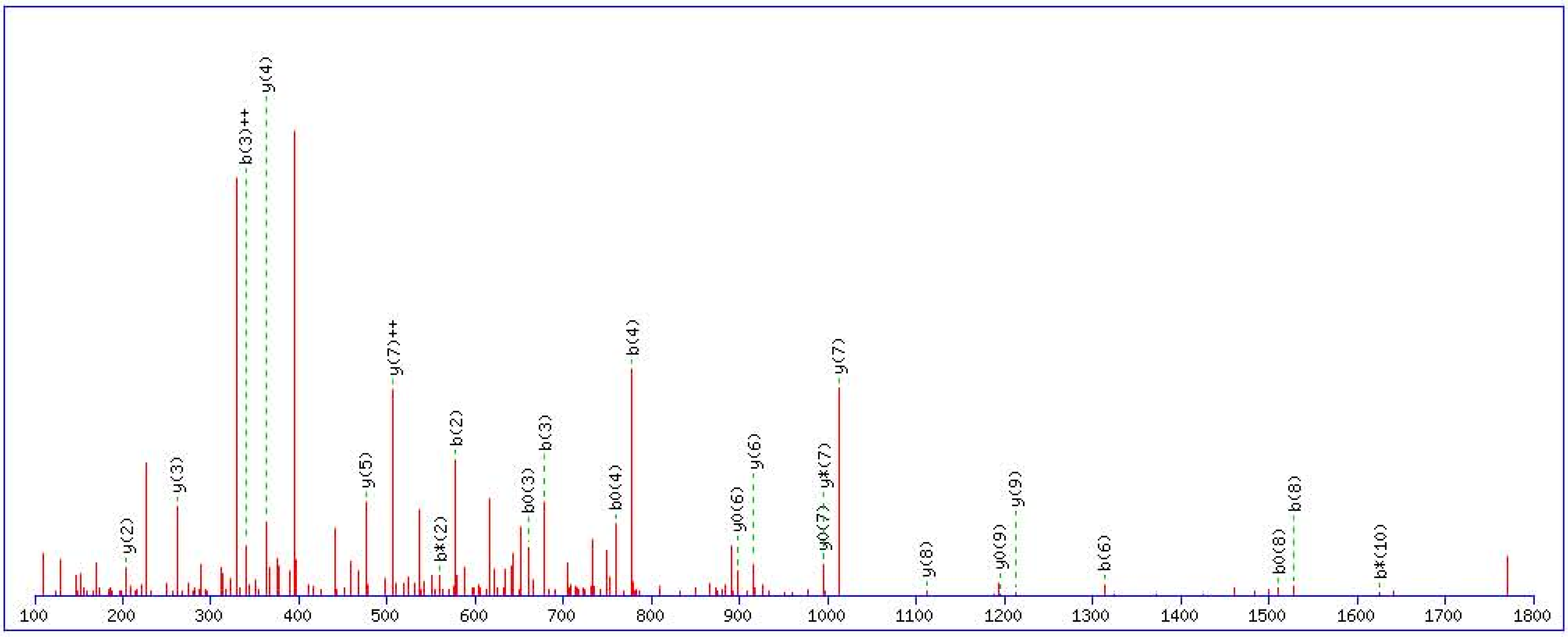
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HQTVPQNTGGK**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

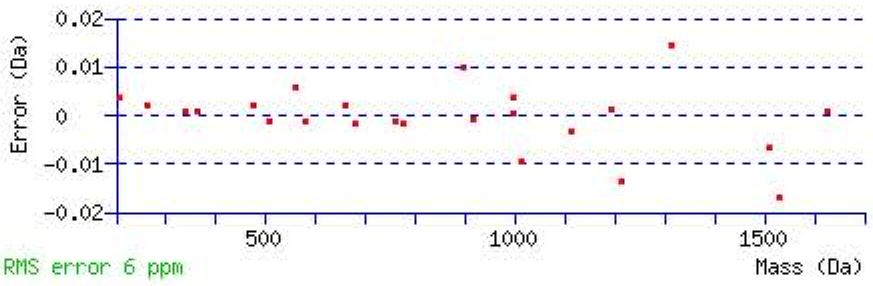
Match to Query 42493: 1787.913972 from(596.978600,3+) rtinseconds(1583) index(66373)
Title: Locus:1.1.1.1488.13 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

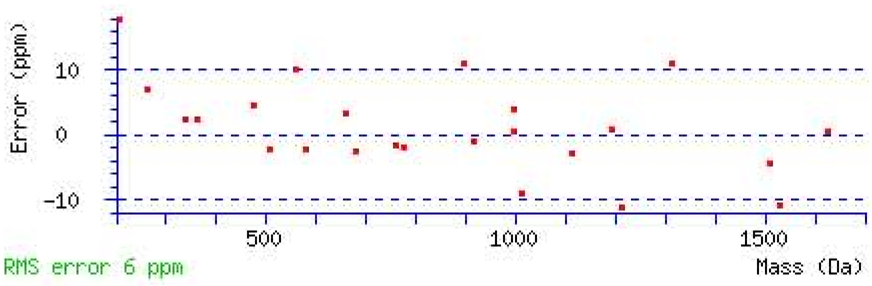
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1787.917496
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2     : Biotin:Thermo-21345 (Q)
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.0057
Matches : 24/108 fragment ions using 57 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 138.066188 | 69.536732 | | | | | **H** | | | | | | | **11** |
| **2** | **577.291514** | 289.149395 | 560.264965 | 280.636121 | | | **Q** | 1651.865847 | 826.436562 | 1634.839298 | 817.923287 | 1633.855282 | 817.431279 | **10** |
| **3** | **678.339193** | 339.673235 | 661.312644 | 331.159960 | 660.328628 | 330.667952 | **T** | ***1212.640521*** | 606.823899 | 1195.613972 | 598.310624 | 1194.629956 | 597.818616 | **9** |
| **4** | **777.407607** | 389.207442 | 760.381058 | 380.694167 | 759.397042 | 380.202159 | **V** | ***1111.592842*** | 556.300059 | 1094.566293 | 547.786785 | 1093.582277 | 547.294777 | **8** |
| **5** | 874.460371 | 437.733824 | 857.433822 | 429.220549 | 856.449806 | 428.728541 | **P** | ***1012.524428*** | 506.765852 | 995.497879 | 498.252578 | 994.513863 | 497.760570 | **7** |
| **6** | **1313.685697** | 657.346487 | 1296.659148 | 648.833212 | 1295.675132 | 648.341204 | **Q** | ***915.471664*** | 458.239470 | 898.445115 | 449.726196 | 897.461099 | 449.234188 | **6** |
| **7** | 1427.728624 | 714.367950 | 1410.702075 | 705.854676 | 1409.718059 | 705.362668 | **N** | ***476.246338*** | 238.626807 | 459.219789 | 230.113532 | 458.235773 | 229.621524 | **5** |
| **8** | **1528.776303** | 764.891790 | 1511.749754 | 756.378515 | 1510.765738 | 755.886507 | **T** | ***362.203411*** | 181.605343 | 345.176862 | 173.092069 | 344.192846 | 172.600061 | **4** |
| **9** | 1585.797767 | 793.402522 | 1568.771218 | 784.889247 | 1567.787202 | 784.397239 | **G** | ***261.155732*** | 131.081504 | 244.129183 | 122.568229 | | | **3** |
| **10** | 1642.819231 | 821.913254 | 1625.792682 | 813.399979 | 1624.808666 | 812.907971 | **G** | ***204.134268*** | 102.570772 | 187.107719 | 94.057497 | | | **2** |
| **11** | | | | | | | **K** | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | **1** |





NCBI **BLAST** search of HQTVPQNTGGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.9 | 1787.917496 | -0.003524 | HQTVPQNTGGK |
| 3.8 | 1787.923996 | -0.010024 | VPLQGFAALEGMNGIQK |
| 2.1 | 1787.925323 | -0.011351 | THRAVLAACSHYFKK |
| 1.1 | 1787.935211 | -0.021239 | ARAYGPGIEPTGNMVKK |
| 0.5 | 1787.912735 | 0.001237 | FLLEDEKHIQEMLK |

**Mascot:** http://www.matrixscience.com/

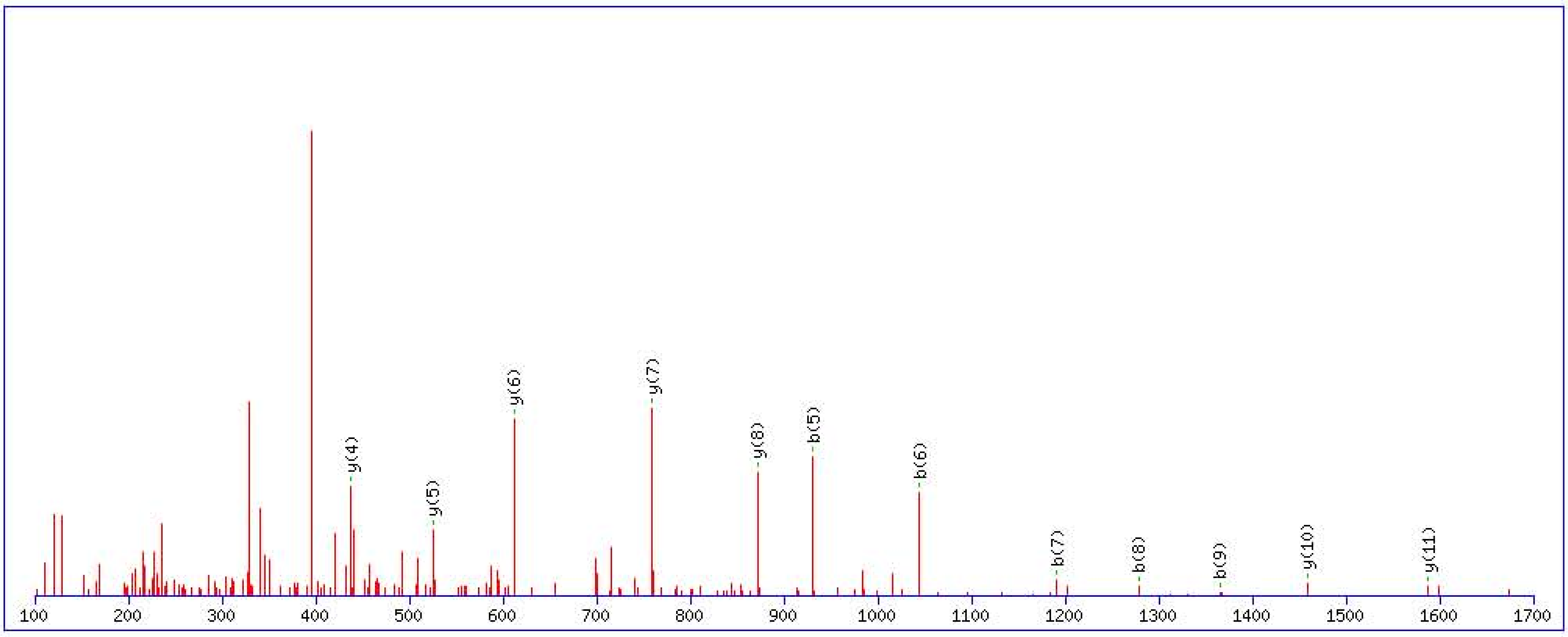
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **SKEFQLFSSPHGK**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

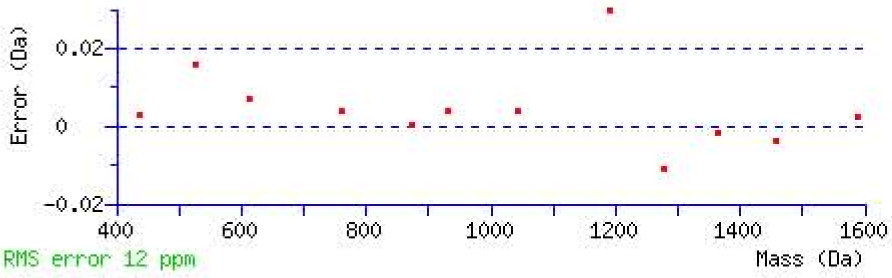
Match to Query 42737: 1801.916862 from(601.646230,3+) rtinseconds(1757) index(67246)
Title: Locus:1.1.1.1549.18 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

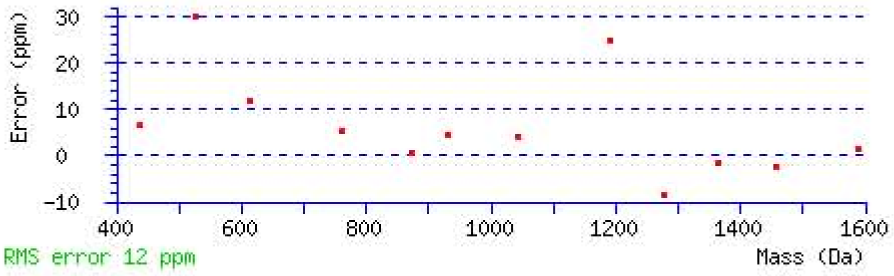
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1801.918518
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 49  Expect: 3.9e-005
Matches : 12/134 fragment ions using 16 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 13 |
| 2 | 216.134267 | 108.570771 | 199.107718 | 100.057497 | 198.123702 | 99.565489 | K | 1715.893774 | 858.450525 | 1698.867225 | 849.937251 | 1697.883209 | 849.445243 | 12 |
| 3 | 345.176860 | 173.092068 | 328.150311 | 164.578793 | 327.166295 | 164.086785 | E | ***1587.798811*** | 794.403044 | 1570.772262 | 785.889769 | 1569.788246 | 785.397761 | 11 |
| 4 | 492.245274 | 246.626275 | 475.218725 | 238.113000 | 474.234709 | 237.620992 | F | ***1458.756218*** | 729.881747 | 1441.729669 | 721.368473 | 1440.745653 | 720.876465 | 10 |
| 5 | **931.470600** | 466.238938 | 914.444051 | 457.725664 | 913.460035 | 457.233656 | Q | 1311.687804 | 656.347540 | 1294.661255 | 647.834266 | 1293.677239 | 647.342258 | 9 |
| 6 | **1044.554664** | 522.780970 | 1027.528115 | 514.267696 | 1026.544099 | 513.775688 | L | ***872.462478*** | 436.734877 | 855.435929 | 428.221603 | 854.451913 | 427.729595 | 8 |
| 7 | **1191.623078** | 596.315177 | 1174.596529 | 587.801903 | 1173.612513 | 587.309895 | F | ***759.378414*** | 380.192845 | 742.351865 | 371.679571 | 741.367849 | 371.187563 | 7 |
| 8 | **1278.655106** | 639.831191 | 1261.628557 | 631.317917 | 1260.644541 | 630.825909 | S | ***612.310000*** | 306.658638 | 595.283451 | 298.145364 | 594.299435 | 297.653356 | 6 |
| 9 | **1365.687134** | 683.347205 | 1348.660585 | 674.833931 | 1347.676569 | 674.341923 | S | ***525.277972*** | 263.142624 | 508.251423 | 254.629350 | 507.267407 | 254.137342 | 5 |
| 10 | 1462.739898 | 731.873587 | 1445.713349 | 723.360313 | 1444.729333 | 722.868305 | P | ***438.245944*** | 219.626610 | 421.219395 | 211.113335 | | | 4 |
| 11 | 1599.798810 | 800.403043 | 1582.772261 | 791.889769 | 1581.788245 | 791.397761 | H | 341.193180 | 171.100228 | 324.166631 | 162.586953 | | | 3 |
| 12 | 1656.820274 | 828.913775 | 1639.793725 | 820.400501 | 1638.809709 | 819.908493 | G | 204.134268 | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SKEFQLFSSPHGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 49.1 | 1801.918518 | -0.001656 | SKEFQLFSSPHGK |
| 2.1 | 1801.914536 | 0.002326 | QTVMTVVYGVTRYGGR |

**Mascot:** http://www.matrixscience.com/

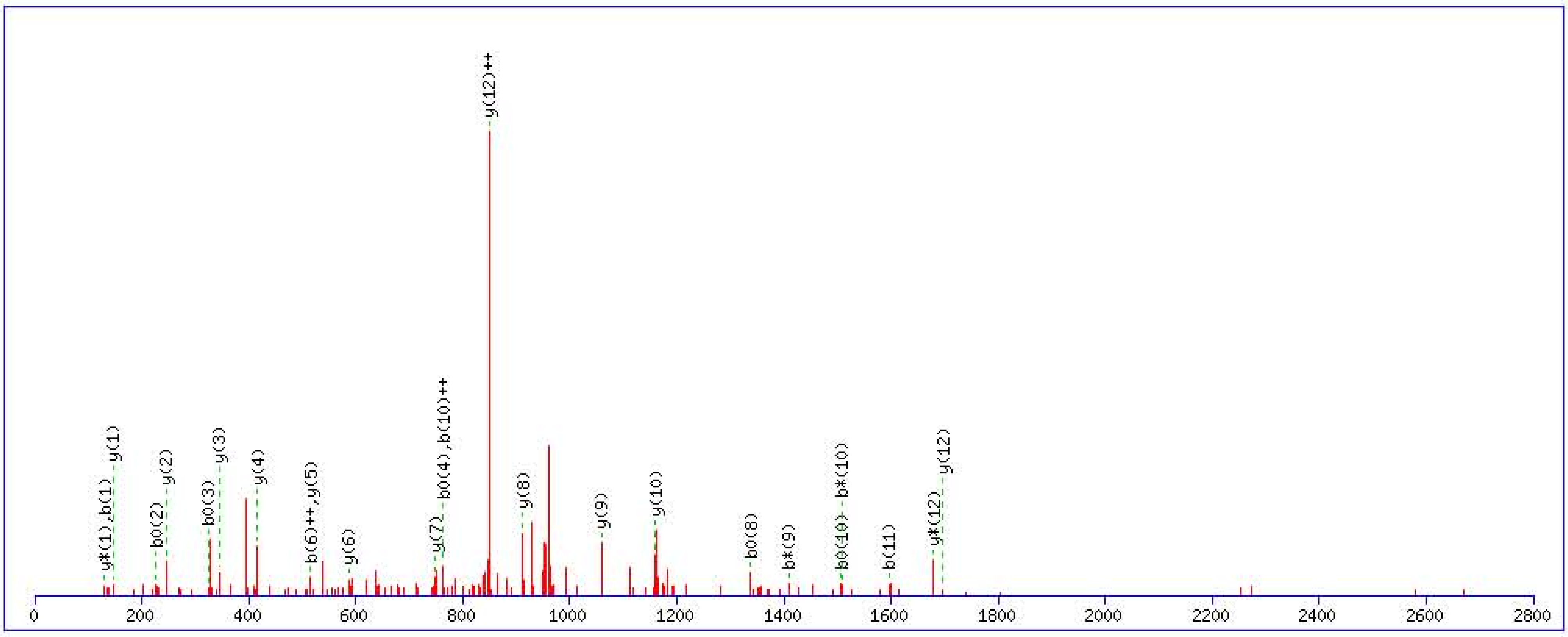
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **EDPQTFYYAVAVVK**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

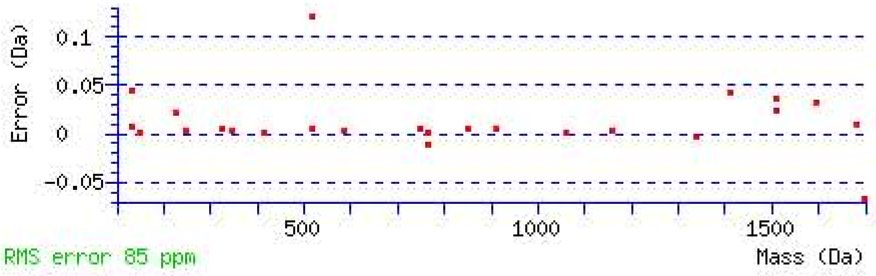
Match to Query 45364: 1939.971748 from(970.993150,2+) rtinseconds(2564) index(71896)
Title: Locus:1.1.1.1830.9 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

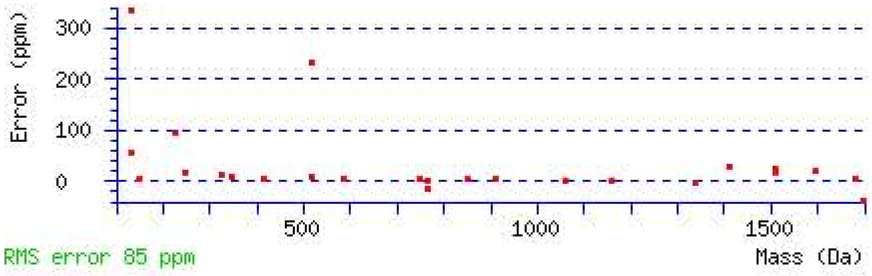
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1939.975372
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 45  Expect: 8.9e-005
Matches : 25/132 fragment ions using 62 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **130.049869** | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 14 |
| 2 | 245.076812 | 123.042044 | | | 227.066247 | 114.036762 | D | 1811.940058 | 906.473667 | 1794.913509 | 897.960393 | 1793.929493 | 897.468385 | 13 |
| 3 | 342.129576 | 171.568426 | | | 324.119011 | 162.563144 | P | ***1696.913115*** | 848.960196 | 1679.886566 | 840.446921 | 1678.902550 | 839.954913 | 12 |
| 4 | 781.354902 | 391.181089 | 764.328353 | 382.667815 | 763.344337 | 382.175807 | Q | 1599.860351 | 800.433814 | 1582.833802 | 791.920539 | 1581.849786 | 791.428531 | 11 |
| 5 | 882.402581 | 441.704929 | 865.376032 | 433.191654 | 864.392016 | 432.699646 | T | ***1160.635025*** | 580.821151 | 1143.608476 | 572.307876 | 1142.624460 | 571.815868 | 10 |
| 6 | 1029.470995 | **515.239136** | 1012.444446 | 506.725861 | 1011.460430 | 506.233853 | F | ***1059.587346*** | 530.297311 | 1042.560797 | 521.784037 | | | 9 |
| 7 | 1192.534324 | 596.770800 | 1175.507775 | 588.257526 | 1174.523759 | 587.765518 | Y | ***912.518932*** | 456.763104 | 895.492383 | 448.249830 | | | 8 |
| 8 | 1355.597653 | 678.302465 | 1338.571104 | 669.789190 | 1337.587088 | 669.297182 | Y | ***749.455603*** | 375.231440 | 732.429054 | 366.718165 | | | 7 |
| 9 | 1426.634767 | 713.821022 | 1409.608218 | 705.307747 | 1408.624202 | 704.815739 | A | ***586.392274*** | 293.699775 | 569.365725 | 285.186501 | | | 6 |
| 10 | 1525.703181 | **763.355229** | 1508.676632 | 754.841954 | 1507.692616 | 754.349946 | V | ***515.355160*** | 258.181218 | 498.328611 | 249.667944 | | | 5 |
| 11 | **1596.740295** | 798.873786 | 1579.713746 | 790.360511 | 1578.729730 | 789.868503 | A | ***416.286746*** | 208.647011 | 399.260197 | 200.133737 | | | 4 |
| 12 | 1695.808709 | 848.407993 | 1678.782160 | 839.894718 | 1677.798144 | 839.402710 | V | ***345.249632*** | 173.128454 | 328.223083 | 164.615180 | | | 3 |
| 13 | 1794.877123 | 897.942200 | 1777.850574 | 889.428925 | 1776.866558 | 888.936917 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 14 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of EDPQTFYYAVAVVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 45.2 | 1939.975372 | -0.003624 | EDPQTFYYAVAVVK |
| 2.0 | 1939.992477 | -0.020729 | TTIYEIQDKTGSMAVVGK |

**Mascot:** http://www.matrixscience.com/

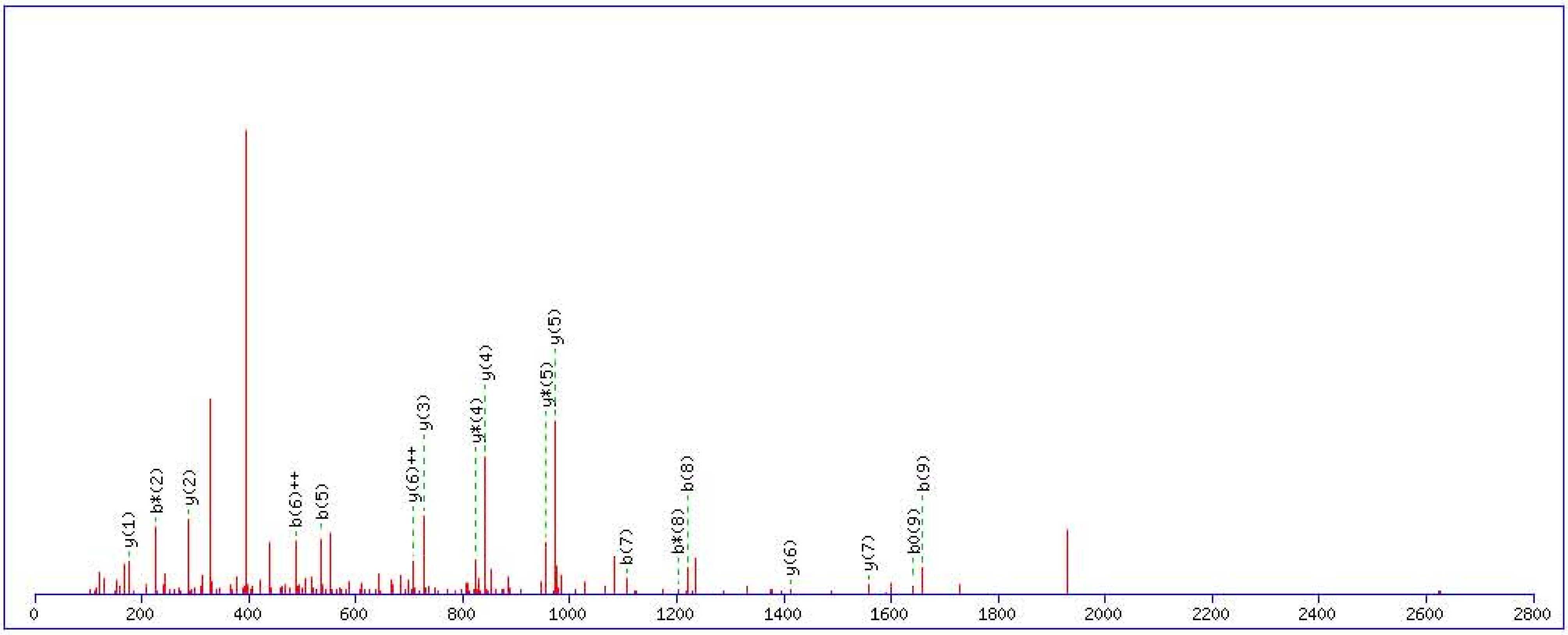
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KDSGFQMNQLR**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

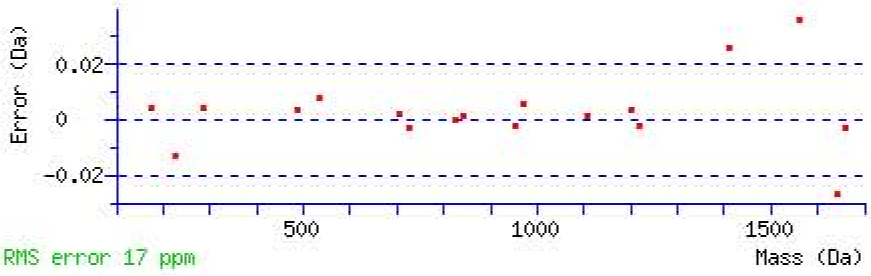
Match to Query 45444: 1944.972162 from(649.331330,3+) rtinseconds(2085) index(69281)
Title: Locus:1.1.1.1663.10 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●

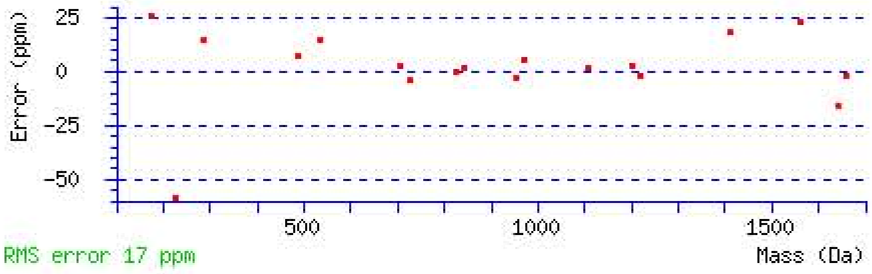


```
Monoisotopic mass of neutral peptide Mr(calc): 1944.973602
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6      : Biotin:Thermo-21345 (Q)
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.025
Matches : 18/102 fragment ions using 34 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129.102239 | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 11 |
| 2 | 244.129182 | 122.568229 | 227.102633 | 114.054955 | 226.118617 | 113.562947 | D | 1817.885929 | 909.446603 | 1800.859380 | 900.933328 | 1799.875364 | 900.441320 | 10 |
| 3 | 331.161210 | 166.084243 | 314.134661 | 157.570969 | 313.150645 | 157.078961 | S | 1702.858986 | 851.933131 | 1685.832437 | 843.419857 | 1684.848421 | 842.927848 | 9 |
| 4 | 388.182674 | 194.594975 | 371.156125 | 186.081701 | 370.172109 | 185.589693 | G | 1615.826958 | 808.417117 | 1598.800409 | 799.903843 | | | 8 |
| 5 | **535.251088** | 268.129182 | 518.224539 | 259.615908 | 517.240523 | 259.123900 | F | ***1558.805494*** | 779.906385 | 1541.778945 | 771.393111 | | | 7 |
| 6 | 974.476414 | 487.741845 | 957.449865 | 479.228571 | 956.465849 | 478.736563 | Q | ***1411.737080*** | 706.372178 | 1394.710531 | 697.858904 | | | 6 |
| 7 | **1105.516899** | 553.262088 | 1088.490350 | 544.748813 | 1087.506334 | 544.256805 | M | ***972.511754*** | 486.759515 | 955.485205 | 478.246241 | | | 5 |
| 8 | **1219.559826** | 610.283551 | 1202.533277 | 601.770277 | 1201.549261 | 601.278268 | N | ***841.471269*** | 421.239273 | 824.444720 | 412.725998 | | | 4 |
| 9 | **1658.785152** | 829.896214 | 1641.758603 | 821.382940 | 1640.774587 | 820.890932 | Q | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 10 | 1771.869216 | 886.438246 | 1754.842667 | 877.924972 | 1753.858651 | 877.432964 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



RMS error 17 ppm



RMS error 17 ppm

NCBI **BLAST** search of KDSGFQMNQLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.1 | 1944.973602 | -0.001440 | KDSGFQMNQLR |

**Mascot:** http://www.matrixscience.com/

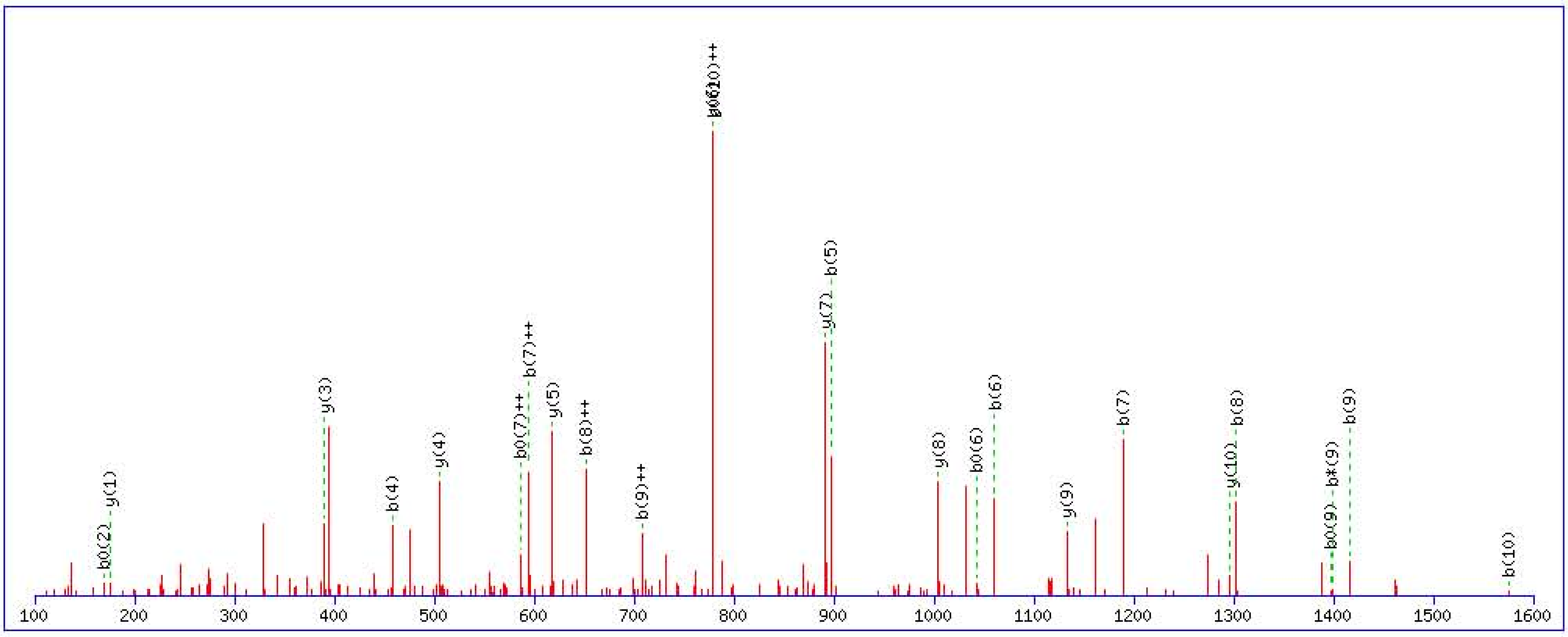
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ADRDQYELLCLDNTR**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

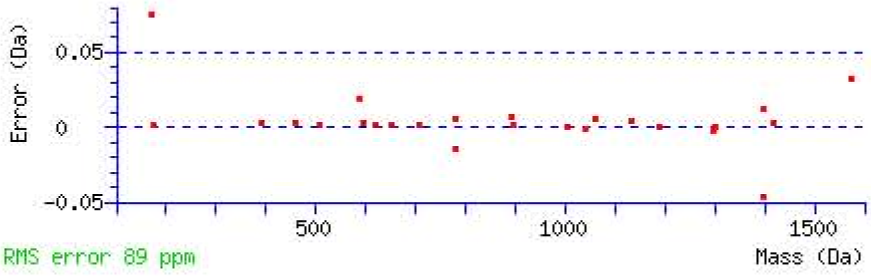
Match to Query 50929: 2192.037672 from(731.686500,3+) rtinseconds(2208) index(70015)
Title: Locus:1.1.1.1706.12 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

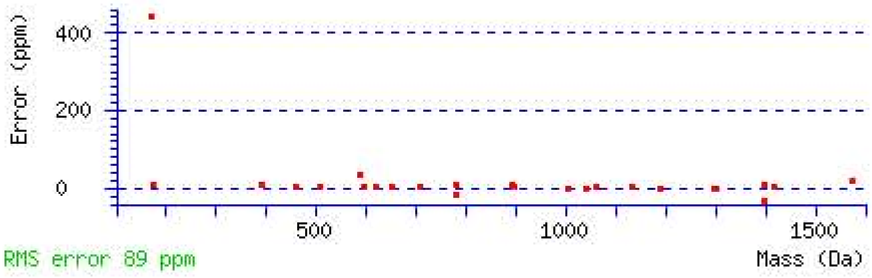
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] 100 to 1600 Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2192.035400
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 49  Expect: 3.7e-005
Matches : 25/160 fragment ions using 43 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^0$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^0$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 72.044390 | 36.525833 |  |  |  |  | A |  |  |  |  |  |  | 15 |
| 2 | 187.071333 | 94.039304 |  |  | 169.060768 | 85.034022 | D | 2122.005587 | 1061.506431 | 2104.979038 | 1052.993157 | 2103.995022 | 1052.501149 | 14 |
| 3 | 343.172444 | 172.089860 | 326.145895 | 163.576585 | 325.161879 | 163.084577 | R | 2006.978644 | 1003.992960 | 1989.952095 | 995.479685 | 1988.968079 | 994.987677 | 13 |
| 4 | **458.199387** | 229.603332 | 441.172838 | 221.090057 | 440.188822 | 220.598049 | D | 1850.877533 | 925.942404 | 1833.850984 | 917.429130 | 1832.866968 | 916.937122 | 12 |
| 5 | **897.424713** | 449.215995 | 880.398164 | 440.702720 | 879.414148 | 440.210712 | Q | 1735.850590 | 868.428933 | 1718.824041 | 859.915658 | 1717.840025 | 859.423650 | 11 |
| 6 | **1060.488042** | 530.747659 | 1043.461493 | 522.234385 | 1042.477477 | 521.742376 | Y | ***1296.625264*** | 648.816270 | 1279.598715 | 640.302995 | 1278.614699 | 639.810987 | 10 |
| 7 | **1189.530635** | **595.268955** | 1172.504086 | 586.755681 | 1171.520070 | 586.263673 | E | ***1133.561935*** | 567.284605 | 1116.535386 | 558.771331 | 1115.551370 | 558.279323 | 9 |
| 8 | **1302.614699** | **651.810987** | 1285.588150 | 643.297713 | 1284.604134 | 642.805705 | L | ***1004.519342*** | 502.763309 | 987.492793 | 494.250034 | 986.508777 | 493.758026 | 8 |
| 9 | **1415.698763** | **708.353019** | 1398.672214 | 699.839745 | 1397.688198 | 699.347737 | L | ***891.435278*** | 446.221277 | 874.408729 | 437.708002 | 873.424713 | 437.215994 | 7 |
| 10 | **1575.729412** | 788.368344 | 1558.702863 | 779.855069 | 1557.718847 | 779.363061 | C | ***778.351214*** | 389.679245 | 761.324665 | 381.165971 | 760.340649 | 380.673963 | 6 |
| 11 | 1688.813476 | 844.910376 | 1671.786927 | 836.397101 | 1670.802911 | 835.905093 | L | ***618.320565*** | 309.663921 | 601.294016 | 301.150646 | 600.310000 | 300.658638 | 5 |
| 12 | 1803.840419 | 902.423847 | 1786.813870 | 893.910573 | 1785.829854 | 893.418565 | D | ***505.236501*** | 253.121888 | 488.209952 | 244.608614 | 487.225936 | 244.116606 | 4 |
| 13 | 1917.883346 | 959.445311 | 1900.856797 | 950.932036 | 1899.872781 | 950.440028 | N | ***390.209558*** | 195.608417 | 373.183009 | 187.095142 | 372.198993 | 186.603134 | 3 |
| 14 | 2018.931025 | 1009.969150 | 2001.904476 | 1001.455876 | 2000.920460 | 1000.963868 | T | 276.166631 | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 15 |  |  |  |  |  |  | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 |  |  | 1 |





NCBI **BLAST** search of ADRDQYELLCLDNTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 48.6 | 2192.035400 | 0.002272 | ADRDQYELLCLDNTR |
| 1.4 | 2192.049973 | -0.012301 | AQEQLGKEMRMNMENLVR |

**Mascot:** http://www.matrixscience.com/

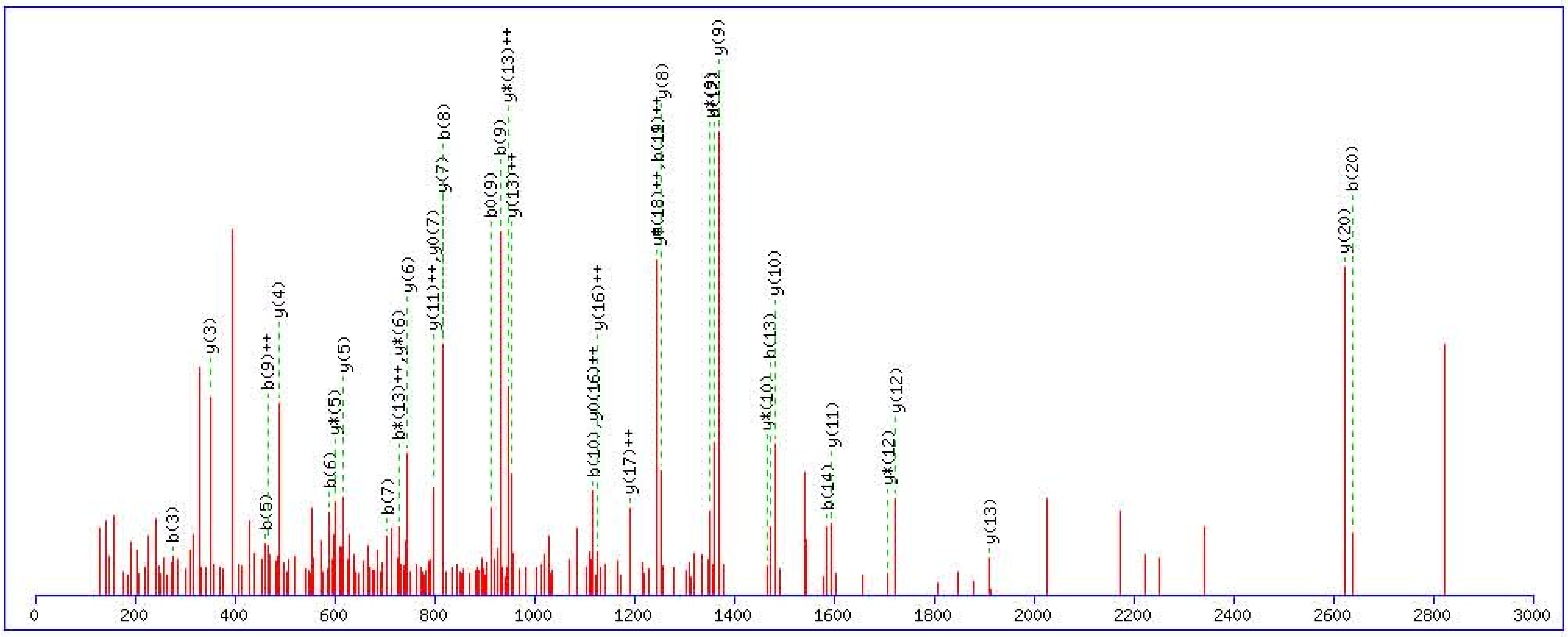
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SMGGKEDLIWELLNQAQEHFGK**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

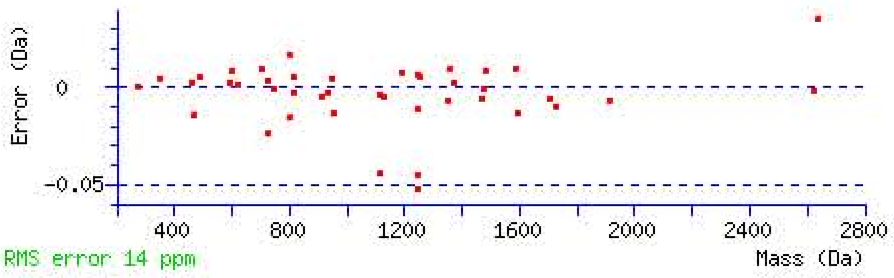
Match to Query 59908: 2840.397972 from(947.806600,3+) rtinseconds(2978) index(74988)
Title: Locus:1.1.1.1971.6 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

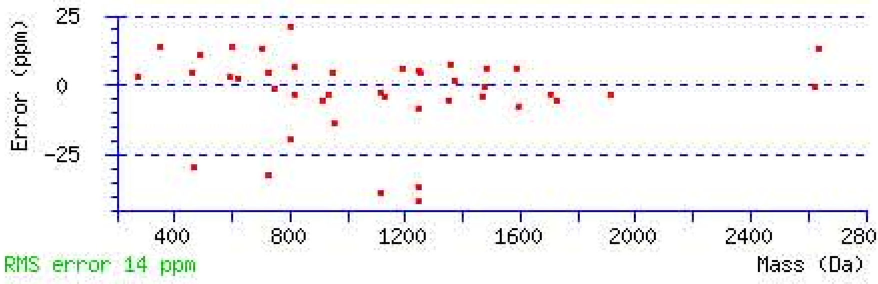
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2840.398926
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q15     : Biotin:Thermo-21345 (Q)
Ions Score: 73  Expect: 1.4e-006
Matches : 42/236 fragment ions using 76 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 22 |
| 2 | 219.079789 | 110.043532 | | | 201.069224 | 101.038250 | M | 2754.374206 | 1377.690741 | 2737.347657 | 1369.177466 | 2736.363641 | 1368.685458 | 21 |
| 3 | ***276.101253*** | 138.554264 | | | 258.090688 | 129.548982 | G | ***2623.333721*** | 1312.170498 | 2606.307172 | 1303.657224 | 2605.323156 | 1303.165216 | 20 |
| 4 | 333.122717 | 167.064996 | | | 315.112152 | 158.059714 | G | 2566.312257 | 1283.659766 | 2549.285708 | 1275.146492 | 2548.301692 | 1274.654484 | 19 |
| 5 | ***461.217680*** | 231.112478 | 444.191131 | 222.599203 | 443.207115 | 222.107195 | K | 2509.290793 | 1255.149034 | 2492.264244 | 1246.635760 | 2491.280228 | 1246.143752 | 18 |
| 6 | ***590.260273*** | 295.633775 | 573.233724 | 287.120500 | 572.249708 | 286.628492 | E | 2381.195830 | 1191.101553 | 2364.169281 | 1182.588278 | 2363.185265 | 1182.096270 | 17 |
| 7 | ***705.287216*** | 353.147246 | 688.260667 | 344.633972 | 687.276651 | 344.141964 | D | 2252.153237 | 1126.580256 | 2235.126688 | 1118.066982 | 2234.142672 | 1117.574974 | 16 |
| 8 | ***818.371280*** | 409.689278 | 801.344731 | 401.176004 | 800.360715 | 400.683996 | L | 2137.126294 | 1069.066785 | 2120.099745 | 1060.553510 | 2119.115729 | 1060.061502 | 15 |
| 9 | ***931.455344*** | **466.231310** | 914.428795 | 457.718036 | 913.444779 | 457.226028 | I | 2024.042230 | 1012.524753 | 2007.015681 | 1004.011479 | 2006.031665 | 1003.519471 | 14 |
| 10 | ***1117.534657*** | 559.270967 | 1100.508108 | 550.757692 | 1099.524092 | 550.265684 | W | ***1910.958166*** | 955.982721 | 1893.931617 | 947.469447 | 1892.947601 | 946.977439 | 13 |
| 11 | ***1246.577250*** | 623.792263 | 1229.550701 | 615.278989 | 1228.566685 | 614.786981 | E | ***1724.878853*** | 862.943065 | 1707.852304 | 854.429790 | 1706.868288 | 853.937782 | 12 |
| 12 | ***1359.661314*** | 680.334295 | 1342.634765 | 671.821021 | 1341.650749 | 671.329012 | L | ***1595.836260*** | 798.421768 | 1578.809711 | 789.908494 | 1577.825695 | 789.416486 | 11 |
| 13 | ***1472.745378*** | 736.876327 | 1455.718829 | 728.363052 | 1454.734813 | 727.871044 | L | ***1482.752196*** | 741.879736 | 1465.725647 | 733.366462 | 1464.741631 | 732.874454 | 10 |
| 14 | ***1586.788305*** | 793.897790 | 1569.761756 | 785.384516 | 1568.777740 | 784.892508 | N | ***1369.668132*** | 685.337704 | 1352.641583 | 676.824430 | 1351.657567 | 676.332422 | 9 |
| 15 | 2026.013631 | 1013.510454 | 2008.987082 | 1004.997179 | 2008.003066 | 1004.505171 | Q | ***1255.625205*** | 628.316241 | 1238.598656 | 619.802966 | 1237.614640 | 619.310958 | 8 |
| 16 | 2097.050745 | 1049.029010 | 2080.024196 | 1040.515736 | 2079.040180 | 1040.023728 | A | ***816.399879*** | 408.703578 | 799.373330 | 400.190303 | 798.389314 | 399.698295 | 7 |
| 17 | 2225.109323 | 1113.058300 | 2208.082774 | 1104.545025 | 2207.098758 | 1104.053017 | Q | ***745.362765*** | 373.185021 | 728.336216 | 364.671746 | 727.352200 | 364.179738 | 6 |
| 18 | 2354.151916 | 1177.579596 | 2337.125367 | 1169.066322 | 2336.141351 | 1168.574314 | E | ***617.304187*** | 309.155732 | 600.277638 | 300.642457 | 599.293622 | 300.150449 | 5 |
| 19 | 2491.210828 | **1246.109052** | 2474.184279 | 1237.595777 | 2473.200263 | 1237.103770 | H | ***488.261594*** | 244.634435 | 471.235045 | 236.121160 | | | 4 |
| 20 | ***2638.279242*** | 1319.643259 | 2621.252693 | 1311.129984 | 2620.268677 | 1310.637976 | F | ***351.202682*** | 176.104979 | 334.176133 | 167.591704 | | | 3 |
| 21 | 2695.300706 | 1348.153991 | 2678.274157 | 1339.640716 | 2677.290141 | 1339.148708 | G | 204.134268 | 102.570772 | 187.107719 | 94.057497 | | | 2 |
| 22 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of SMGGKEDLIWELLNQAQEHFGK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 73.1 | 2840.398926 | -0.000954 | SMGGKEDLIWELLNQAQEHFGK |
| 57.9 | 2840.398926 | -0.000954 | SMGGKEDLIWELLNQAQEHFGK |

**Mascot:** http://www.matrixscience.com/

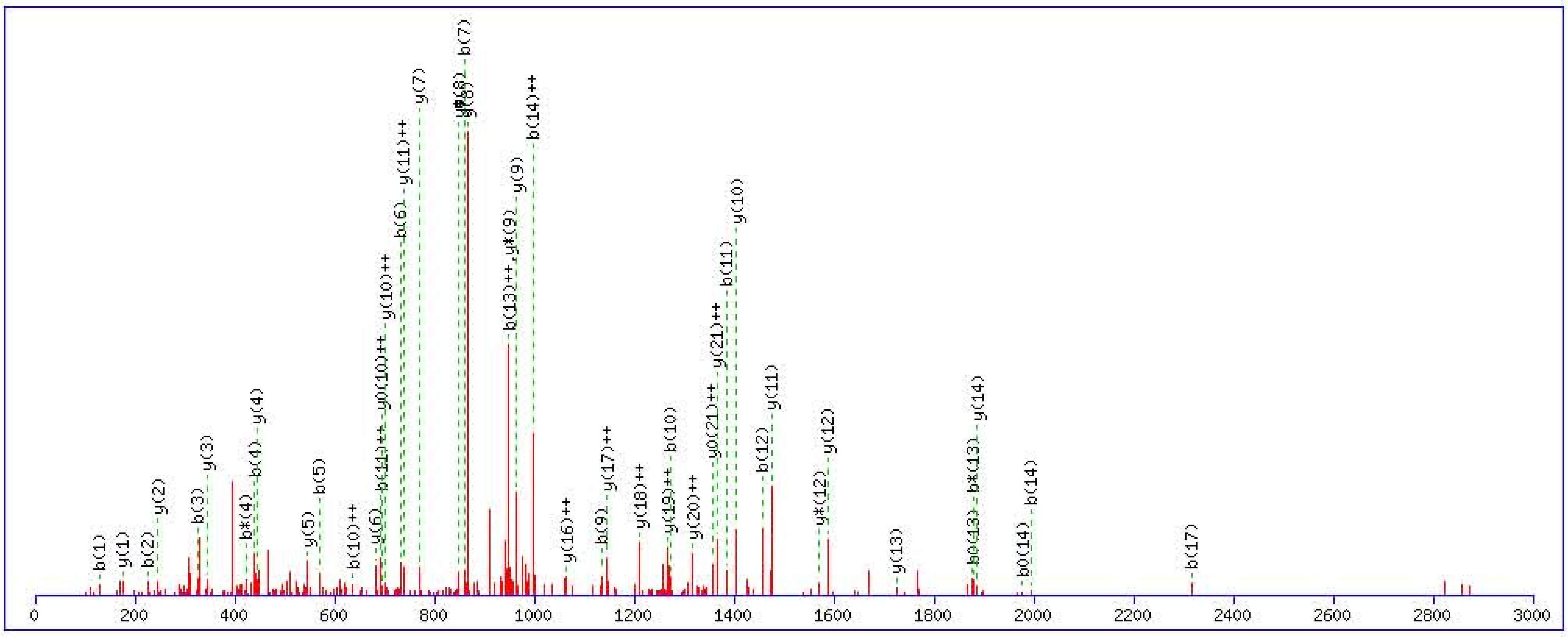
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **KPVDEYKDCHLAQVPSHTVVAR**
Found in **TRFE_HUMAN**, Serotransferrin OS=Homo sapiens GN=TF PE=1 SV=3

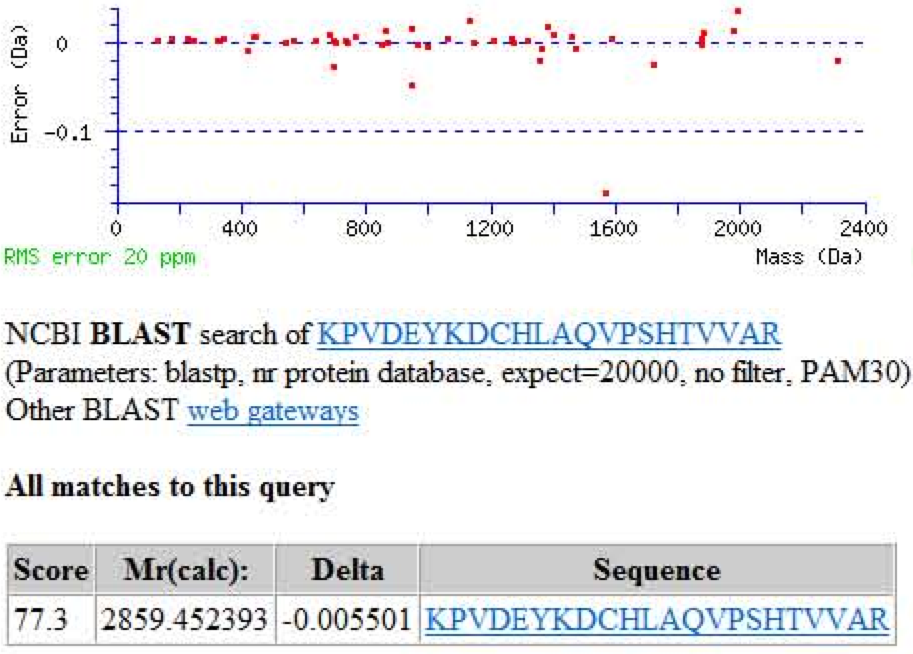
Match to Query 60386: 2859.446892 from(954.156240,3+) rtinseconds(1526) index(66017)
Title: Locus:1.1.1.1468.16 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

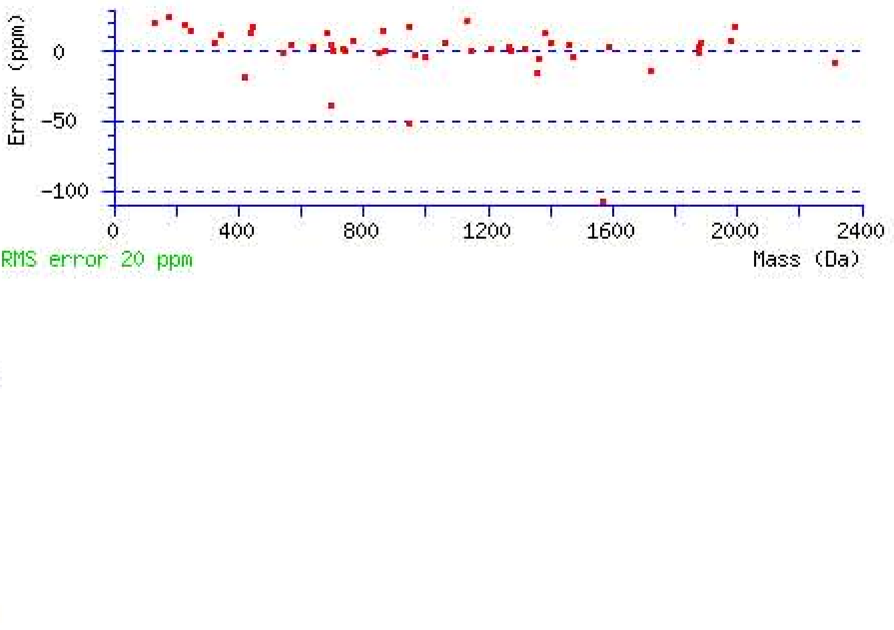
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2859.452393
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q13    : Biotin:Thermo-21345 (Q)
Ions Score: 77  Expect: 5.5e-007
Matches : 49/238 fragment ions using 112 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ***129.102239*** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 22 |
| 2 | ***226.155003*** | 113.581139 | 209.128454 | 105.067865 | | | P | 2732.364705 | 1366.685990 | 2715.338156 | 1358.172716 | 2714.354140 | 1357.680708 | 21 |
| 3 | ***325.223417*** | 163.115346 | 308.196868 | 154.602072 | | | V | 2635.311941 | 1318.159608 | 2618.285392 | 1309.646334 | 2617.301376 | 1309.154326 | 20 |
| 4 | ***440.250360*** | 220.628818 | 423.223811 | 212.115544 | 422.239795 | 211.623536 | D | 2536.243527 | 1268.625401 | 2519.216978 | 1260.112127 | 2518.232962 | 1259.620119 | 19 |
| 5 | ***569.292953*** | 285.150115 | 552.266404 | 276.636840 | 551.282388 | 276.144832 | E | 2421.216584 | 1211.111930 | 2404.190035 | 1202.598655 | 2403.206019 | 1202.106647 | 18 |
| 6 | ***732.356282*** | 366.681779 | 715.329733 | 358.168505 | 714.345717 | 357.676497 | Y | 2292.173991 | 1146.590633 | 2275.147442 | 1138.077359 | 2274.163426 | 1137.585351 | 17 |
| 7 | ***860.451245*** | 430.729261 | 843.424696 | 422.215986 | 842.440680 | 421.723978 | K | 2129.110662 | 1065.058969 | 2112.084113 | 1056.545694 | 2111.100097 | 1056.053686 | 16 |
| 8 | 975.478188 | 488.242732 | 958.451639 | 479.729458 | 957.467623 | 479.237450 | D | 2001.015699 | 1001.011487 | 1983.989150 | 992.498213 | 1983.005134 | 992.006205 | 15 |
| 9 | ***1135.508837*** | 568.258057 | 1118.482288 | 559.744782 | 1117.498272 | 559.252774 | C | ***1885.988756*** | 943.498016 | 1868.962207 | 934.984741 | 1867.978191 | 934.492733 | 14 |
| 10 | ***1272.567749*** | **636.787513** | 1255.541200 | 628.274238 | 1254.557184 | 627.782230 | H | ***1725.958107*** | 863.482691 | 1708.931558 | 854.969417 | 1707.947542 | 854.477409 | 13 |
| 11 | ***1385.651813*** | **693.329545** | 1368.625264 | 684.816270 | 1367.641248 | 684.324262 | L | ***1588.899195*** | 794.953235 | 1571.872646 | 786.439961 | 1570.888630 | 785.947953 | 12 |
| 12 | ***1456.688927*** | 728.848101 | 1439.662378 | 720.334827 | 1438.678362 | 719.842819 | A | ***1475.815131*** | 738.411203 | 1458.788582 | 729.897929 | 1457.804566 | 729.405921 | 11 |
| 13 | 1895.914253 | **948.460765** | 1878.887704 | 939.947490 | 1877.903688 | 939.455482 | Q | ***1404.778017*** | 702.892646 | 1387.751468 | 694.379372 | 1386.767452 | 693.887364 | 10 |
| 14 | ***1994.982667*** | **997.994972** | 1977.956118 | 989.481697 | 1976.972102 | 988.989689 | V | ***965.552691*** | 483.279983 | 948.526142 | 474.766709 | 947.542126 | 474.274701 | 9 |
| 15 | 2092.035431 | 1046.521353 | 2075.008882 | 1038.008079 | 2074.024866 | 1037.516071 | P | ***866.484277*** | 433.745776 | 849.457728 | 425.232502 | 848.473712 | 424.740494 | 8 |
| 16 | 2179.067459 | 1090.037367 | 2162.040910 | 1081.524093 | 2161.056894 | 1081.032085 | S | ***769.431513*** | 385.219394 | 752.404964 | 376.706120 | 751.420948 | 376.214112 | 7 |
| 17 | ***2316.126371*** | 1158.566823 | 2299.099822 | 1150.053549 | 2298.115806 | 1149.561541 | H | ***682.399485*** | 341.703380 | 665.372936 | 333.190106 | 664.388920 | 332.698098 | 6 |
| 18 | 2417.174050 | 1209.090663 | 2400.147501 | 1200.577388 | 2399.163485 | 1200.085380 | T | ***545.340573*** | 273.173924 | 528.314024 | 264.660650 | 527.330008 | 264.168642 | 5 |
| 19 | 2516.242464 | 1258.624870 | 2499.215915 | 1250.111595 | 2498.231899 | 1249.619587 | V | ***444.292894*** | 222.650085 | 427.266345 | 214.136810 | | | 4 |
| 20 | 2615.310878 | 1308.159077 | 2598.284329 | 1299.645802 | 2597.300313 | 1299.153794 | V | ***345.224480*** | 173.115878 | 328.197931 | 164.602603 | | | 3 |
| 21 | 2686.347992 | 1343.677634 | 2669.321443 | 1335.164359 | 2668.337427 | 1334.672351 | A | ***246.156066*** | 123.581671 | 229.129517 | 115.068397 | | | 2 |
| 22 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KPVDEYKDCHLAQVPSHTVVAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 77.3 | 2859.452393 | -0.005501 | KPVDEYKDCHLAQVPSHTVVAR |

**Mascot:** http://www.matrixscience.com/

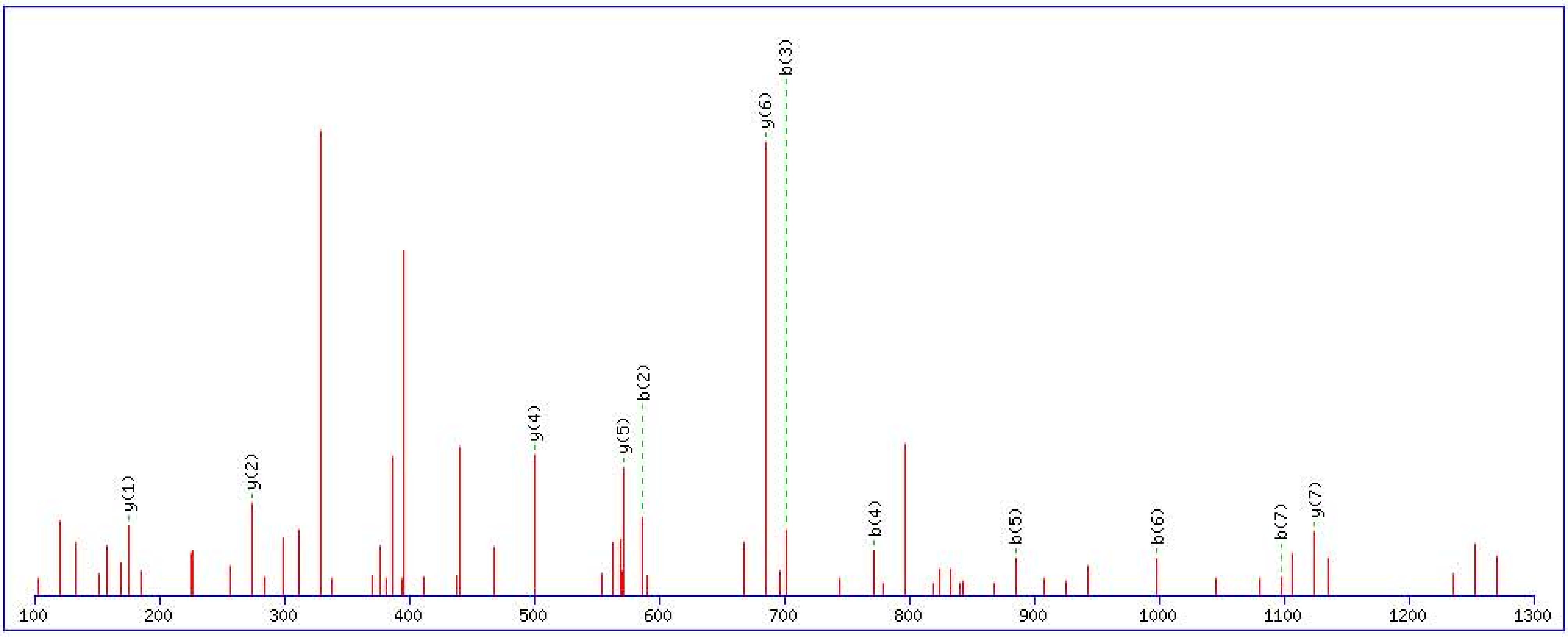
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **FQNALLVR**
Found in **ALBU_HUMAN**, Serum albumin OS=Homo sapiens GN=ALB PE=1 SV=2

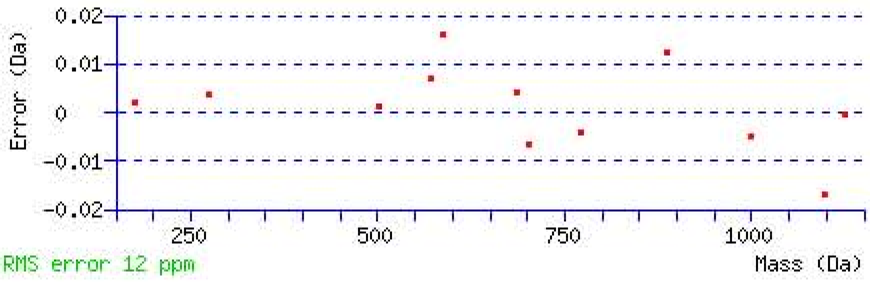
Match to Query 25354: 1270.723948 from(636.369250,2+) rtinseconds(2111) index(6516)
Title: Locus:1.1.1.1544.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

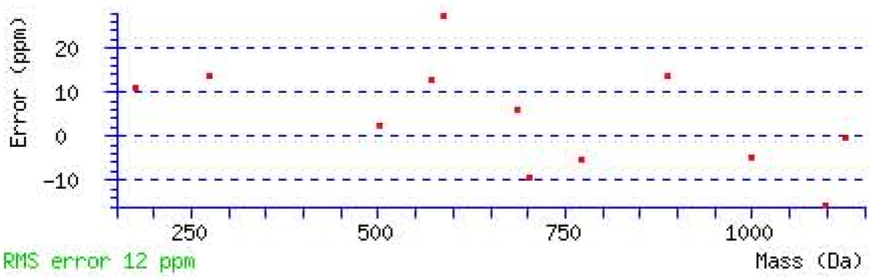
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1270.721985
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 37  Expect: 0.0034
Matches : 12/54 fragment ions using 24 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 148.075690 | 74.541483 | | | F | | | | | 8 |
| 2 | ***587.301016*** | 294.154146 | 570.274467 | 285.640872 | Q | ***1124.660861*** | 562.834068 | 1107.634312 | 554.320794 | 7 |
| 3 | ***701.343943*** | 351.175610 | 684.317394 | 342.662335 | N | ***685.435535*** | 343.221406 | 668.408986 | 334.708131 | 6 |
| 4 | ***772.381057*** | 386.694166 | 755.354508 | 378.180892 | A | ***571.392608*** | 286.199942 | 554.366059 | 277.686668 | 5 |
| 5 | ***885.465121*** | 443.236199 | 868.438572 | 434.722924 | L | ***500.355494*** | 250.681385 | 483.328945 | 242.168110 | 4 |
| 6 | ***998.549185*** | 499.778231 | 981.522636 | 491.264956 | L | 387.271430 | 194.139353 | 370.244881 | 185.626078 | 3 |
| 7 | ***1097.617599*** | 549.312437 | 1080.591050 | 540.799163 | V | ***274.187366*** | 137.597321 | 257.160817 | 129.084046 | 2 |
| 8 | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | 1 |





NCBI **BLAST** search of FQNALLVR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 36.7 | 1270.721985 | 0.001963 | FQNALLVR |
| 13.3 | 1270.725357 | -0.001409 | QKVMAIVR |
| 9.8 | 1270.735687 | -0.011739 | KEAELRSGIIR |
| 9.5 | 1270.722000 | 0.001948 | FQIAQVVR |
| 6.9 | 1270.733215 | -0.009267 | MFHIRAVILR |
| 6.2 | 1270.706711 | 0.017237 | NMPAKTELIVR |
| 3.3 | 1270.735733 | -0.011785 | EILGRGVSSVVR |
| 2.9 | 1270.717957 | 0.005991 | QLSRTLSR |
| 2.3 | 1270.735703 | -0.011755 | ASSLLAGERLVR |
| 2.3 | 1270.739761 | -0.015813 | QVVNIPSFIVR |

**Mascot:** http://www.matrixscience.com/

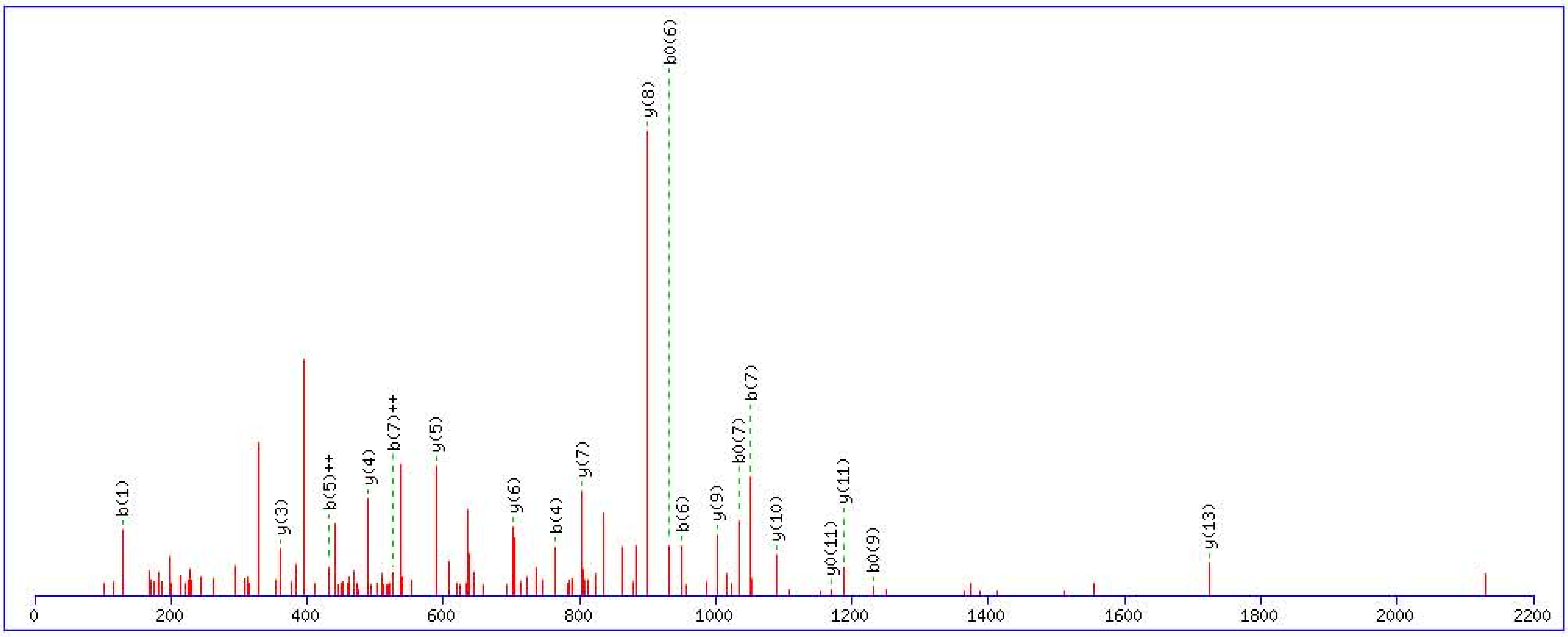
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **KVPQVSTPTLVEVSR**
Found in **ALBU_HUMAN**, Serum albumin OS=Homo sapiens GN=ALB PE=1 SV=2

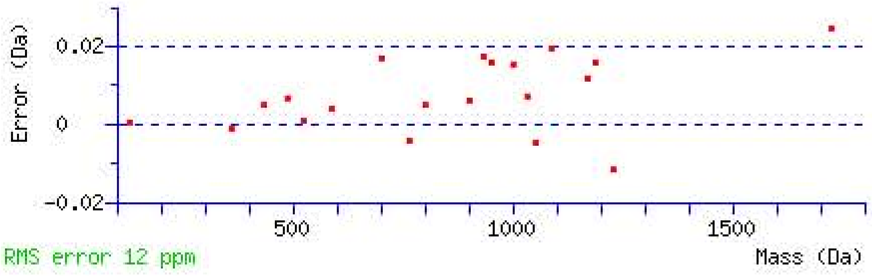
Match to Query 45553: 1950.092952 from(651.038260,3+) rtinseconds(1958) index(21464)
Title: Locus:1.1.1.684.4 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

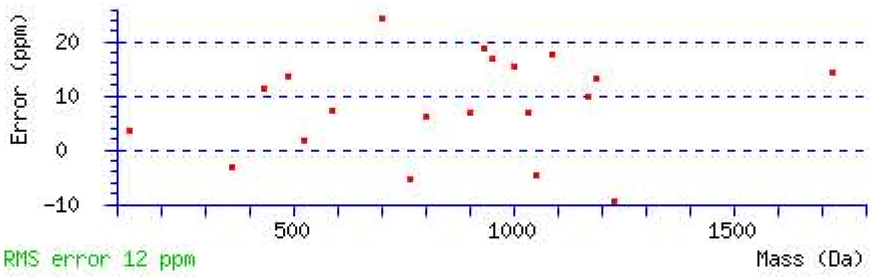
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1950.097229
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 52  Expect: 7.1e-005
Matches : 20/156 fragment ions using 42 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **129.102239** | 65.054757 | 112.075690 | 56.541483 | | | K | | | | | | | 15 |
| 2 | 228.170653 | 114.588965 | 211.144104 | 106.075690 | | | V | 1823.009533 | 912.008404 | 1805.982984 | 903.495130 | 1804.998968 | 903.003122 | 14 |
| 3 | 325.223417 | 163.115346 | 308.196868 | 154.602072 | | | P | ***1723.941119*** | 862.474197 | 1706.914570 | 853.960923 | 1705.930554 | 853.468915 | 13 |
| 4 | **764.448743** | 382.728010 | 747.422194 | 374.214735 | | | Q | 1626.888355 | 813.947815 | 1609.861806 | 805.434541 | 1608.877790 | 804.942533 | 12 |
| 5 | 863.517157 | **432.262217** | 846.490608 | 423.748942 | | | V | ***1187.663029*** | 594.335153 | 1170.636480 | 585.821878 | 1169.652464 | 585.329870 | 11 |
| 6 | **950.549185** | 475.778231 | 933.522636 | 467.264956 | 932.538620 | 466.772948 | S | ***1088.594615*** | 544.800946 | 1071.568066 | 536.287671 | 1070.584050 | 535.795663 | 10 |
| 7 | **1051.596864** | **526.302070** | 1034.570315 | 517.788795 | 1033.586299 | 517.296787 | T | ***1001.562587*** | 501.284932 | 984.536038 | 492.771657 | 983.552022 | 492.279649 | 9 |
| 8 | 1148.649628 | 574.828452 | 1131.623079 | 566.315178 | 1130.639063 | 565.823169 | P | ***900.514908*** | 450.761092 | 883.488359 | 442.247818 | 882.504343 | 441.755810 | 8 |
| 9 | 1249.697307 | 625.352291 | 1232.670758 | 616.839017 | 1231.686742 | 616.347009 | T | ***803.462144*** | 402.234710 | 786.435595 | 393.721436 | 785.451579 | 393.229428 | 7 |
| 10 | 1362.781371 | 681.894323 | 1345.754822 | 673.381049 | 1344.770806 | 672.889041 | L | ***702.414465*** | 351.710871 | 685.387916 | 343.197596 | 684.403900 | 342.705588 | 6 |
| 11 | 1461.849785 | 731.428530 | 1444.823236 | 722.915256 | 1443.839220 | 722.423248 | V | ***589.330401*** | 295.168839 | 572.303852 | 286.655564 | 571.319836 | 286.163556 | 5 |
| 12 | 1590.892378 | 795.949827 | 1573.865829 | 787.436552 | 1572.881813 | 786.944544 | E | ***490.261987*** | 245.634631 | 473.235438 | 237.121357 | 472.251422 | 236.629349 | 4 |
| 13 | 1689.960792 | 845.484034 | 1672.934243 | 836.970759 | 1671.950227 | 836.478751 | V | ***361.219394*** | 181.113335 | 344.192845 | 172.600061 | 343.208829 | 172.108053 | 3 |
| 14 | 1776.992820 | 889.000048 | 1759.966271 | 880.486774 | 1758.982255 | 879.994765 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 15 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of KVPQVSTPTLVEVSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.3 | 1950.097229 | -0.004277 | KVPQVSTPTLVEVSR |

**Mascot:** http://www.matrixscience.com/

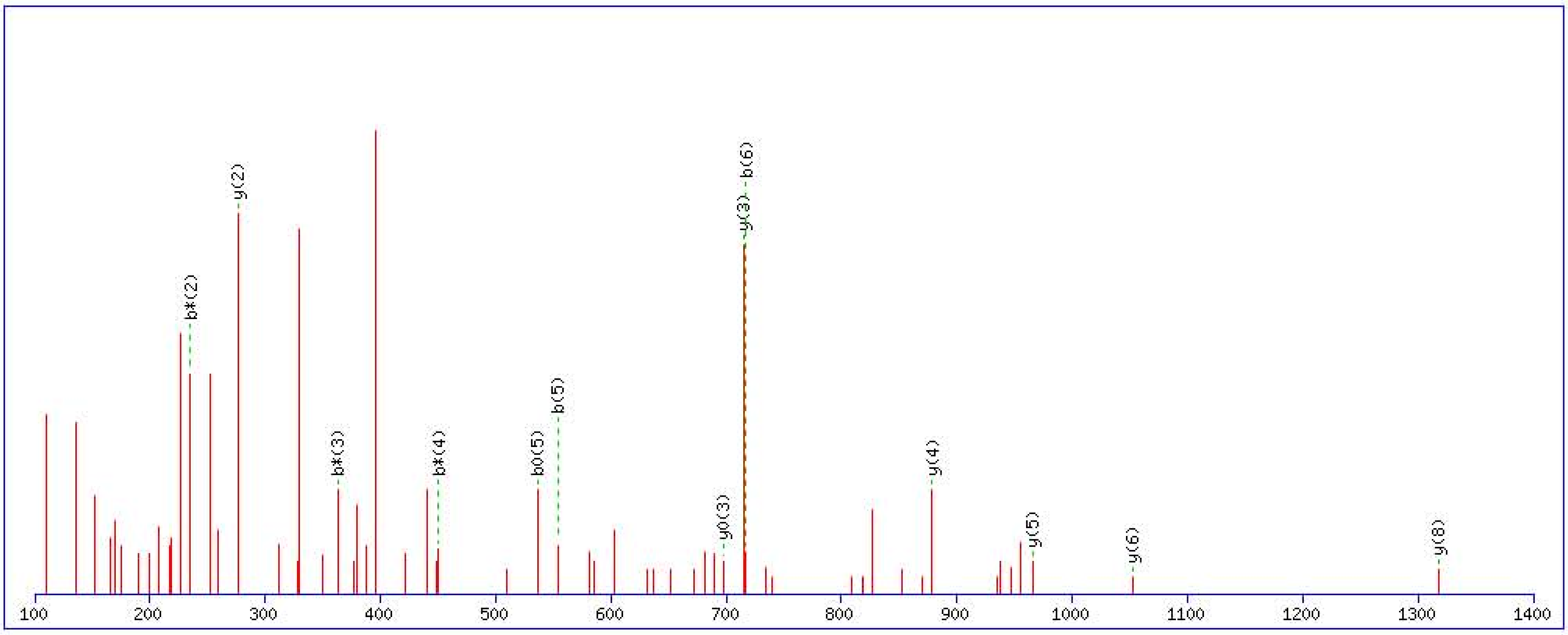
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NHQSSYQTR**
Found in **PON1_HUMAN**, Serum paraoxonase/arylesterase 1 OS=Homo sapiens GN=PON1 PE=1 SV=3

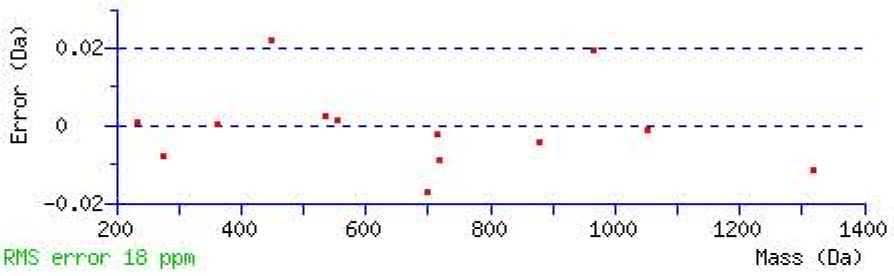
Match to Query 31909: 1430.665782 from(477.895870,3+) rtinseconds(1148) index(31169)
Title: Locus:1.1.1.2819.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

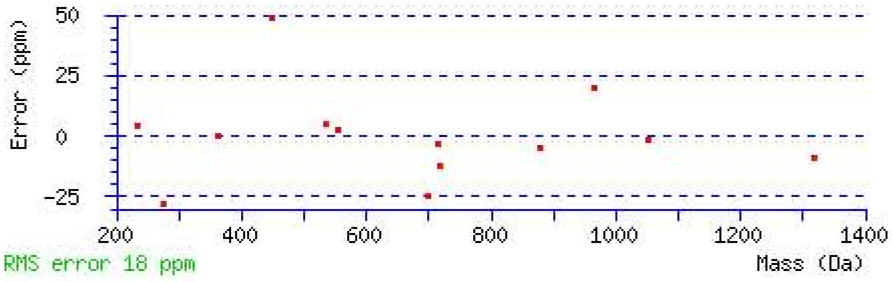
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1430.672470
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7     : Biotin:Thermo-21345 (Q)
Ions Score: 25  Expect: 0.036
Matches : 13/88 fragment ions using 29 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 9 |
| 2 | 252.109115 | 126.558195 | 235.082566 | 118.044921 | | | H | ***1317.636832*** | 659.322054 | 1300.610283 | 650.808780 | 1299.626267 | 650.316772 | 8 |
| 3 | 380.167693 | 190.587484 | 363.141144 | 182.074210 | | | Q | 1180.577920 | 590.792598 | 1163.551371 | 582.279324 | 1162.567355 | 581.787316 | 7 |
| 4 | 467.199721 | 234.103499 | 450.173172 | 225.590224 | 449.189156 | 225.098216 | S | ***1052.519342*** | 526.763309 | 1035.492793 | 518.250035 | 1034.508777 | 517.758027 | 6 |
| 5 | **554.231749** | 277.619513 | 537.205200 | 269.106238 | 536.221184 | 268.614230 | S | ***965.487314*** | 483.247295 | 948.460765 | 474.734021 | 947.476749 | 474.242013 | 5 |
| 6 | **717.295078** | 359.151177 | 700.268529 | 350.637903 | 699.284513 | 350.145895 | Y | ***878.455286*** | 439.731281 | 861.428737 | 431.218007 | 860.444721 | 430.725999 | 4 |
| 7 | 1156.520404 | 578.763840 | 1139.493855 | 570.250566 | 1138.509839 | 569.758558 | Q | ***715.391957*** | 358.199617 | 698.365408 | 349.686342 | 697.381392 | 349.194334 | 3 |
| 8 | 1257.568083 | 629.287680 | 1240.541534 | 620.774405 | 1239.557518 | 620.282397 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 9 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of NHQSSYQTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 25.4 | 1430.672470 | -0.006688 | NHQSSYQTR |

**Mascot:** http://www.matrixscience.com/

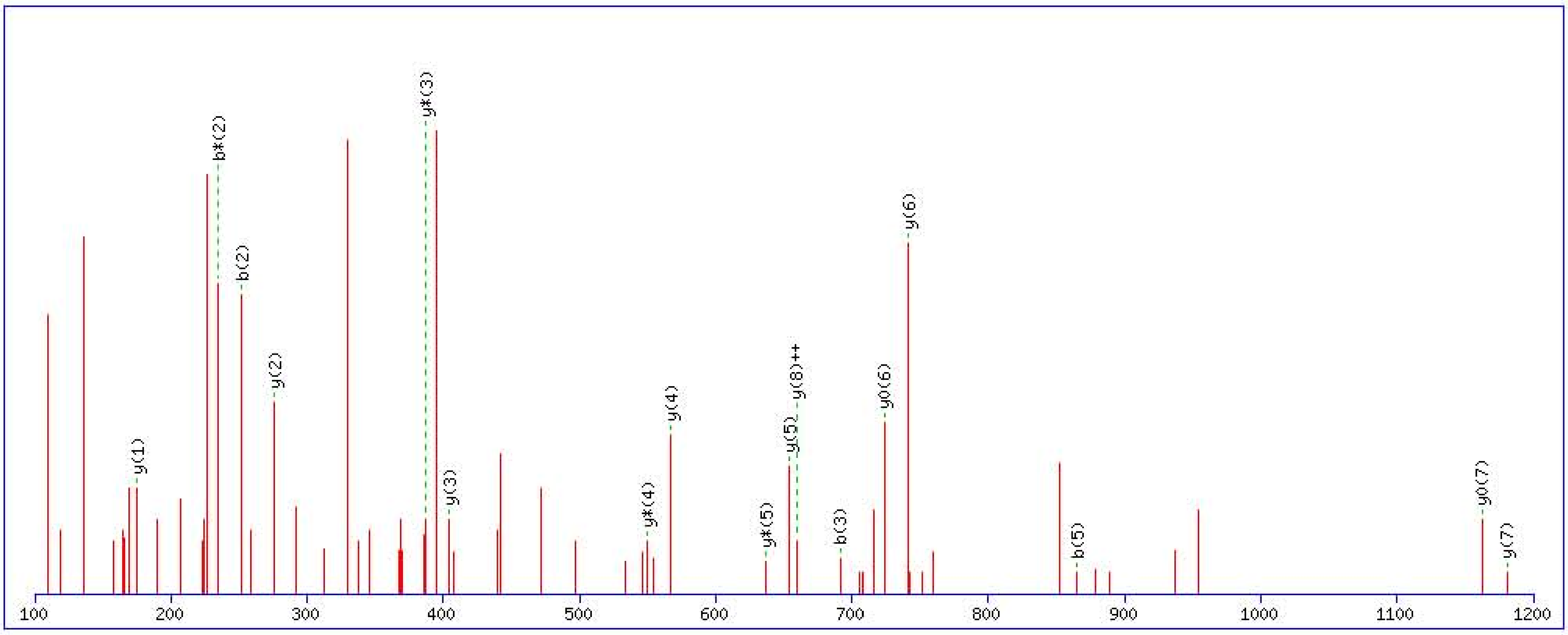
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **NHQSSYQTR**
Found in **PON1_HUMAN**, Serum paraoxonase/arylesterase 1 OS=Homo sapiens GN=PON1 PE=1 SV=3

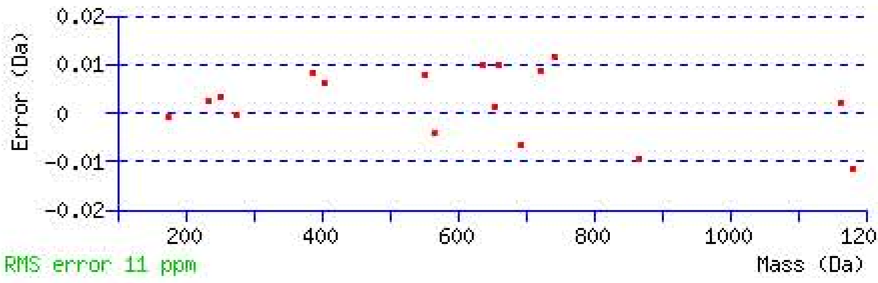
Match to Query 31911: 1430.670132 from(477.897320,3+) rtinseconds(1168) index(47659)
Title: Locus:1.1.1.1022.8 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

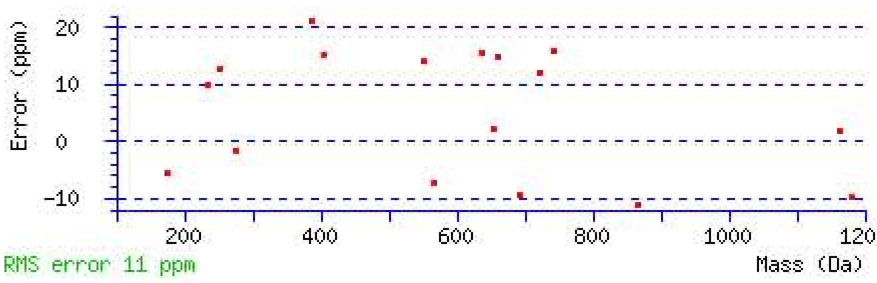
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1200 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1430.672470
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 27 **Expect:** 0.027
**Matches :** 17/88 fragment ions using 42 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 9 |
| 2 | **252.109115** | 126.558195 | 235.082566 | 118.044921 | | | H | 1317.636832 | 659.322054 | 1300.610283 | 650.808780 | 1299.626267 | 650.316772 | 8 |
| 3 | **691.334441** | 346.170859 | 674.307892 | 337.657584 | | | Q | ***1180.577920*** | 590.792598 | 1163.551371 | 582.279324 | 1162.567355 | 581.787316 | 7 |
| 4 | 778.366469 | 389.686872 | 761.339920 | 381.173598 | 760.355904 | 380.681590 | S | ***741.352594*** | 371.179935 | 724.326045 | 362.666661 | 723.342029 | 362.174653 | 6 |
| 5 | **865.398497** | 433.202886 | 848.371948 | 424.689612 | 847.387932 | 424.197604 | S | ***654.320566*** | 327.663921 | 637.294017 | 319.150647 | 636.310001 | 318.658639 | 5 |
| 6 | 1028.461826 | 514.734551 | 1011.435277 | 506.221276 | 1010.451261 | 505.729268 | Y | ***567.288538*** | 284.147907 | 550.261989 | 275.634633 | 549.277973 | 275.142625 | 4 |
| 7 | 1156.520404 | 578.763840 | 1139.493855 | 570.250566 | 1138.509839 | 569.758558 | Q | ***404.225209*** | 202.616243 | 387.198660 | 194.102968 | 386.214644 | 193.610960 | 3 |
| 8 | 1257.568083 | 629.287680 | 1240.541534 | 620.774405 | 1239.557518 | 620.282397 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of NHQSSYQTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.1 | 1430.672470 | -0.002338 | NHQSSYQTR |
| 7.6 | 1430.672470 | -0.002338 | NHQSSYQTR |

**Mascot:** http://www.matrixscience.com/

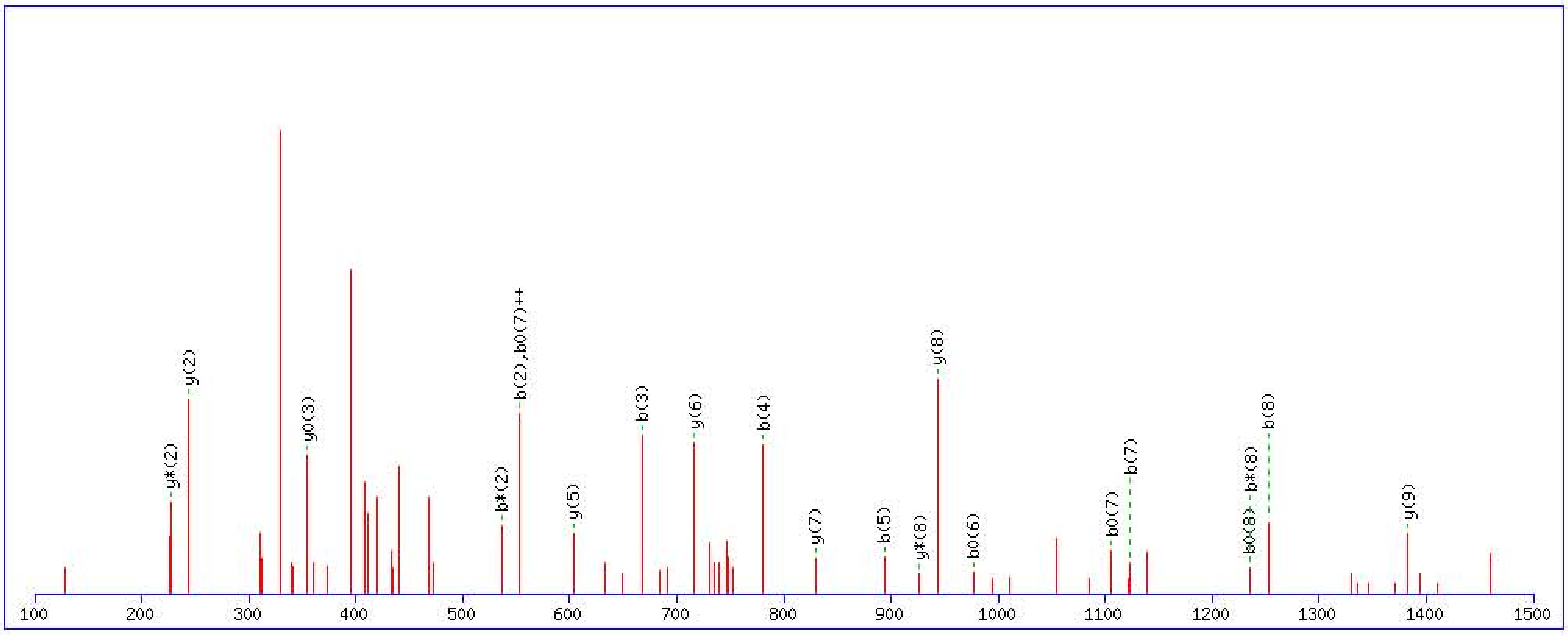
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **IQNILTEEPK**
Found in **PON1_HUMAN**, Serum paraoxonase/arylesterase 1 OS=Homo sapiens GN=PON1 PE=1 SV=3

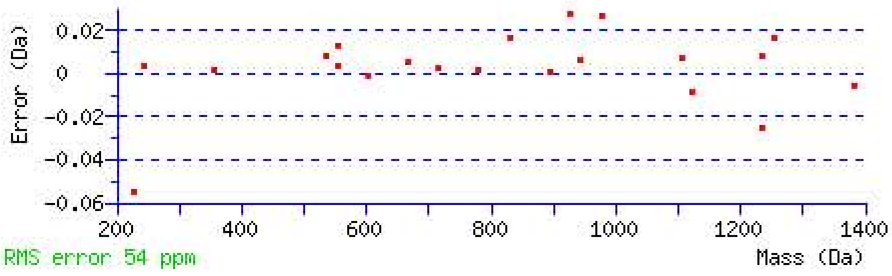
Match to Query 33703: 1494.801788 from(748.408170,2+) rtinseconds(2058) index(53303)
Title: Locus:1.1.1.1331.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

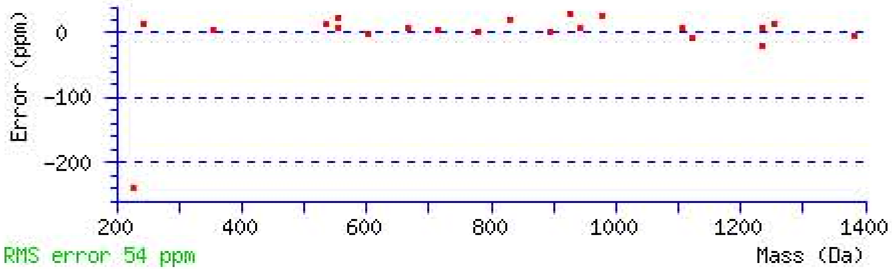
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1494.811569
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 32  Expect: 0.0029
Matches : 21/92 fragment ions using 38 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 10 |
| 2 | ***553.316666*** | 277.161971 | 536.290117 | 268.648697 | | | Q | ***1382.734814*** | 691.871045 | 1365.708265 | 683.357771 | 1364.724249 | 682.865763 | 9 |
| 3 | ***667.359593*** | 334.183435 | 650.333044 | 325.670160 | | | N | ***943.509488*** | 472.258382 | 926.482939 | 463.745108 | 925.498923 | 463.253100 | 8 |
| 4 | ***780.443657*** | 390.725467 | 763.417108 | 382.212192 | | | I | ***829.466561*** | 415.236919 | 812.440012 | 406.723644 | 811.455996 | 406.231636 | 7 |
| 5 | ***893.527721*** | 447.267499 | 876.501172 | 438.754224 | | | L | ***716.382497*** | 358.694887 | 699.355948 | 350.181612 | 698.371932 | 349.689604 | 6 |
| 6 | 994.575400 | 497.791338 | 977.548851 | 489.278064 | 976.564835 | 488.786056 | T | ***603.298433*** | 302.152855 | 586.271884 | 293.639580 | 585.287868 | 293.147572 | 5 |
| 7 | ***1123.617993*** | 562.312635 | 1106.591444 | 553.799360 | 1105.607428 | 553.307352 | E | 502.250754 | 251.629015 | 485.224205 | 243.115741 | 484.240189 | 242.623733 | 4 |
| 8 | ***1252.660586*** | 626.833931 | 1235.634037 | 618.320657 | 1234.650021 | 617.828649 | E | 373.208161 | 187.107719 | 356.181612 | 178.594444 | 355.197596 | 178.102436 | 3 |
| 9 | 1349.713350 | 675.360313 | 1332.686801 | 666.847039 | 1331.702785 | 666.355031 | P | ***244.165568*** | 122.586422 | 227.139019 | 114.073148 | | | 2 |
| 10 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of IQNILTEEPK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.4 | 1494.811569 | -0.009781 | IQNILTEEPK |
| 4.9 | 1494.809097 | -0.007309 | LQLYVFVMR |
| 4.8 | 1494.779907 | 0.021881 | QLKVMASDHR |
| 4.0 | 1494.780380 | 0.021408 | GFSHSSALRIHQR |

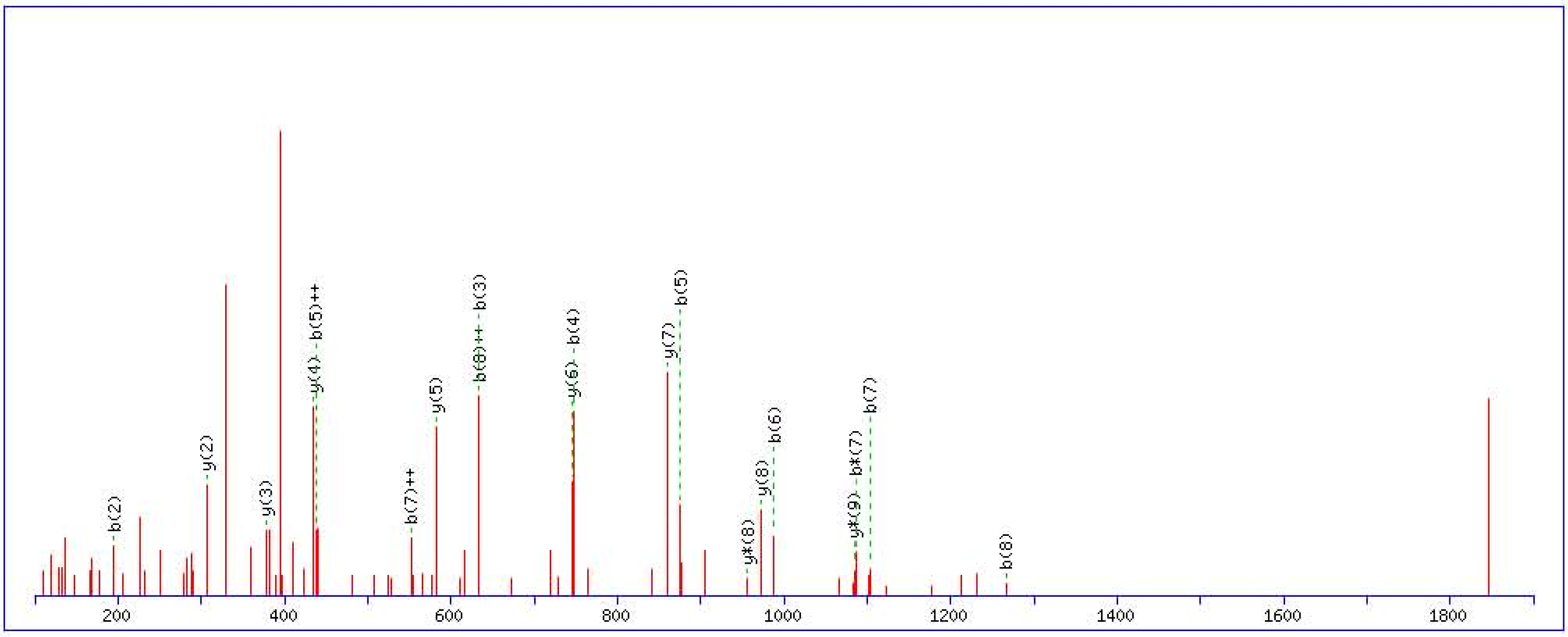
# MATRIX SCIENCE Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GHQLQLDYFGACK**
Found in **SPRL1_HUMAN**, SPARC-like protein 1 OS=Homo sapiens GN=SPARCL1 PE=1 SV=2

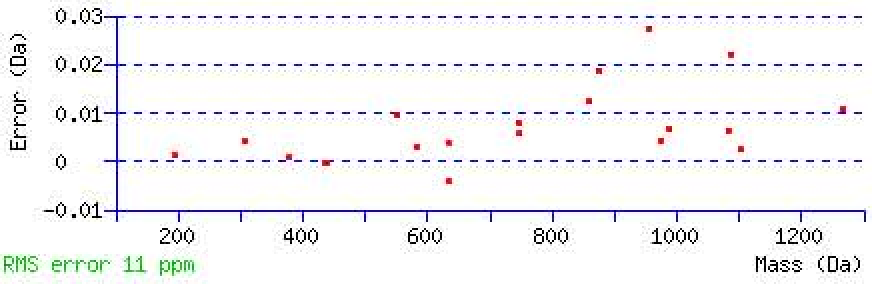
Match to Query 43588: 1846.891752 from(616.637860,3+) rtinseconds(2151) index(53896)
Title: Locus:1.1.1.1364.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

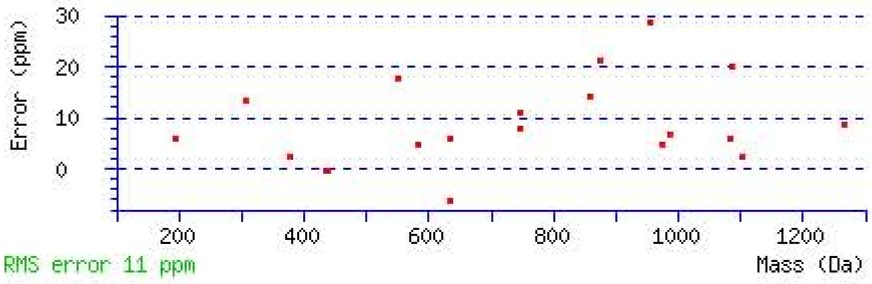
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1846.885849
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 5.9e-005
Matches : 20/116 fragment ions using 35 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 13 |
| 2 | ***195.087652*** | 98.047464 | | | | | H | 1790.871661 | 895.939469 | 1773.845112 | 887.426194 | 1772.861096 | 886.934186 | 12 |
| 3 | ***634.312978*** | 317.660127 | 617.286429 | 309.146853 | | | Q | 1653.812749 | 827.410013 | 1636.786200 | 818.896738 | 1635.802184 | 818.404730 | 11 |
| 4 | ***747.397042*** | 374.202159 | 730.370493 | 365.688885 | | | L | 1214.587423 | 607.797350 | 1197.560874 | 599.284075 | 1196.576858 | 598.792067 | 10 |
| 5 | ***875.455620*** | **438.231448** | 858.429071 | 429.718174 | | | Q | 1101.503359 | 551.255318 | 1084.476810 | 542.742043 | 1083.492794 | 542.250035 | 9 |
| 6 | ***988.539684*** | 494.773480 | 971.513135 | 486.260206 | | | L | ***973.444781*** | 487.226029 | 956.418232 | 478.712754 | 955.434216 | 478.220746 | 8 |
| 7 | ***1103.566627*** | **552.286952** | 1086.540078 | 543.773677 | 1085.556062 | 543.281669 | D | ***860.360717*** | 430.683997 | 843.334168 | 422.170722 | 842.350152 | 421.678714 | 7 |
| 8 | ***1266.629956*** | **633.818616** | 1249.603407 | 625.305342 | 1248.619391 | 624.813334 | Y | ***745.333774*** | 373.170525 | 728.307225 | 364.657251 | | | 6 |
| 9 | 1413.698370 | 707.352823 | 1396.671821 | 698.839549 | 1395.687805 | 698.347541 | F | ***582.270445*** | 291.638861 | 565.243896 | 283.125586 | | | 5 |
| 10 | 1470.719834 | 735.863555 | 1453.693285 | 727.350281 | 1452.709269 | 726.858273 | G | ***435.202031*** | 218.104653 | 418.175482 | 209.591379 | | | 4 |
| 11 | 1541.756948 | 771.382112 | 1524.730399 | 762.868838 | 1523.746383 | 762.376830 | A | ***378.180567*** | 189.593921 | 361.154018 | 181.080647 | | | 3 |
| 12 | 1701.787597 | 851.397437 | 1684.761048 | 842.884162 | 1683.777032 | 842.392154 | C | ***307.143453*** | 154.075365 | 290.116904 | 145.562090 | | | 2 |
| 13 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GHQLQLDYFGACK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.4 | 1846.885849 | 0.005903 | GHQLQLDYFGACK |
| 30.0 | 1846.885849 | 0.005903 | GHQLQLDYFGACK |
| 1.3 | 1846.895721 | -0.003969 | LQLEETMPSPYGR |

**Mascot:** http://www.matrixscience.com/

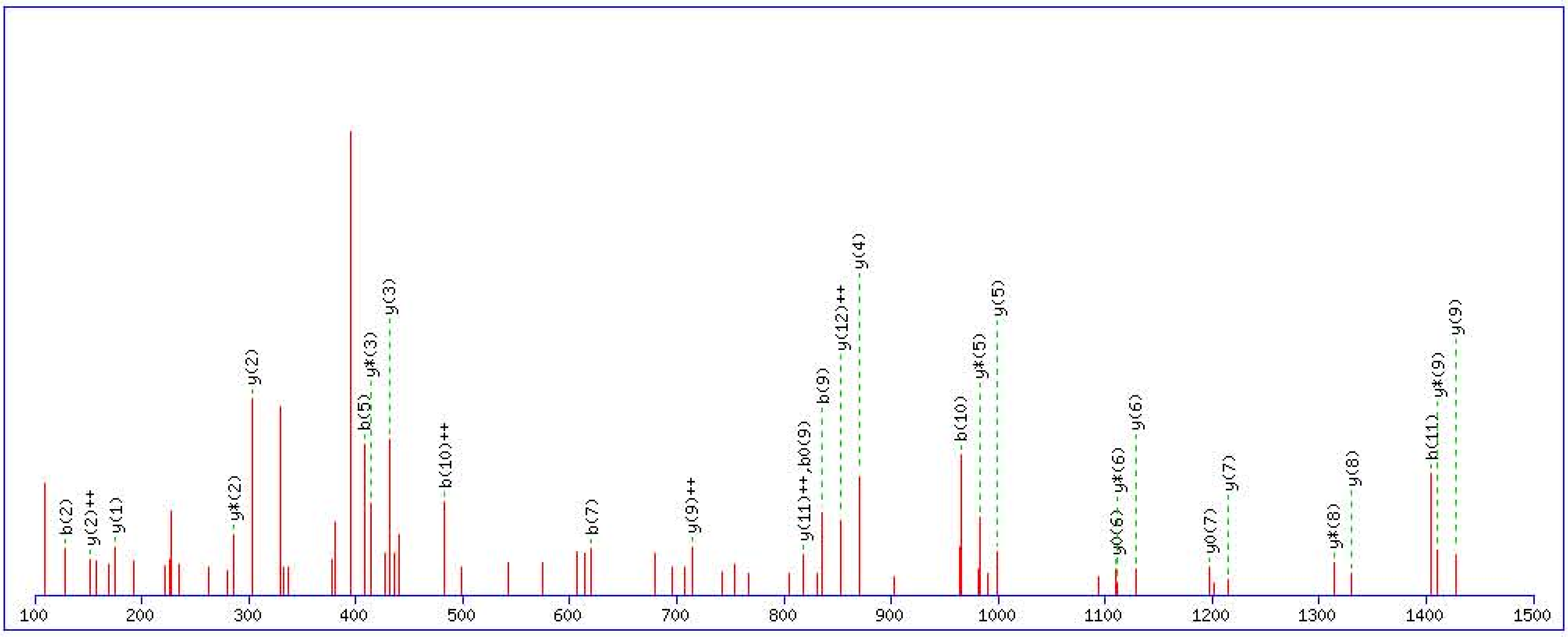
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GAAAHPDSEEQQQR**
Found in **TLN1_HUMAN**, Talin-1 OS=Homo sapiens GN=TLN1 PE=1 SV=3

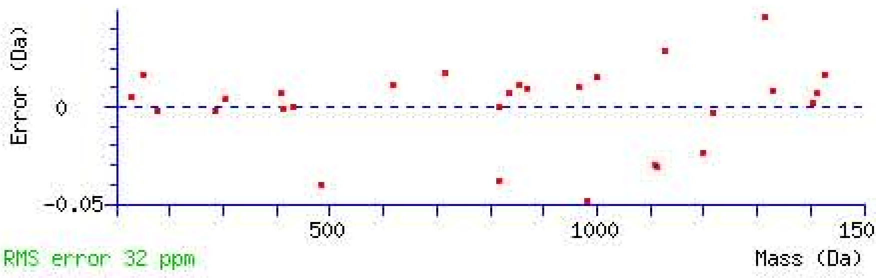
Match to Query 43356: 1833.843882 from(612.288570,3+) rtinseconds(1152) index(47598)
Title: Locus:1.1.1.1016.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

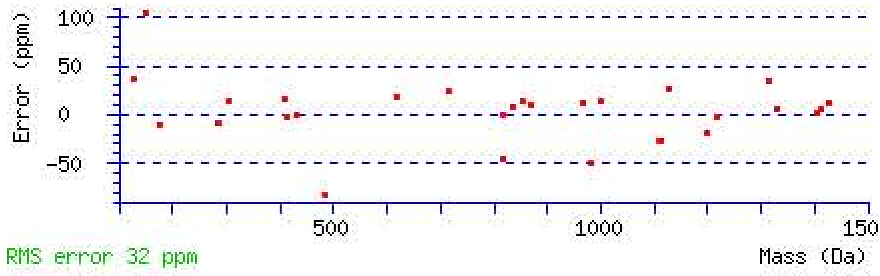
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1500 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1833.842773
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11    : Biotin:Thermo-21345 (Q)
Ions Score: 50  Expect: 0.00015
Matches : 29/116 fragment ions using 47 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 14 |
| 2 | **129.065854** | 65.036565 | | | | | A | 1777.828609 | 889.417943 | 1760.802060 | 880.904668 | 1759.818044 | 880.412660 | 13 |
| 3 | 200.102968 | 100.555122 | | | | | A | 1706.791495 | 853.899386 | 1689.764946 | 845.386111 | 1688.780930 | 844.894103 | 12 |
| 4 | 271.140082 | 136.073679 | | | | | A | 1635.754381 | 818.380829 | 1618.727832 | 809.867554 | 1617.743816 | 809.375546 | 11 |
| 5 | **408.198994** | 204.603135 | | | | | H | 1564.717267 | 782.862272 | 1547.690718 | 774.348997 | 1546.706702 | 773.856989 | 10 |
| 6 | 505.251758 | 253.129517 | | | | | P | ***1427.658355*** | 714.332816 | 1410.631806 | 705.819541 | 1409.647790 | 705.327533 | 9 |
| 7 | **620.278701** | 310.642989 | | | 602.268136 | 301.637706 | D | ***1330.605591*** | 665.806434 | 1313.579042 | 657.293159 | 1312.595026 | 656.801151 | 8 |
| 8 | 707.310729 | 354.159003 | | | 689.300164 | 345.153720 | S | ***1215.578648*** | 608.292962 | 1198.552099 | 599.779688 | 1197.568083 | 599.287680 | 7 |
| 9 | **836.353322** | 418.680299 | | | 818.342757 | 409.675017 | E | ***1128.546620*** | 564.776948 | 1111.520071 | 556.263674 | 1110.536055 | 555.771666 | 6 |
| 10 | **965.395915** | 483.201596 | | | 947.385350 | 474.196313 | E | ***999.504027*** | 500.255652 | 982.477478 | 491.742377 | 981.493462 | 491.250369 | 5 |
| 11 | **1404.621241** | 702.814259 | 1387.594692 | 694.300984 | 1386.610676 | 693.808976 | Q | ***870.461434*** | 435.734355 | 853.434885 | 427.221081 | | | 4 |
| 12 | 1532.679819 | 766.843548 | 1515.653270 | 758.330273 | 1514.669254 | 757.838265 | Q | ***431.236108*** | 216.121692 | 414.209559 | 207.608418 | | | 3 |
| 13 | 1660.738397 | 830.872837 | 1643.711848 | 822.359562 | 1642.727832 | 821.867554 | Q | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | 2 |
| 14 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of GAAAHPDSEEQQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 49.9 | 1833.842773 | 0.001109 | GAAAHPDSEEQQQR |
| 47.7 | 1833.842773 | 0.001109 | GAAAHPDSEEQQQR |
| 44.3 | 1833.842773 | 0.001109 | GAAAHPDSEEQQQR |
| 11.5 | 1833.864761 | -0.020879 | QREQMEQMKQR |
| 9.5 | 1833.864761 | -0.020879 | QREQMEQMKQR |
| 8.3 | 1833.864761 | -0.020879 | QREQMEQMKQR |
| 7.6 | 1833.860077 | -0.016195 | EDVSPGTAIGKTPEMMR |
| 7.6 | 1833.860077 | -0.016195 | EDVSPGTAIGKTPEMMR |
| 7.4 | 1833.864761 | -0.020879 | QREQMEQMKQR |
| 5.0 | 1833.852676 | -0.008794 | MESSPIPQSSGNSSTLGR |

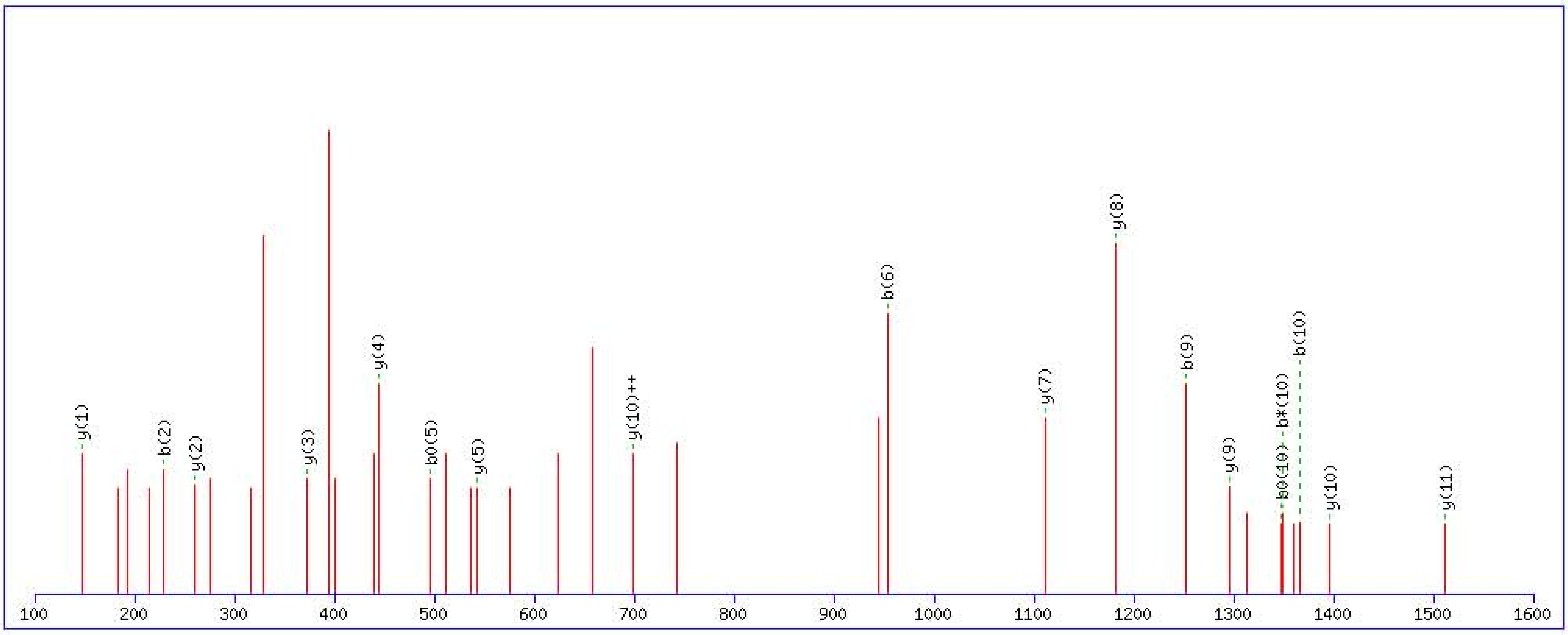
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **LDTLAQEVALLK**
Found in **TETN_HUMAN**, Tetranectin OS=Homo sapiens GN=CLEC3B PE=1 SV=3

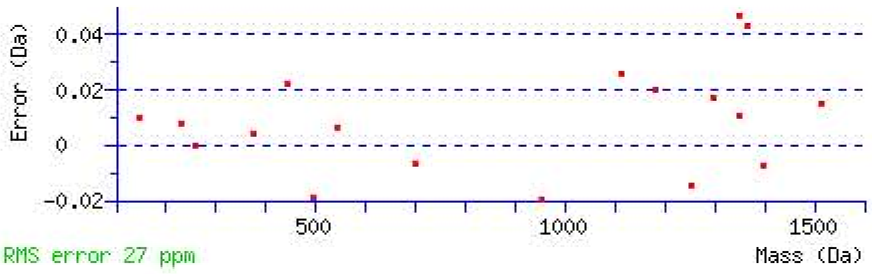
Match to Query 38190: 1623.934408 from(812.974480,2+) rtinseconds(2582) index(9001)
Title: Locus:1.1.1.1708.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 1.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

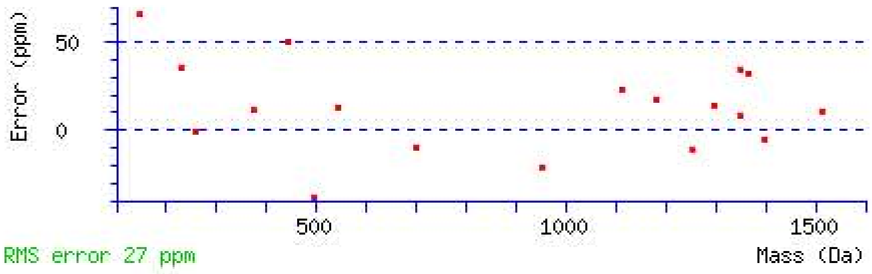
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1623.926941
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q6** : Biotin:Thermo-21345 (Q)
**Ions Score:** 60 **Expect:** 5.7e-006
**Matches :** 18/110 fragment ions using 36 most intense peaks (help)

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 12 |
| 2 | **229.118283** | 115.062779 | | | 211.107718 | 106.057497 | D | ***1511.850179*** | 756.428728 | 1494.823630 | 747.915453 | 1493.839614 | 747.423445 | 11 |
| 3 | 330.165962 | 165.586619 | | | 312.155397 | 156.581336 | T | ***1396.823236*** | 698.915256 | 1379.796687 | 690.401982 | 1378.812671 | 689.909973 | 10 |
| 4 | 443.250026 | 222.128651 | | | 425.239461 | 213.123369 | L | ***1295.775557*** | 648.391416 | 1278.749008 | 639.878142 | 1277.764992 | 639.386134 | 9 |
| 5 | 514.287140 | 257.647208 | | | 496.276575 | 248.641926 | A | ***1182.691493*** | 591.849385 | 1165.664944 | 583.336110 | 1164.680928 | 582.844102 | 8 |
| 6 | **953.512466** | 477.259871 | 936.485917 | 468.746597 | 935.501901 | 468.254589 | Q | ***1111.654379*** | 556.330827 | 1094.627830 | 547.817553 | 1093.643814 | 547.325545 | 7 |
| 7 | 1082.555059 | 541.781168 | 1065.528510 | 533.267893 | 1064.544494 | 532.775885 | E | 672.429053 | 336.718165 | 655.402504 | 328.204890 | 654.418488 | 327.712882 | 6 |
| 8 | 1181.623473 | 591.315375 | 1164.596924 | 582.802100 | 1163.612908 | 582.310092 | V | ***543.386460*** | 272.196868 | 526.359911 | 263.683593 | | | 5 |
| 9 | **1252.660587** | 626.833932 | 1235.634038 | 618.320657 | 1234.650022 | 617.828649 | A | ***444.318046*** | 222.662661 | 427.291497 | 214.149386 | | | 4 |
| 10 | **1365.744651** | 683.375964 | 1348.718102 | 674.862689 | 1347.734086 | 674.370681 | L | ***373.280932*** | 187.144104 | 356.254383 | 178.630829 | | | 3 |
| 11 | 1478.828715 | 739.917995 | 1461.802166 | 731.404721 | 1460.818150 | 730.912713 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088797 | | | 2 |
| 12 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LDTLAQEVALLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 59.9 | 1623.926941 | 0.007467 | LDTLAQEVALLK |
| 4.0 | 1623.919556 | 0.014852 | EVSPEPIVSTVARLK |

**Mascot:** http://www.matrixscience.com/

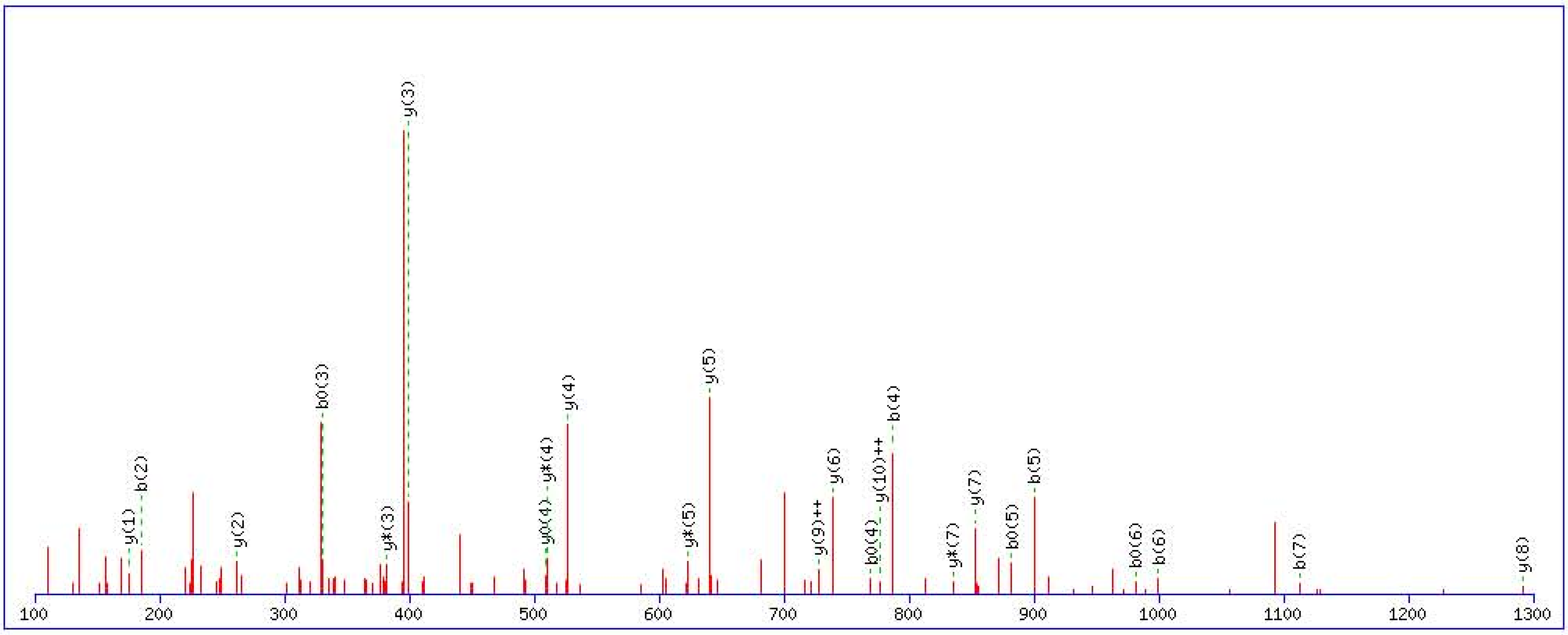
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SPYQLVLQHSR**
Found in **BGH3_HUMAN**, Transforming growth factor-beta-induced protein ig-h3 OS=Homo sapiens GN=TGFBI PE=1 SV=1

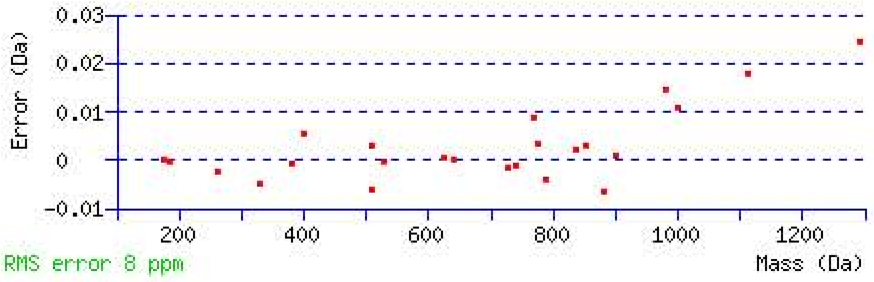
Match to Query 39089: 1637.866542 from(546.962790,3+) rtinseconds(1894) index(35610)
Title: Locus:1.1.1.3079.12 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

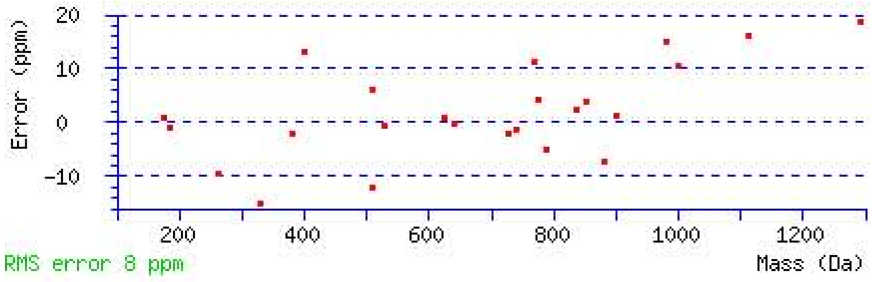
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1637.871170
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 29  Expect: 0.025
Matches : 24/112 fragment ions using 61 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 11 |
| 2 | **185.092068** | 93.049672 | | | 167.081503 | 84.044389 | P | 1551.846431 | 776.426853 | 1534.819882 | 767.913579 | 1533.835866 | 767.421571 | 10 |
| 3 | 348.155397 | 174.581336 | | | 330.144832 | 165.576054 | Y | 1454.793667 | 727.900471 | 1437.767118 | 719.387197 | 1436.783102 | 718.895189 | 9 |
| 4 | **787.380723** | 394.194000 | 770.354174 | 385.680725 | 769.370158 | 385.188717 | Q | ***1291.730338*** | 646.368807 | 1274.703789 | 637.855532 | 1273.719773 | 637.363524 | 8 |
| 5 | **900.464787** | 450.736032 | 883.438238 | 442.222757 | 882.454222 | 441.730749 | L | ***852.505012*** | 426.756144 | 835.478463 | 418.242869 | 834.494447 | 417.750861 | 7 |
| 6 | **999.533201** | 500.270239 | 982.506652 | 491.756964 | 981.522636 | 491.264956 | V | ***739.420948*** | 370.214112 | 722.394399 | 361.700837 | 721.410383 | 361.208829 | 6 |
| 7 | **1112.617265** | 556.812270 | 1095.590716 | 548.298996 | 1094.606700 | 547.806988 | L | ***640.352534*** | 320.679905 | 623.325985 | 312.166630 | 622.341969 | 311.674622 | 5 |
| 8 | 1240.675843 | 620.841559 | 1223.649294 | 612.328285 | 1222.665278 | 611.836277 | Q | ***527.268470*** | 264.137873 | 510.241921 | 255.624598 | 509.257905 | 255.132590 | 4 |
| 9 | 1377.734755 | 689.371015 | 1360.708206 | 680.857741 | 1359.724190 | 680.365733 | H | ***399.209892*** | 200.108584 | 382.183343 | 191.595309 | 381.199327 | 191.103301 | 3 |
| 10 | 1464.766783 | 732.887029 | 1447.740234 | 724.373755 | 1446.756218 | 723.881747 | S | ***262.150980*** | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SPYQLVLQHSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 29.2 | 1637.871170 | -0.004628 | SPYQLVLQHSR |

**Mascot:** http://www.matrixscience.com/

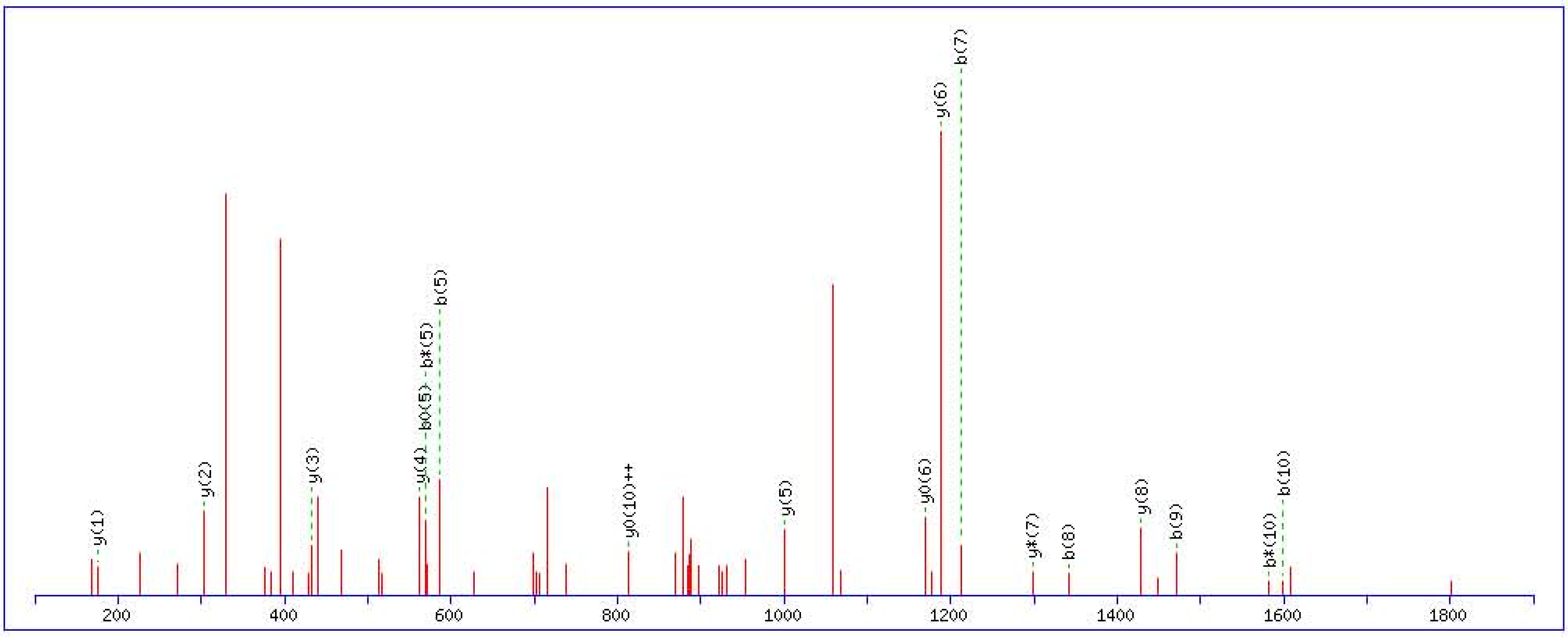
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ESELQWQEEER**
Found in **TRHY_HUMAN**, Trichohyalin OS=Homo sapiens GN=TCHH PE=1 SV=2

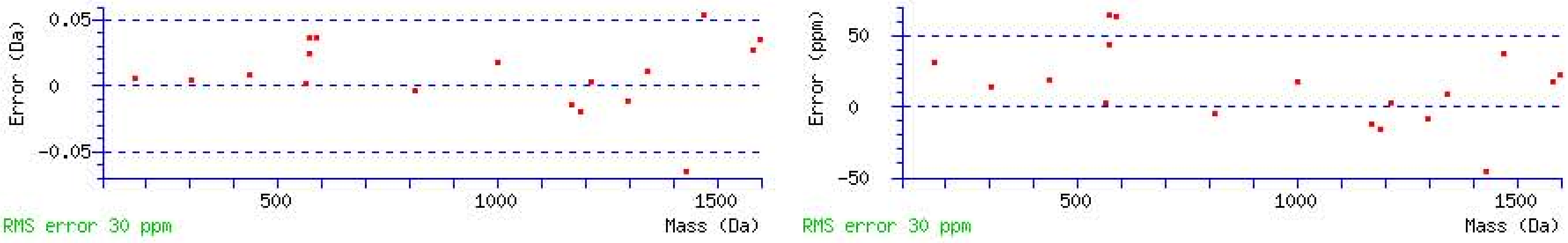
Match to Query 42205: 1772.818908 from(887.416730,2+) rtinseconds(1835) index(20548)
Title: Locus:1.1.1.641.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1772.803909
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 33  Expect: 0.0093
Matches : 18/110 fragment ions using 37 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 11 |
| 2 | 217.081897 | 109.044586 | | | 199.071332 | 100.039304 | S | 1644.768633 | 822.887955 | 1627.742084 | 814.374680 | 1626.758068 | 813.882672 | 10 |
| 3 | 346.124490 | 173.565883 | | | 328.113925 | 164.560600 | E | 1557.736605 | 779.371941 | 1540.710056 | 770.858666 | 1539.726040 | 770.366658 | 9 |
| 4 | 459.208554 | 230.107915 | | | 441.197989 | 221.102633 | L | ***1428.694012*** | 714.850644 | 1411.667463 | 706.337370 | 1410.683447 | 705.845362 | 8 |
| 5 | **587.267132** | 294.137204 | 570.240583 | 285.623930 | 569.256567 | 285.131922 | Q | 1315.609948 | 658.308612 | 1298.583399 | 649.795338 | 1297.599383 | 649.303330 | 7 |
| 6 | 773.346445 | 387.176861 | 756.319896 | 378.663586 | 755.335880 | 378.171578 | W | ***1187.551370*** | 594.279323 | 1170.524821 | 585.766049 | 1169.540805 | 585.274041 | 6 |
| 7 | **1212.571771** | 606.789524 | 1195.545222 | 598.276249 | 1194.561206 | 597.784241 | Q | ***1001.472057*** | 501.239667 | 984.445508 | 492.726392 | 983.461492 | 492.234384 | 5 |
| 8 | **1341.614364** | 671.310820 | 1324.587815 | 662.797546 | 1323.603799 | 662.305538 | E | ***562.246731*** | 281.627004 | 545.220182 | 273.113729 | 544.236166 | 272.621721 | 4 |
| 9 | **1470.656957** | 735.832117 | 1453.630408 | 727.318842 | 1452.646392 | 726.826834 | E | ***433.204138*** | 217.105707 | 416.177589 | 208.592433 | 415.193573 | 208.100425 | 3 |
| 10 | **1599.699550** | 800.353413 | 1582.673001 | 791.840139 | 1581.688985 | 791.348131 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |



NCBI **BLAST** search of ESELQWQEEER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.4 | 1772.803909 | 0.014999 | ESELQWQEEER |
| 33.1 | 1772.822556 | -0.003648 | FQEGQEEER |
| 11.1 | 1772.829727 | -0.010819 | QEEEEAMRRER |
| 9.5 | 1772.803909 | 0.014999 | ESELQWQEEER |
| 5.3 | 1772.798752 | 0.020156 | HISSCMRWPGHYSR |
| 3.7 | 1772.811798 | 0.007110 | YQTPPHQNFEDLER |
| 3.3 | 1772.803909 | 0.014999 | DMASPNWSILPEEER |
| 3.1 | 1772.828873 | -0.009965 | QAEQEATVAREEQER |
| 3.0 | 1772.819901 | -0.000993 | CGKSFSQSCHLVAHR |
| 1.3 | 1772.836288 | -0.017380 | ADGSLTGGGLEAAAMAPER |

**Mascot:** http://www.matrixscience.com/

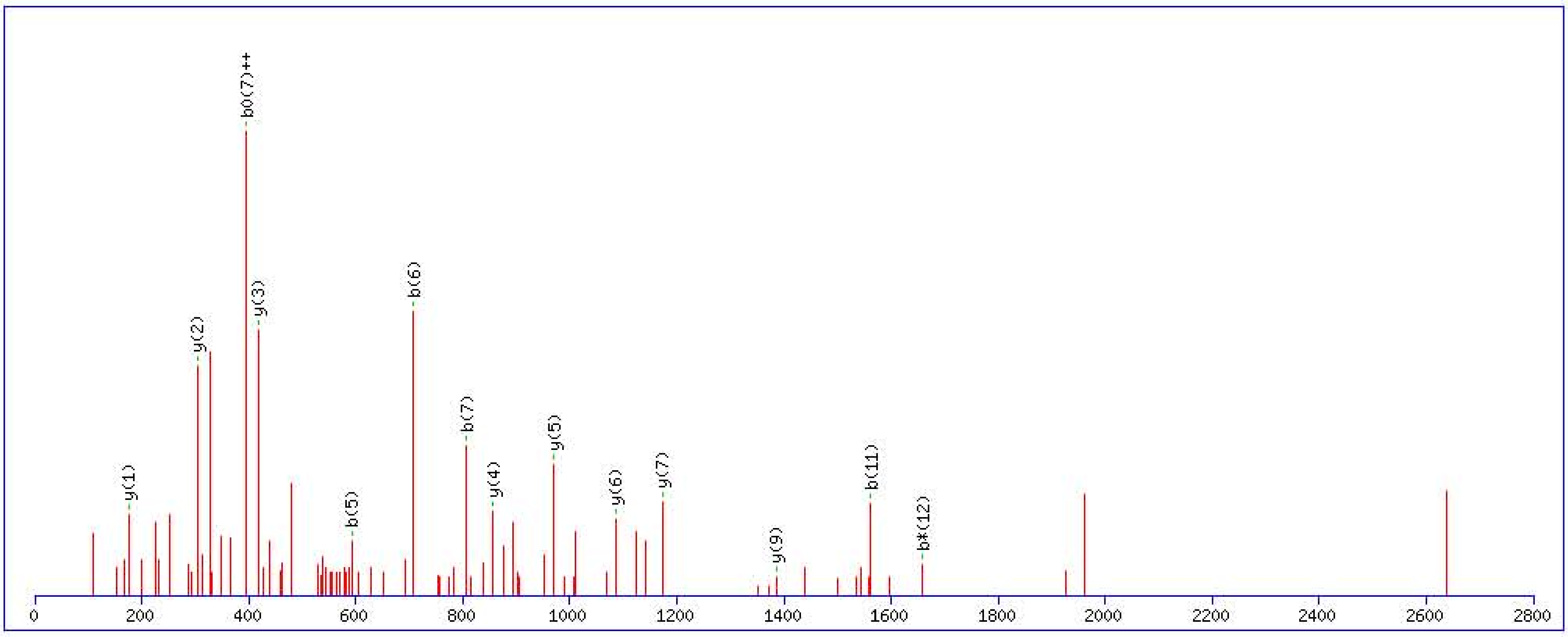
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **NLHDLDVSDNQLER**
Found in **VASN_HUMAN**, Vasorin OS=Homo sapiens GN=VASN PE=1 SV=1

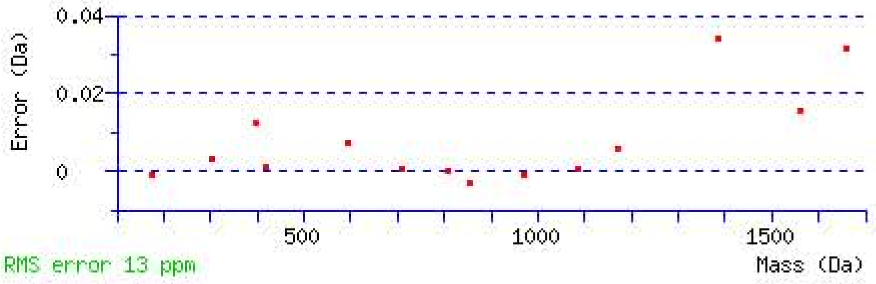
Match to Query 46062: 1977.952632 from(660.324820,3+) rtinseconds(1938) index(35989)
Title: Locus:1.1.1.3094.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

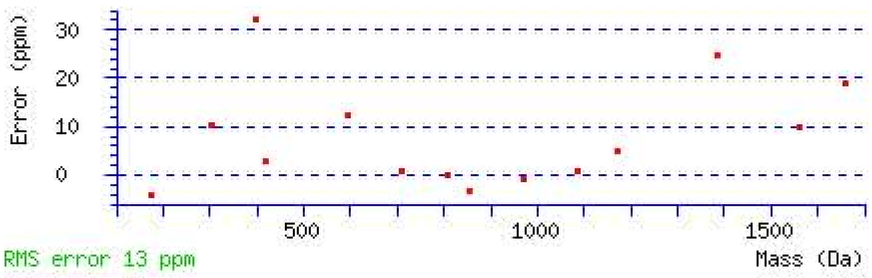
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1977.957809
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11    : Biotin:Thermo-21345 (Q)
Ions Score: 73  Expect: 2.8e-007
Matches : 14/148 fragment ions using 16 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 115.050203 | 58.028740 | 98.023654 | 49.515465 | | | N | | | | | | | 14 |
| 2 | 228.134267 | 114.570771 | 211.107718 | 106.057497 | | | L | 1864.922173 | 932.964724 | 1847.895624 | 924.451450 | 1846.911608 | 923.959442 | 13 |
| 3 | 365.193179 | 183.100227 | 348.166630 | 174.586953 | | | H | 1751.838109 | 876.422692 | 1734.811560 | 867.909418 | 1733.827544 | 867.417410 | 12 |
| 4 | 480.220122 | 240.613699 | 463.193573 | 232.100425 | 462.209557 | 231.608417 | D | 1614.779197 | 807.893236 | 1597.752648 | 799.379962 | 1596.768632 | 798.887954 | 11 |
| 5 | **593.304186** | 297.155731 | 576.277637 | 288.642457 | 575.293621 | 288.150449 | L | 1499.752254 | 750.379765 | 1482.725705 | 741.866490 | 1481.741689 | 741.374482 | 10 |
| 6 | **708.331129** | 354.669203 | 691.304580 | 346.155928 | 690.320564 | 345.663920 | D | ***1386.668190*** | 693.837733 | 1369.641641 | 685.324458 | 1368.657625 | 684.832450 | 9 |
| 7 | **807.399543** | 404.203410 | 790.372994 | 395.690135 | 789.388978 | 395.198127 | V | 1271.641247 | 636.324261 | 1254.614698 | 627.810987 | 1253.630682 | 627.318979 | 8 |
| 8 | 894.431571 | 447.719424 | 877.405022 | 439.206149 | 876.421006 | 438.714141 | S | ***1172.572833*** | 586.790054 | 1155.546284 | 578.276780 | 1154.562268 | 577.784772 | 7 |
| 9 | 1009.458514 | 505.232895 | 992.431965 | 496.719620 | 991.447949 | 496.227612 | D | ***1085.540805*** | 543.274040 | 1068.514256 | 534.760766 | 1067.530240 | 534.268758 | 6 |
| 10 | 1123.501441 | 562.254358 | 1106.474892 | 553.741084 | 1105.490876 | 553.249076 | N | ***970.513862*** | 485.760569 | 953.487313 | 477.247294 | 952.503297 | 476.755286 | 5 |
| 11 | **1562.726767** | 781.867021 | 1545.700218 | 773.353747 | 1544.716202 | 772.861739 | Q | ***856.470935*** | 428.739105 | 839.444386 | 420.225831 | 838.460370 | 419.733823 | 4 |
| 12 | 1675.810831 | 838.409053 | 1658.784282 | 829.895779 | 1657.800266 | 829.403771 | L | ***417.245609*** | 209.126442 | 400.219060 | 200.613168 | 399.235044 | 200.121160 | 3 |
| 13 | 1804.853424 | 902.930350 | 1787.826875 | 894.417075 | 1786.842859 | 893.925067 | E | ***304.161545*** | 152.584410 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 14 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of NLHDLDVSDNQLER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 72.8 | 1977.957809 | -0.005177 | NLHDLDVSDNQLER |
| 2.9 | 1977.979813 | -0.027181 | TMPRTVPGSTMKMGSLER |

**Mascot:** http://www.matrixscience.com/

{MATRIX SCIENCE}

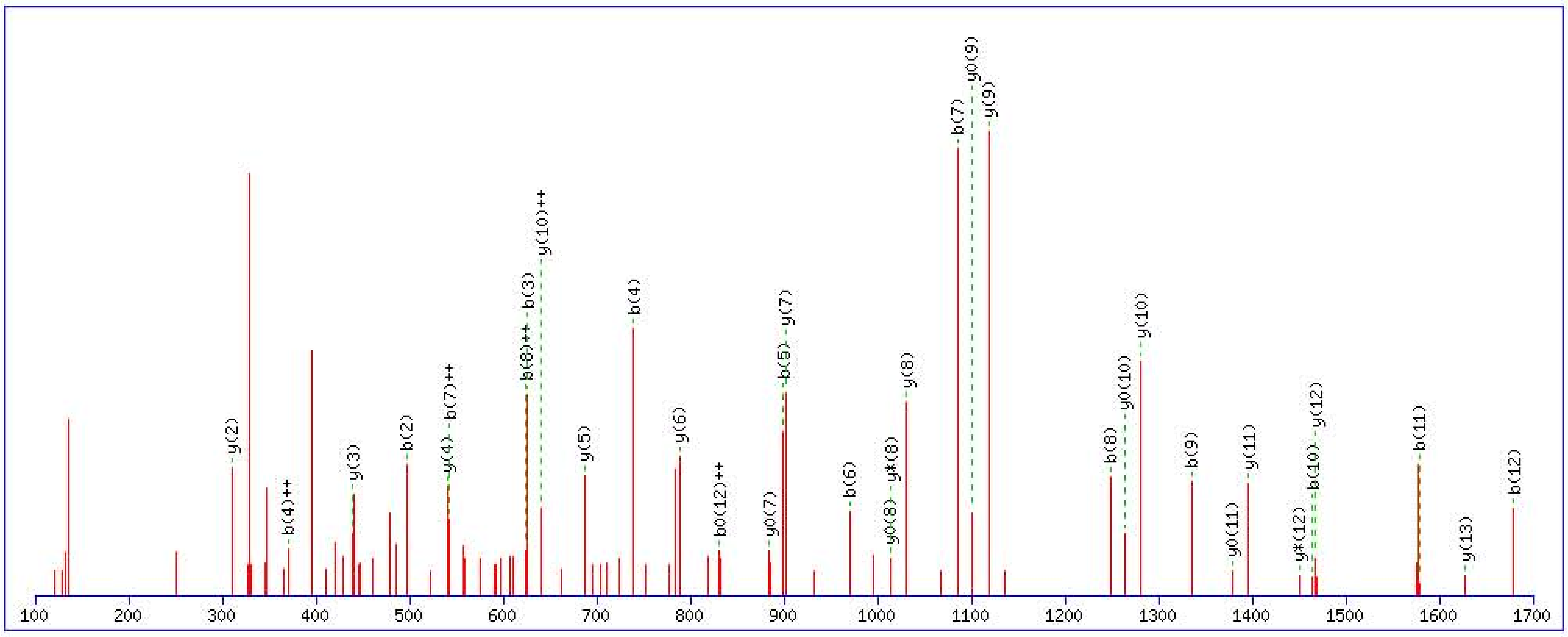
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GQELCADYSENTFTEYK**
Found in **VTDB_HUMAN**, Vitamin D-binding protein OS=Homo sapiens GN=GC PE=1 SV=1

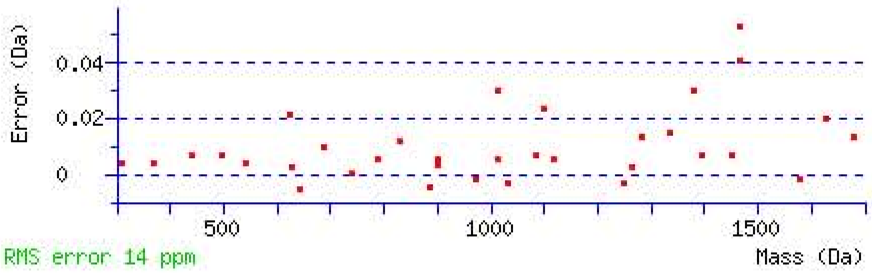
Match to Query 53918: 2365.026612 from(789.349480,3+) rtinseconds(2151) index(69672)
Title: Locus:1.1.1.1686.25 File:"2013-07-02 CLN FXIII 60 min 2nd FT.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

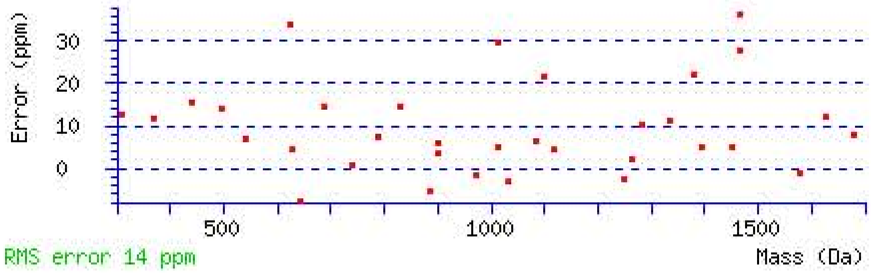
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2365.024231
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q2      : Biotin:Thermo-21345 (Q)
Ions Score: 78  Expect: 5.3e-008
Matches : 35/182 fragment ions using 55 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 17 |
| 2 | ***497.254066*** | 249.130671 | 480.227517 | 240.617397 | | | Q | 2309.010064 | 1155.008670 | 2291.983515 | 1146.495395 | 2290.999499 | 1146.003387 | 16 |
| 3 | ***626.296659*** | 313.651968 | 609.270110 | 305.138693 | 608.286094 | 304.646685 | E | 1869.784738 | 935.396007 | 1852.758189 | 926.882733 | 1851.774173 | 926.390725 | 15 |
| 4 | ***739.380723*** | **370.194000** | 722.354174 | 361.680725 | 721.370158 | 361.188717 | L | 1740.742145 | 870.874711 | 1723.715596 | 862.361436 | 1722.731580 | 861.869428 | 14 |
| 5 | ***899.411372*** | 450.209324 | 882.384823 | 441.696050 | 881.400807 | 441.204042 | C | ***1627.658081*** | 814.332679 | 1610.631532 | 805.819404 | 1609.647516 | 805.327396 | 13 |
| 6 | ***970.448486*** | 485.727881 | 953.421937 | 477.214607 | 952.437921 | 476.722599 | A | ***1467.627432*** | 734.317354 | 1450.600883 | 725.804080 | 1449.616867 | 725.312072 | 12 |
| 7 | ***1085.475429*** | **543.241353** | 1068.448880 | 534.728078 | 1067.464864 | 534.236070 | D | ***1396.590318*** | 698.798797 | 1379.563769 | 690.285523 | 1378.579753 | 689.793515 | 11 |
| 8 | ***1248.538758*** | **624.773017** | 1231.512209 | 616.259743 | 1230.528193 | 615.767735 | Y | ***1281.563375*** | 641.285326 | 1264.536826 | 632.772051 | 1263.552810 | 632.280043 | 10 |
| 9 | ***1335.570786*** | 668.289031 | 1318.544237 | 659.775757 | 1317.560221 | 659.283749 | S | ***1118.500046*** | 559.753661 | 1101.473497 | 551.240387 | 1100.489481 | 550.748379 | 9 |
| 10 | ***1464.613379*** | 732.810328 | 1447.586830 | 724.297053 | 1446.602814 | 723.805045 | E | ***1031.468018*** | 516.237647 | 1014.441469 | 507.724373 | 1013.457453 | 507.232365 | 8 |
| 11 | ***1578.656306*** | 789.831791 | 1561.629757 | 781.318517 | 1560.645741 | 780.826509 | N | ***902.425425*** | 451.716351 | 885.398876 | 443.203076 | 884.414860 | 442.711068 | 7 |
| 12 | ***1679.703985*** | 840.355631 | 1662.677436 | 831.842356 | 1661.693420 | 831.350348 | T | ***788.382498*** | 394.694887 | 771.355949 | 386.181613 | 770.371933 | 385.689605 | 6 |
| 13 | 1826.772399 | 913.889838 | 1809.745850 | 905.376563 | 1808.761834 | 904.884555 | F | ***687.334819*** | 344.171048 | 670.308270 | 335.657773 | 669.324254 | 335.165765 | 5 |
| 14 | 1927.820078 | 964.413677 | 1910.793529 | 955.900403 | 1909.809513 | 955.408395 | T | ***540.266405*** | 270.636841 | 523.239856 | 262.123566 | 522.255840 | 261.631558 | 4 |
| 15 | 2056.862671 | 1028.934973 | 2039.836122 | 1020.421699 | 2038.852106 | 1019.929691 | E | ***439.218726*** | 220.113001 | 422.192177 | 211.599726 | 421.208161 | 211.107718 | 3 |
| 16 | 2219.926000 | 1110.466638 | 2202.899451 | 1101.953363 | 2201.915435 | 1101.461355 | Y | ***310.176133*** | 155.591705 | 293.149584 | 147.078430 | | | 2 |
| 17 | | | | | | | K | 147.112804 | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GQELCADYSENTFTEYK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 78.4 | 2365.024231 | 0.002381 | GQELCADYSENTFTEYK |

**Mascot:** http://www.matrixscience.com/

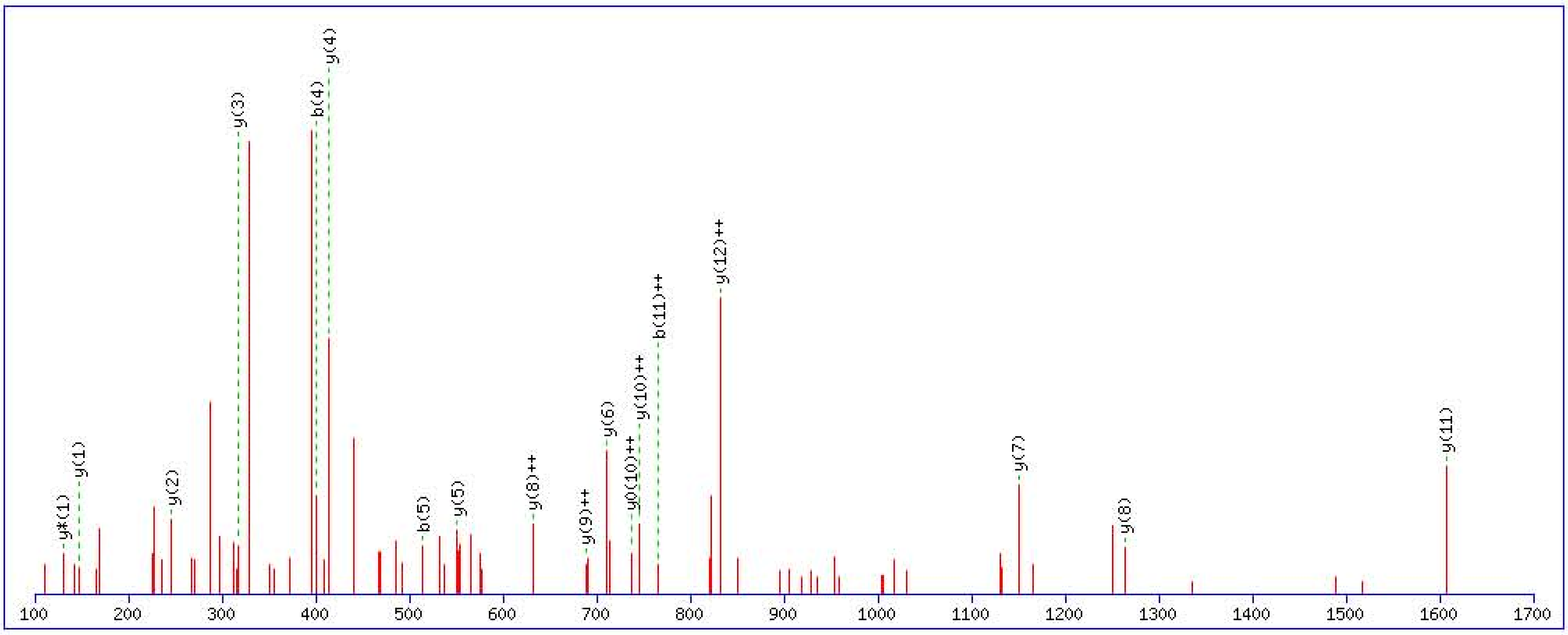
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **LGDDLLQCHPAVK**
Found in **PROC_HUMAN**, Vitamin K-dependent protein C OS=Homo sapiens GN=PROC PE=1 SV=1

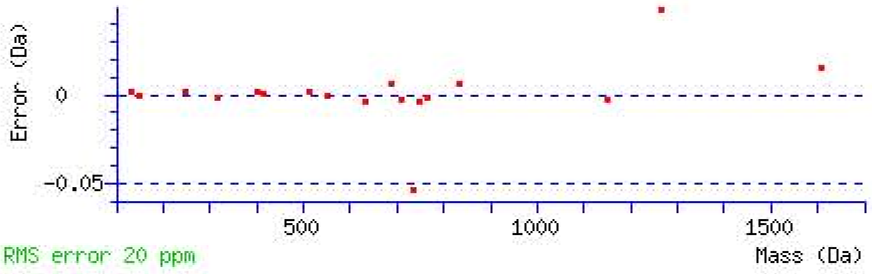
Match to Query 42289: 1775.911722 from(592.977850,3+) rtinseconds(1990) index(52811)
Title: Locus:1.1.1.1308.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

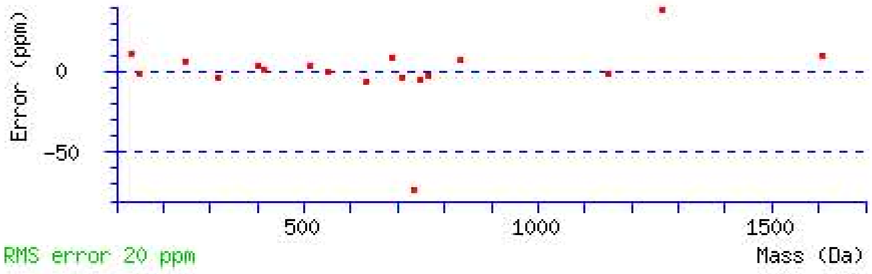
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1700 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1775.906250
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 32 **Expect:** 0.017
**Matches :** 18/110 fragment ions using 55 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | L | | | | | | | 13 |
| 2 | 171.112804 | 86.060040 | | | | | G | 1663.829461 | 832.418369 | 1646.802912 | 823.905094 | 1645.818896 | 823.413086 | 12 |
| 3 | 286.139747 | 143.573512 | | | 268.129182 | 134.568229 | D | ***1606.807997*** | 803.907637 | 1589.781448 | 795.394362 | 1588.797432 | 794.902354 | 11 |
| 4 | **401.166690** | 201.086983 | | | 383.156125 | 192.081701 | D | 1491.781054 | 746.394165 | 1474.754505 | 737.880891 | 1473.770489 | 737.388883 | 10 |
| 5 | **514.250754** | 257.629015 | | | 496.240189 | 248.623733 | L | 1376.754111 | 688.880694 | 1359.727562 | 680.367419 | | | 9 |
| 6 | 627.334818 | 314.171047 | | | 609.324253 | 305.165765 | L | ***1263.670047*** | 632.338662 | 1246.643498 | 623.825387 | | | 8 |
| 7 | 1066.560144 | 533.783710 | 1049.533595 | 525.270436 | 1048.549579 | 524.778428 | Q | ***1150.585983*** | 575.796630 | 1133.559434 | 567.283355 | | | 7 |
| 8 | 1226.590793 | 613.799035 | 1209.564244 | 605.285760 | 1208.580228 | 604.793752 | C | ***711.360657*** | 356.183967 | 694.334108 | 347.670692 | | | 6 |
| 9 | 1363.649705 | 682.328491 | 1346.623156 | 673.815216 | 1345.639140 | 673.323208 | H | ***551.330008*** | 276.168642 | 534.303459 | 267.655368 | | | 5 |
| 10 | 1460.702469 | 730.854873 | 1443.675920 | 722.341598 | 1442.691904 | 721.849590 | P | ***414.271096*** | 207.639186 | 397.244547 | 199.125912 | | | 4 |
| 11 | 1531.739583 | 766.373430 | 1514.713034 | 757.860155 | 1513.729018 | 757.368147 | A | ***317.218332*** | 159.112804 | 300.191783 | 150.599530 | | | 3 |
| 12 | 1630.807997 | 815.907637 | 1613.781448 | 807.394362 | 1612.797432 | 806.902354 | V | ***246.181218*** | 123.594247 | 229.154669 | 115.080973 | | | 2 |
| 13 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of LGDDLLQCHPAVK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.8 | 1775.906250 | 0.005472 | LGDDLLQCHPAVK |

**Mascot:** http://www.matrixscience.com/

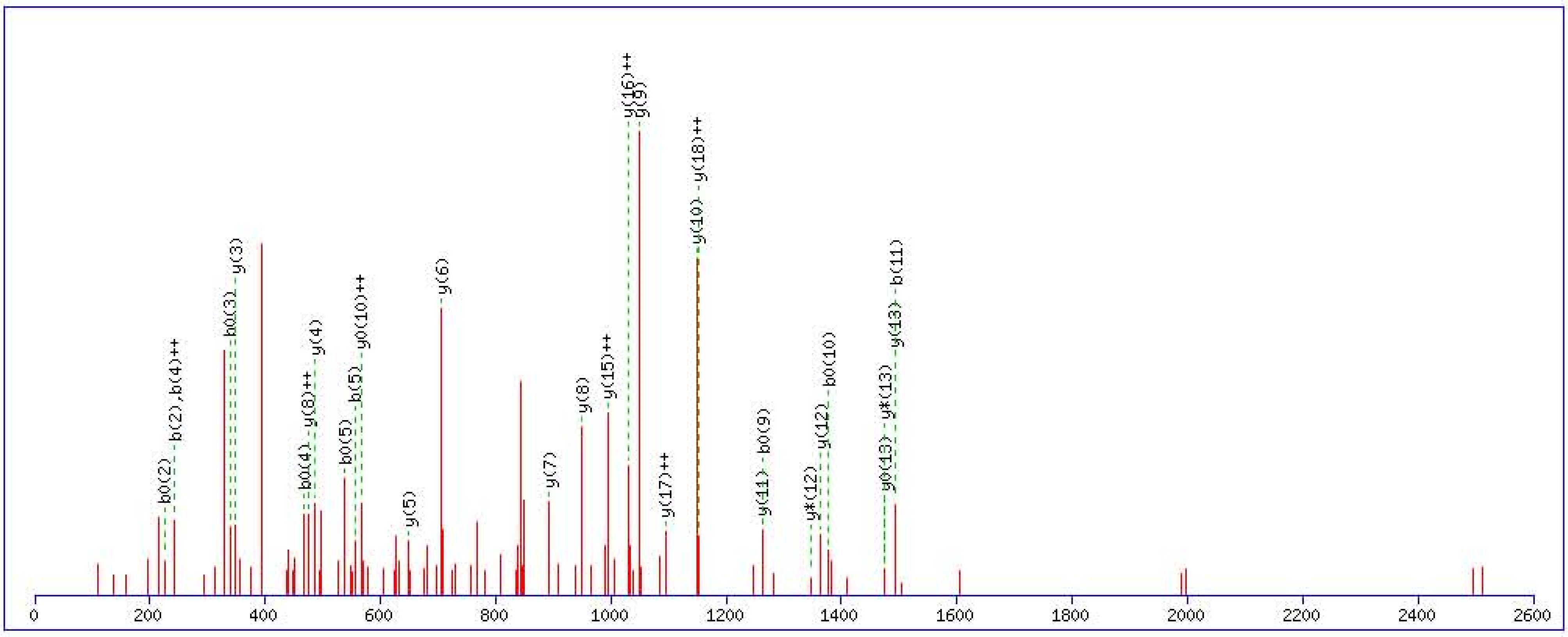
# {MATRIX}{SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ELNQAGQETLVTGWGYHSSR**
Found in **PROC_HUMAN**, Vitamin K-dependent protein C OS=Homo sapiens GN=PROC PE=1 SV=1

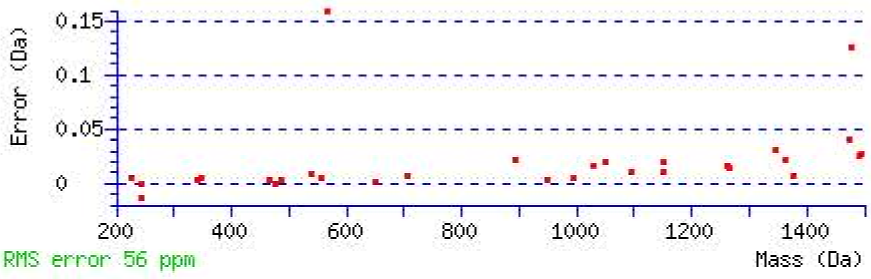
Match to Query 57183: 2543.248152 from(848.756660,3+) rtinseconds(2199) index(54222)
Title: Locus:1.1.1.1380.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

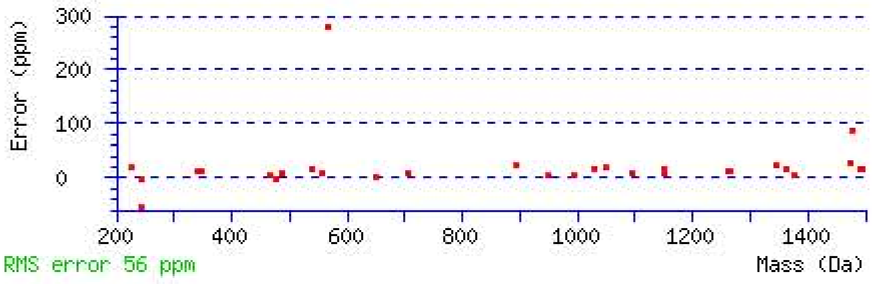
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 2543.222702
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q7** : Biotin:Thermo-21345 (Q)
**Ions Score:** 52 **Expect:** 0.00018
**Matches** : 30/222 fragment ions using 61 most intense peaks (help)

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 130.049869 | 65.528572 | | | 112.039304 | 56.523290 | E | | | | | | | 20 |
| 2 | **243.133933** | 122.070605 | | | 225.123368 | 113.065322 | L | 2415.187392 | 1208.097334 | 2398.160843 | 1199.584059 | 2397.176827 | 1199.092051 | 19 |
| 3 | 357.176860 | 179.092068 | 340.150311 | 170.578794 | 339.166295 | 170.086786 | N | 2302.103328 | 1151.555302 | 2285.076779 | 1143.042027 | 2284.092763 | 1142.550019 | 18 |
| 4 | 485.235438 | 243.121357 | 468.208889 | 234.608083 | 467.224873 | 234.116075 | Q | 2188.060401 | 1094.533838 | 2171.033852 | 1086.020564 | 2170.049836 | 1085.528556 | 17 |
| 5 | **556.272552** | 278.639914 | 539.246003 | 270.126640 | 538.261987 | 269.634632 | A | 2060.001823 | 1030.504549 | 2042.975274 | 1021.991275 | 2041.991258 | 1021.499267 | 16 |
| 6 | 613.294016 | 307.150646 | 596.267467 | 298.637372 | 595.283451 | 298.145364 | G | 1988.964709 | 994.985993 | 1971.938160 | 986.472718 | 1970.954144 | 985.980710 | 15 |
| 7 | 1052.519342 | 526.763309 | 1035.492793 | 518.250035 | 1034.508777 | 517.758027 | Q | 1931.943245 | 966.475261 | 1914.916696 | 957.961986 | 1913.932680 | 957.469978 | 14 |
| 8 | 1181.561935 | 591.284606 | 1164.535386 | 582.771331 | 1163.551370 | 582.279323 | E | ***1492.717919*** | 746.862597 | 1475.691370 | 738.349323 | 1474.707354 | 737.857315 | 13 |
| 9 | 1282.609614 | 641.808445 | 1265.583065 | 633.295171 | 1264.599049 | 632.803163 | T | ***1363.675326*** | 682.341301 | 1346.648777 | 673.828026 | 1345.664761 | 673.336018 | 12 |
| 10 | 1395.693678 | 698.350477 | 1378.667129 | 689.837203 | 1377.683113 | 689.345195 | L | ***1262.627647*** | 631.817461 | 1245.601098 | 623.304187 | 1244.617082 | 622.812179 | 11 |
| 11 | **1494.762092** | 747.884684 | 1477.735543 | 739.371410 | 1476.751527 | 738.879402 | V | ***1149.543583*** | 575.275429 | 1132.517034 | 566.762155 | 1131.533018 | 566.270147 | 10 |
| 12 | 1595.809771 | 798.408524 | 1578.783222 | 789.895249 | 1577.799206 | 789.403241 | T | ***1050.475169*** | 525.741222 | 1033.448620 | 517.227948 | 1032.464604 | 516.735940 | 9 |
| 13 | 1652.831235 | 826.919256 | 1635.804686 | 818.405981 | 1634.820670 | 817.913973 | G | ***949.427490*** | 475.217383 | 932.400941 | 466.704108 | 931.416925 | 466.212100 | 8 |
| 14 | 1838.910548 | 919.958912 | 1821.883999 | 911.445638 | 1820.899983 | 910.953630 | W | ***892.406026*** | 446.706651 | 875.379477 | 438.193376 | 874.395461 | 437.701368 | 7 |
| 15 | 1895.932012 | 948.469644 | 1878.905463 | 939.956370 | 1877.921447 | 939.464362 | G | ***706.326713*** | 353.666994 | 689.300164 | 345.153720 | 688.316148 | 344.661712 | 6 |
| 16 | 2058.995341 | 1030.001308 | 2041.968792 | 1021.488034 | 2040.984776 | 1020.996026 | Y | ***649.305249*** | 325.156263 | 632.278700 | 316.642988 | 631.294684 | 316.150980 | 5 |
| 17 | 2196.054253 | 1098.530764 | 2179.027704 | 1090.017490 | 2178.043688 | 1089.525482 | H | ***486.241920*** | 243.624598 | 469.215371 | 235.111324 | 468.231355 | 234.619316 | 4 |
| 18 | 2283.086281 | 1142.046778 | 2266.059732 | 1133.533504 | 2265.075716 | 1133.041496 | S | ***349.183008*** | 175.095142 | 332.156459 | 166.581868 | 331.172443 | 166.089860 | 3 |
| 19 | 2370.118309 | 1185.562792 | 2353.091760 | 1177.049518 | 2352.107744 | 1176.557510 | S | 262.150980 | 131.579128 | 245.124431 | 123.065854 | 244.140415 | 122.573846 | 2 |
| 20 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of ELNQAGQETLVTGWGYHSSR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 51.7 | 2543.222702 | 0.025450 | ELNQAGQETLVTGWGYHSSR |
| 44.3 | 2543.222702 | 0.025450 | ELNQAGQETLVTGWGYHSSR |

**Mascot:** http://www.matrixscience.com/

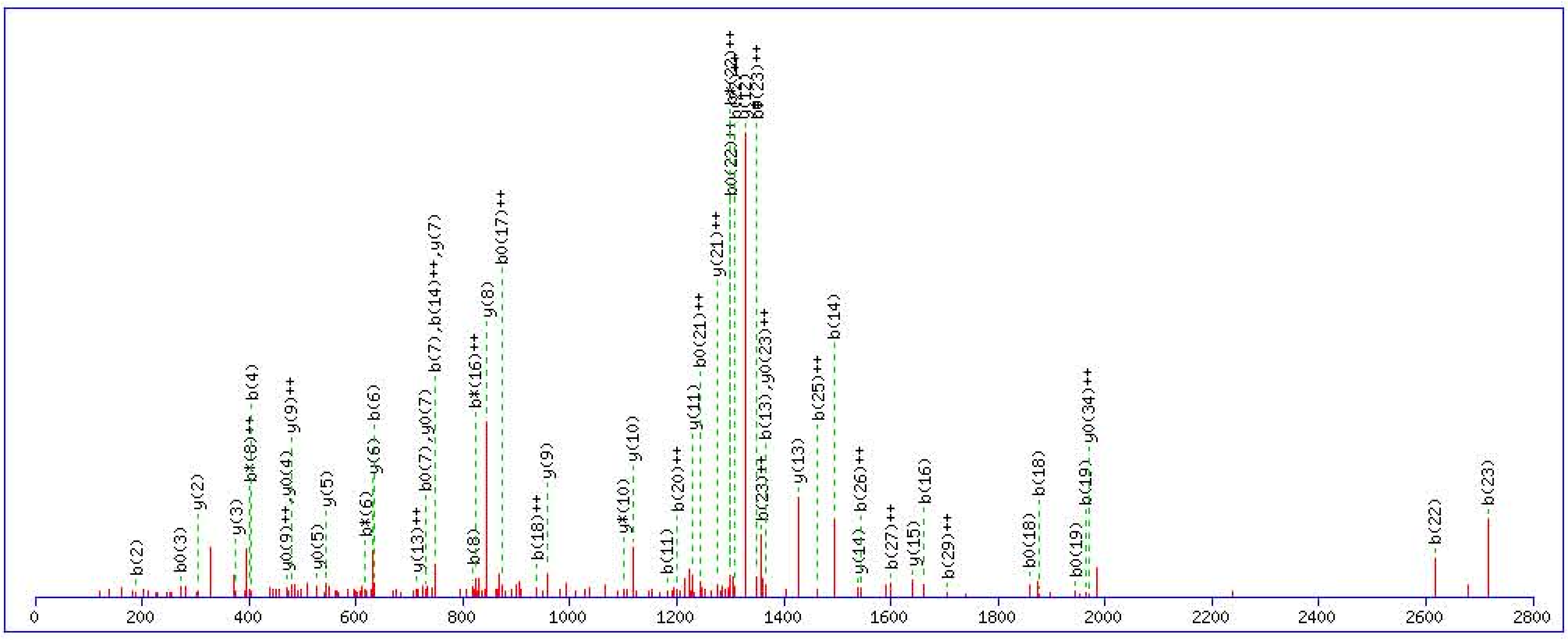
# MATRIX SCIENCE Mascot Search Results

## Peptide View

MS/MS Fragmentation of **STTDNDIALLHLAQPATLSQTIVPICLPDSGLAER**
Found in **PROC_HUMAN**, Vitamin K-dependent protein C OS=Homo sapiens GN=PROC PE=1 SV=1

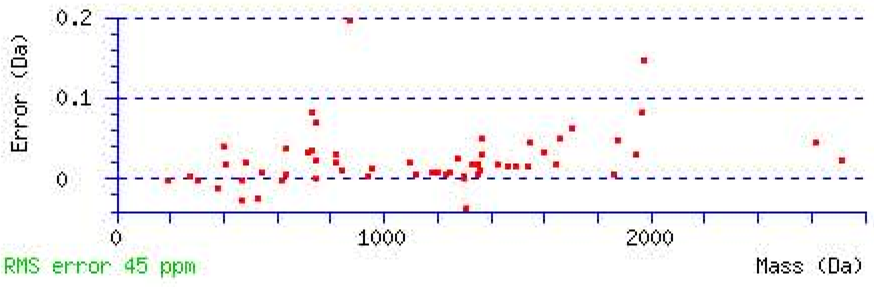
Match to Query 70147: 4041.134736 from(1011.290960,4+) rtinseconds(2998) index(59517)
Title: Locus:1.1.1.1655.22 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

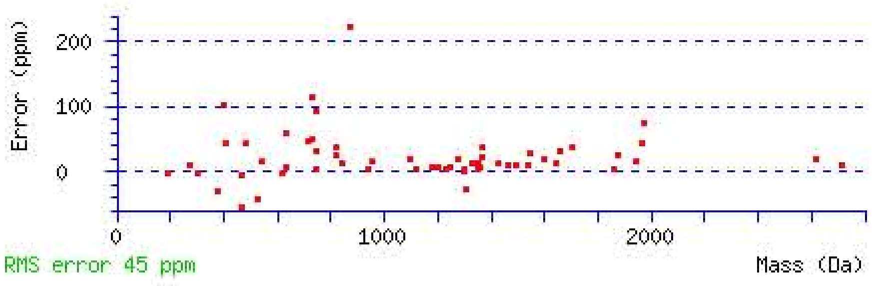
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [0] to [2800] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 4041.091476
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q20 : Biotin:Thermo-21345 (Q)
**Ions Score:** 53 **Expect:** 2.6e-005
**Matches :** 58/398 fragment ions using 146 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 35 |
| 2 | ***189.086983*** | 95.047129 | | | 171.076418 | 86.041847 | T | 3955.066740 | 1978.037008 | 3938.040191 | 1969.523733 | 3937.056175 | 1969.031725 | 34 |
| 3 | 290.134662 | 145.570969 | | | 272.124097 | 136.565687 | T | 3854.019061 | 1927.513168 | 3836.992512 | 1918.999894 | 3836.008496 | 1918.507886 | 33 |
| 4 | ***405.161605*** | 203.084441 | | | 387.151040 | 194.079158 | D | 3752.971382 | 1876.989329 | 3735.944833 | 1868.476054 | 3734.960817 | 1867.984046 | 32 |
| 5 | 519.204532 | 260.105904 | 502.177983 | 251.592630 | 501.193967 | 251.100622 | N | 3637.944439 | 1819.475857 | 3620.917890 | 1810.962583 | 3619.933874 | 1810.470575 | 31 |
| 6 | ***634.231475*** | 317.619376 | 617.204926 | 309.106101 | 616.220910 | 308.614093 | D | 3523.901512 | 1762.454394 | 3506.874963 | 1753.941119 | 3505.890947 | 1753.449111 | 30 |
| 7 | ***747.315539*** | 374.161408 | 730.288990 | 365.648133 | 729.304974 | 365.156125 | I | 3408.874569 | 1704.940922 | 3391.848020 | 1696.427648 | 3390.864004 | 1695.935640 | 29 |
| 8 | ***818.352653*** | 409.679965 | 801.326104 | 401.166690 | 800.342088 | 400.674682 | A | 3295.790505 | 1648.398890 | 3278.763956 | 1639.885616 | 3277.779940 | 1639.393608 | 28 |
| 9 | 931.436717 | 466.221997 | 914.410168 | 457.708722 | 913.426152 | 457.216714 | L | 3224.753391 | 1612.880333 | 3207.726842 | 1604.367059 | 3206.742826 | 1603.875051 | 27 |
| 10 | 1044.520781 | 522.764028 | 1027.494232 | 514.250754 | 1026.510216 | 513.758746 | L | 3111.669327 | 1556.338301 | 3094.642778 | 1547.825027 | 3093.658762 | 1547.333019 | 26 |
| 11 | ***1181.579693*** | 591.293484 | 1164.553144 | 582.780210 | 1163.569128 | 582.288202 | H | 2998.585263 | 1499.796269 | 2981.558714 | 1491.282995 | 2980.574698 | 1490.790987 | 25 |
| 12 | 1294.663757 | 647.835516 | 1277.637208 | 639.322242 | 1276.653192 | 638.830234 | L | 2861.526351 | 1431.266813 | 2844.499802 | 1422.753539 | 2843.515786 | 1422.261531 | 24 |
| 13 | ***1365.700871*** | 683.354073 | 1348.674322 | 674.840799 | 1347.690306 | 674.348791 | A | 2748.442287 | 1374.724781 | 2731.415738 | 1366.211507 | 2730.431722 | 1365.719499 | 23 |
| 14 | ***1493.759449*** | **747.383362** | 1476.732900 | 738.870088 | 1475.748884 | 738.378080 | Q | 2677.405173 | 1339.206224 | 2660.378624 | 1330.692950 | 2659.394608 | 1330.200942 | 22 |
| 15 | 1590.812213 | 795.909744 | 1573.785664 | 787.396470 | 1572.801648 | 786.904462 | P | 2549.346595 | 1275.176935 | 2532.320046 | 1266.663661 | 2531.336030 | 1266.171653 | 21 |
| 16 | ***1661.849327*** | 831.428301 | 1644.822778 | 822.915027 | 1643.838762 | 822.423019 | A | 2452.293831 | 1226.650553 | 2435.267282 | 1218.137279 | 2434.283266 | 1217.645271 | 20 |
| 17 | 1762.897006 | 881.952141 | 1745.870457 | 873.438867 | 1744.886441 | 872.946858 | T | 2381.256717 | 1191.131996 | 2364.230168 | 1182.618722 | 2363.246152 | 1182.126714 | 19 |
| 18 | ***1875.981070*** | **938.494173** | 1858.954521 | 929.980898 | 1857.970505 | 929.488890 | L | 2280.209038 | 1140.608157 | 2263.182489 | 1132.094882 | 2262.198473 | 1131.602874 | 18 |
| 19 | ***1963.013098*** | 982.010187 | 1945.986549 | 973.496913 | 1945.002533 | 973.004904 | S | 2167.124974 | 1084.066125 | 2150.098425 | 1075.552850 | 2149.114409 | 1075.060842 | 17 |
| 20 | 2402.238424 | **1201.622850** | 2385.211875 | 1193.109575 | 2384.227859 | 1192.617567 | Q | 2080.092946 | 1040.550111 | 2063.066397 | 1032.036836 | 2062.082381 | 1031.544828 | 16 |
| 21 | 2503.286103 | 1252.146689 | 2486.259554 | 1243.633415 | 2485.275538 | 1243.141407 | T | ***1640.867620*** | 820.937448 | 1623.841071 | 812.424174 | 1622.857055 | 811.932166 | 15 |
| 22 | ***2616.370167*** | **1308.688721** | 2599.343618 | 1300.175447 | 2598.359602 | 1299.683439 | I | ***1539.819941*** | 770.413609 | 1522.793392 | 761.900334 | 1521.809376 | 761.408326 | 14 |
| 23 | ***2715.438581*** | **1358.222928** | 2698.412032 | 1349.709654 | 2697.428016 | 1349.217646 | V | ***1426.735877*** | 713.871577 | 1409.709328 | 705.358302 | 1408.725312 | 704.866294 | 13 |
| 24 | 2812.491345 | 1406.749310 | 2795.464796 | 1398.236036 | 2794.480780 | 1397.744028 | P | ***1327.667463*** | 664.337370 | 1310.640914 | 655.824095 | 1309.656898 | 655.332087 | 12 |
| 25 | 2925.575409 | **1463.291342** | 2908.548860 | 1454.778068 | 2907.564844 | 1454.286060 | I | ***1230.614699*** | 615.810988 | 1213.588150 | 607.297713 | 1212.604134 | 606.805705 | 11 |
| 26 | 3085.606058 | **1543.306667** | 3068.579509 | 1534.793392 | 3067.595493 | 1534.301384 | C | ***1117.530635*** | 559.268956 | 1100.504086 | 550.755681 | 1099.520070 | 550.263673 | 10 |
| 27 | 3198.690122 | **1599.848699** | 3181.663573 | 1591.335424 | 3180.679557 | 1590.843416 | L | ***957.499986*** | 479.253631 | 940.473437 | 470.740357 | 939.489421 | 470.248349 | 9 |
| 28 | 3295.742886 | 1648.375081 | 3278.716337 | 1639.861806 | 3277.732321 | 1639.369798 | P | ***844.415922*** | 422.711599 | 827.389373 | 414.198325 | 826.405357 | 413.706317 | 8 |
| 29 | 3410.769829 | **1705.888552** | 3393.743280 | 1697.375278 | 3392.759264 | 1696.883270 | D | ***747.363158*** | 374.185217 | 730.336609 | 365.671943 | 729.352593 | 365.179935 | 7 |
| 30 | 3497.801857 | 1749.404566 | 3480.775308 | 1740.891292 | 3479.791292 | 1740.399284 | S | ***632.336215*** | 316.671746 | 615.309666 | 308.158471 | 614.325650 | 307.666463 | 6 |
| 31 | 3554.823321 | 1777.915298 | 3537.796772 | 1769.402024 | 3536.812756 | 1768.910016 | G | ***545.304187*** | 273.155732 | 528.277638 | 264.642457 | 527.293622 | 264.150449 | 5 |
| 32 | 3667.907385 | 1834.457330 | 3650.880836 | 1825.944056 | 3649.896820 | 1825.452048 | L | 488.282723 | 244.645000 | 471.256174 | 236.131725 | 470.272158 | 235.639717 | 4 |
| 33 | 3738.944499 | 1869.975887 | 3721.917950 | 1861.462613 | 3720.933934 | 1860.970605 | A | ***375.198659*** | 188.102968 | 358.172110 | 179.589693 | 357.188094 | 179.097685 | 3 |
| 34 | 3867.987092 | 1934.497184 | 3850.960543 | 1925.983909 | 3849.976527 | 1925.491901 | E | ***304.161545*** | 152.584411 | 287.134996 | 144.071136 | 286.150980 | 143.579128 | 2 |
| 35 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of STTDNDIALLHLAQPATLSQTIVPICLPDSGLAER
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.6 | 4041.091476 | 0.043260 | STTDNDIALLHLAQPATLSQTIVPICLPDSGLAER |
| 40.5 | 4041.091476 | 0.043260 | STTDNDIALLHLAQPATLSQTIVPICLPDSGLAER |
| 3.8 | 4041.127869 | 0.006867 | TTAIVEVKGTVDIVLTPLVAEALDRYIEAMVHCASTR |

**Mascot:** http://www.matrixscience.com/

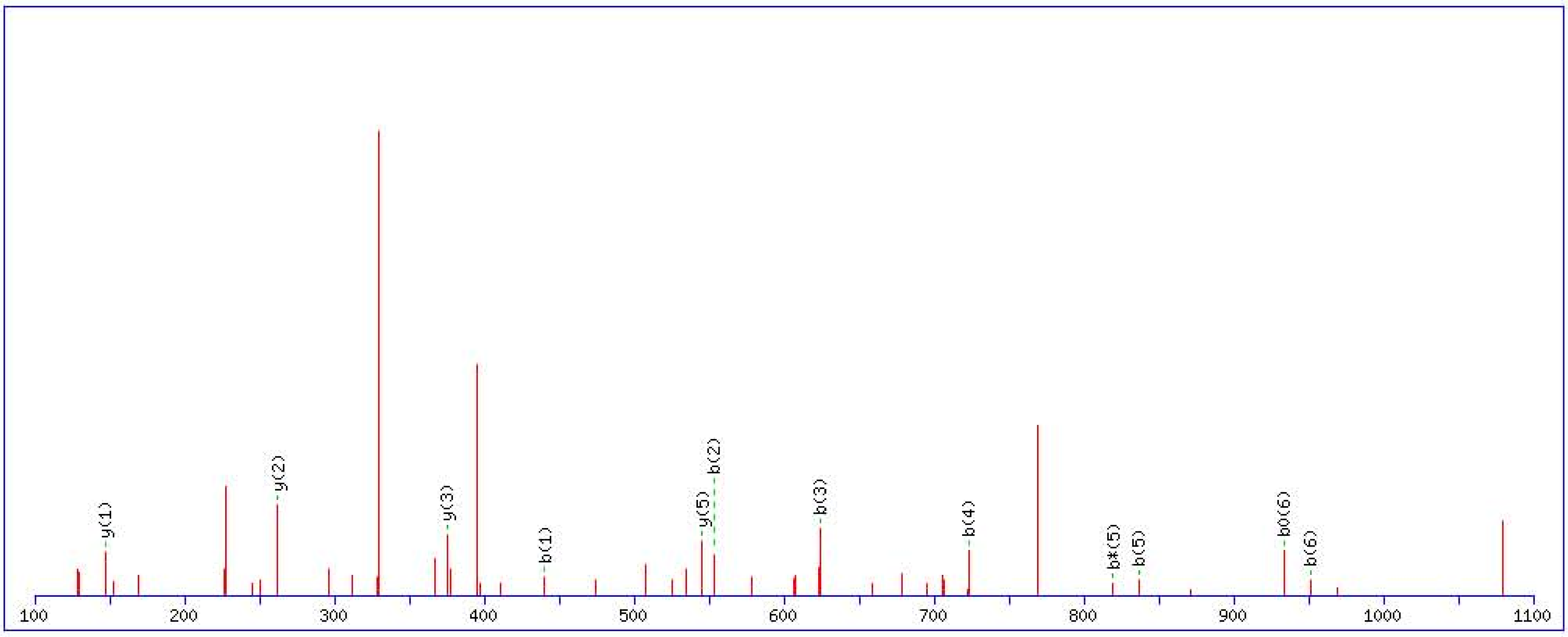
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QLAVLDK**
Found in **PROS_HUMAN**, Vitamin K-dependent protein S OS=Homo sapiens GN=PROS1 PE=1 SV=1

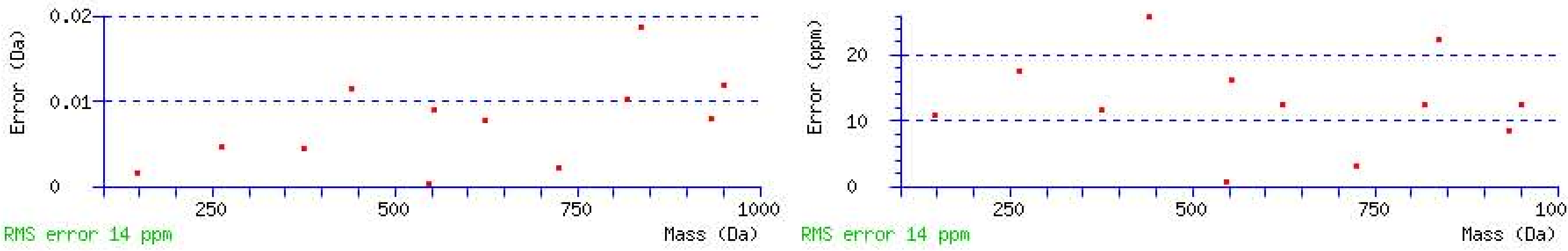
Match to Query 18699: 1096.634328 from(549.324440,2+) rtinseconds(2001) index(52906)
Title: Locus:1.1.1.1312.6 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1096.631439
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q1** : Biotin:Thermo-21345 (Q)
**Ions Score:** 32 **Expect:** 0.0096
**Matches :** 12/60 fragment ions using 26 most intense peaks (help)

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | *440.232602* | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 7 |
| 2 | *553.316666* | 277.161971 | 536.290117 | 268.648697 | | | L | 658.413403 | 329.710340 | 641.386854 | 321.197065 | 640.402838 | 320.705057 | 6 |
| 3 | *624.353780* | 312.680528 | 607.327231 | 304.167254 | | | A | **545.329339** | 273.168308 | 528.302790 | 264.655033 | 527.318774 | 264.163025 | 5 |
| 4 | *723.422194* | 362.214735 | 706.395645 | 353.701461 | | | V | 474.292225 | 237.649750 | 457.265676 | 229.136476 | 456.281660 | 228.644468 | 4 |
| 5 | *836.506258* | 418.756767 | 819.479709 | 410.243493 | | | L | **375.223811** | 188.115543 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 6 | *951.533201* | 476.270239 | 934.506652 | 467.756964 | 933.522636 | 467.264956 | D | **262.139747** | 131.573511 | 245.113198 | 123.060237 | 244.129182 | 122.568229 | 2 |
| 7 | | | | | | | K | **147.112804** | 74.060040 | 130.086255 | 65.546765 | | | 1 |



NCBI **BLAST** search of QLAVLDK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 31.9 | 1096.631439 | 0.002889 | QLAVLDK |
| 18.1 | 1096.624054 | 0.010274 | KPVDSVPLSR |
| 9.3 | 1096.624023 | 0.010305 | IPRENLLDK |
| 8.8 | 1096.635269 | -0.000941 | SSSLVIHKAR |
| 5.3 | 1096.631439 | 0.002889 | GILQLDK |
| 2.2 | 1096.631439 | 0.002889 | QIDVAIK |
| 2.0 | 1096.628067 | 0.006261 | YIFVSLLSR |
| 1.6 | 1096.642654 | -0.008326 | NITMHLLKK |
| 0.9 | 1096.646500 | -0.012172 | KPDQARVRK |
| 0.7 | 1096.631439 | 0.002889 | QIEGLVK |

**Mascot:** http://www.matrixscience.com/

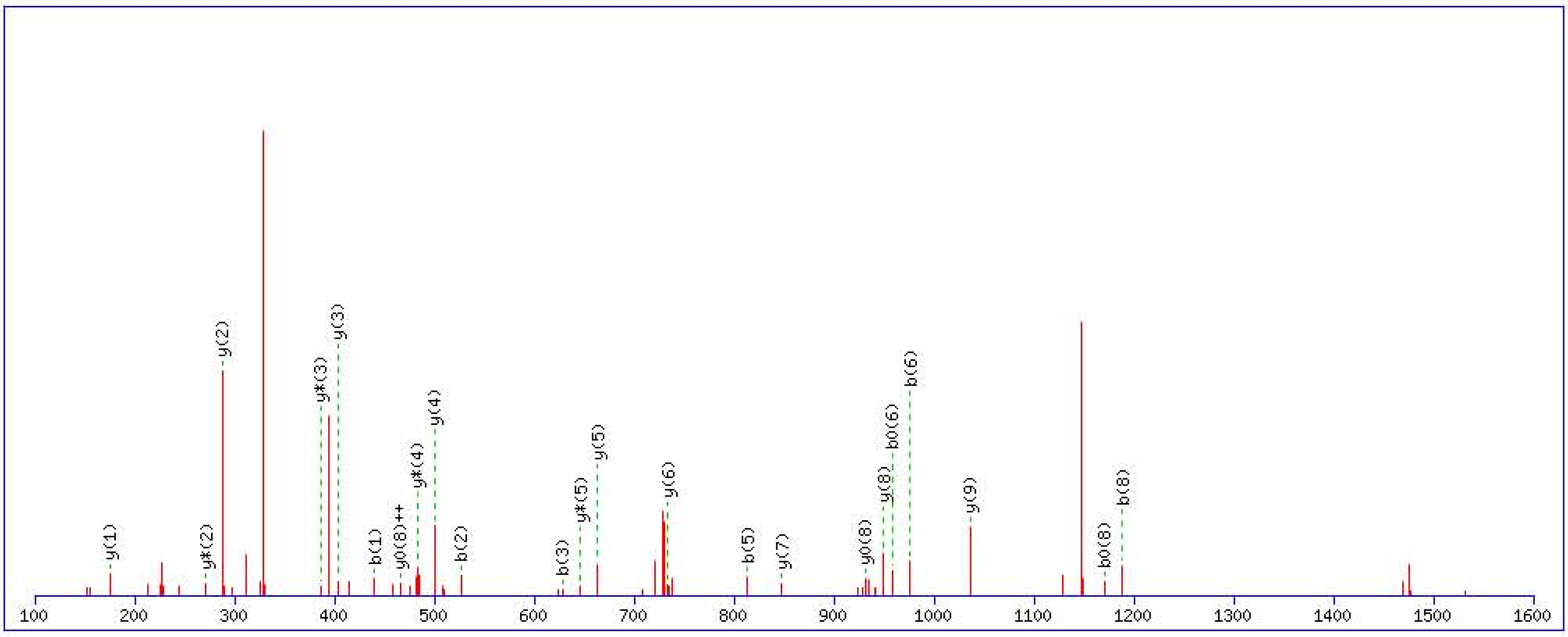
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QSTNAYPDLR**
Found in **PROS_HUMAN**, Vitamin K-dependent protein S OS=Homo sapiens GN=PROS1 PE=1 SV=1

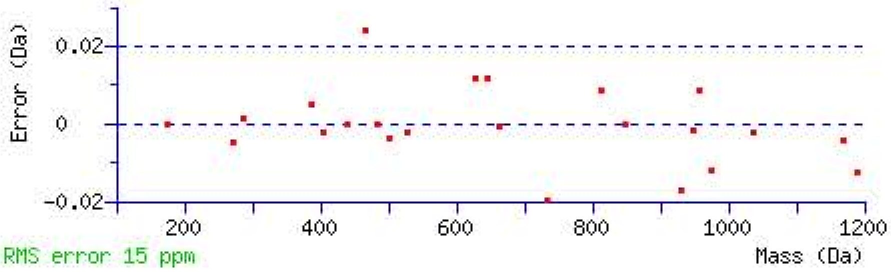
Match to Query 33148: 1474.723168 from(738.368860,2+) rtinseconds(1754) index(34795)
Title: Locus:1.1.1.3030.16 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

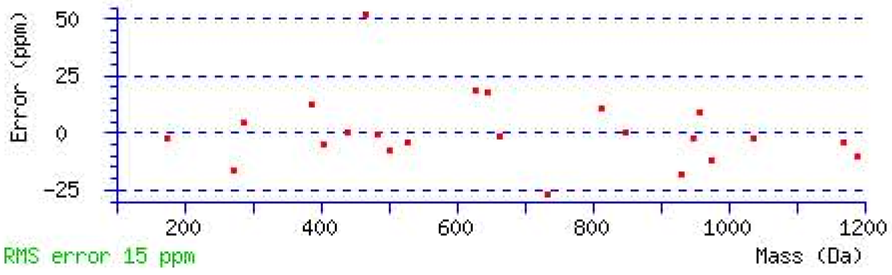
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1474.723831
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 46  Expect: 0.00052
Matches : 23/102 fragment ions using 54 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **440.232602** | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 10 |
| 2 | **527.264630** | 264.135953 | 510.238081 | 255.622679 | 509.254065 | 255.130671 | S | ***1036.505800*** | 518.756538 | 1019.479251 | 510.243263 | 1018.495235 | 509.751255 | 9 |
| 3 | **628.312309** | 314.659793 | 611.285760 | 306.146518 | 610.301744 | 305.654510 | T | ***949.473772*** | 475.240524 | 932.447223 | 466.727249 | 931.463207 | 466.235241 | 8 |
| 4 | 742.355236 | 371.681256 | 725.328687 | 363.167982 | 724.344671 | 362.675974 | N | ***848.426093*** | 424.716684 | 831.399544 | 416.203410 | 830.415528 | 415.711402 | 7 |
| 5 | **813.392350** | 407.199813 | 796.365801 | 398.686538 | 795.381785 | 398.194530 | A | ***734.383166*** | 367.695221 | 717.356617 | 359.181946 | 716.372601 | 358.689938 | 6 |
| 6 | **976.455679** | 488.731477 | 959.429130 | 480.218203 | 958.445114 | 479.726195 | Y | ***663.346052*** | 332.176664 | 646.319503 | 323.663389 | 645.335487 | 323.171382 | 5 |
| 7 | 1073.508443 | 537.257860 | 1056.481894 | 528.744585 | 1055.497878 | 528.252577 | P | ***500.282723*** | 250.644999 | 483.256174 | 242.131725 | 482.272158 | 241.639717 | 4 |
| 8 | **1188.535386** | 594.771331 | 1171.508837 | 586.258057 | 1170.524821 | 585.766049 | D | ***403.229959*** | 202.118617 | 386.203410 | 193.605343 | 385.219394 | 193.113335 | 3 |
| 9 | 1301.619450 | 651.313363 | 1284.592901 | 642.800089 | 1283.608885 | 642.308080 | L | ***288.203016*** | 144.605146 | 271.176467 | 136.091871 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QSTNAYPDLR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.1 | 1474.723831 | -0.000663 | QSTNAYPDLR |
| 15.1 | 1474.721161 | 0.002007 | QSTHGERGHR |
| 9.3 | 1474.741592 | -0.018424 | SSLEHGSDVYLLR |
| 6.4 | 1474.744934 | -0.021766 | LSKEELIQNMDR |
| 4.0 | 1474.727661 | -0.004493 | SSATLWNSPSRNR |
| 2.4 | 1474.731033 | -0.007865 | RGDGGKMAAAGALER |
| 1.4 | 1474.719788 | 0.003380 | QQEELEQMRLR |
| 0.8 | 1474.742462 | -0.019294 | QCKSEFPIR |
| 0.6 | 1474.735092 | -0.011924 | SFCVLSQLTQHR |

**Mascot:** http://www.matrixscience.com/

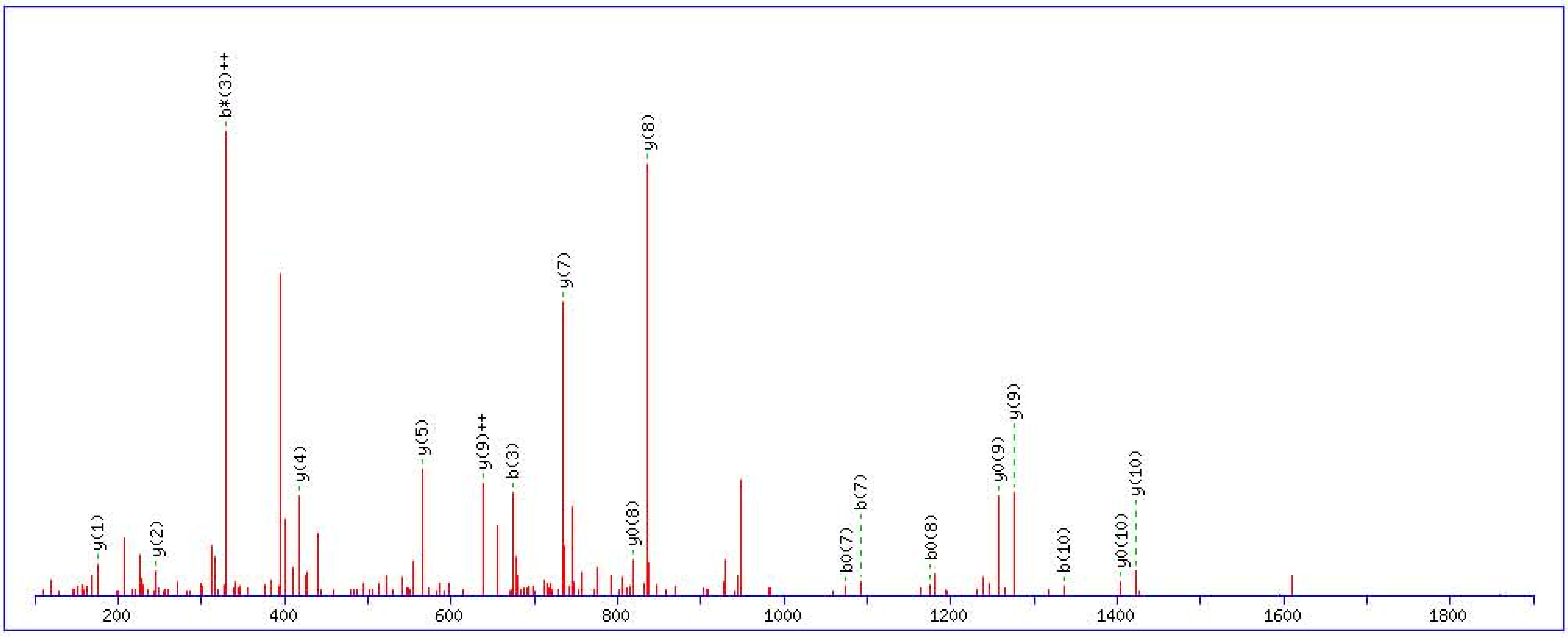
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **SFQTGLFTAAR**
Found in **PROS_HUMAN**, Vitamin K-dependent protein S OS=Homo sapiens GN=PROS1 PE=1 SV=1

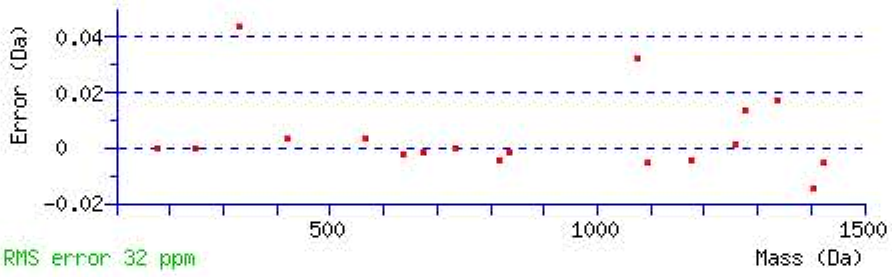
Match to Query 34207: 1508.785028 from(755.399790,2+) rtinseconds(2294) index(38209)
Title: Locus:1.1.1.3218.15 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

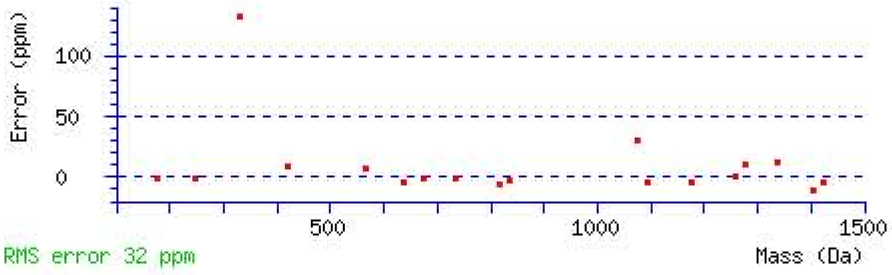
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1900 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1508.780975
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q3      : Biotin:Thermo-21345 (Q)
Ions Score: 55  Expect: 3.5e-005
Matches : 18/110 fragment ions using 28 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^*$ | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^*$ | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 88.039304 | 44.523290 | | | 70.028739 | 35.518008 | S | | | | | | | 11 |
| 2 | 235.107718 | 118.057497 | | | 217.097153 | 109.052214 | F | *1422.756220* | 711.881748 | 1405.729671 | 703.368474 | 1404.745655 | 702.876465 | 10 |
| 3 | **674.333044** | 337.670160 | 657.306495 | 329.156885 | 656.322479 | 328.664877 | Q | *1275.687806* | 638.347541 | 1258.661257 | 629.834267 | 1257.677241 | 629.342259 | 9 |
| 4 | 775.380723 | 388.194000 | 758.354174 | 379.680725 | 757.370158 | 379.188717 | T | *836.462480* | 418.734878 | 819.435931 | 410.221604 | 818.451915 | 409.729596 | 8 |
| 5 | 832.402187 | 416.704732 | 815.375638 | 408.191457 | 814.391622 | 407.699449 | G | *735.414801* | 368.211039 | 718.388252 | 359.697764 | 717.404236 | 359.205756 | 7 |
| 6 | 945.486251 | 473.246764 | 928.459702 | 464.733489 | 927.475686 | 464.241481 | L | 678.393337 | 339.700307 | 661.366788 | 331.187032 | 660.382772 | 330.695024 | 6 |
| 7 | **1092.554665** | 546.780971 | 1075.528116 | 538.267696 | 1074.544100 | 537.775688 | F | *565.309273* | 283.158275 | 548.282724 | 274.645000 | 547.298708 | 274.152992 | 5 |
| 8 | 1193.602344 | 597.304810 | 1176.575795 | 588.791536 | 1175.591779 | 588.299528 | T | *418.240859* | 209.624067 | 401.214310 | 201.110793 | 400.230294 | 200.618785 | 4 |
| 9 | 1264.639458 | 632.823367 | 1247.612909 | 624.310093 | 1246.628893 | 623.818085 | A | 317.193180 | 159.100228 | 300.166631 | 150.586953 | | | 3 |
| 10 | **1335.676572** | 668.341924 | 1318.650023 | 659.828650 | 1317.666007 | 659.336642 | A | *246.156066* | 123.581671 | 229.129517 | 115.068396 | | | 2 |
| 11 | | | | | | | R | *175.118952* | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of SFQTGLFTAAR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 55.0 | 1508.780975 | 0.004053 | SFQTGLFTAAR |
| 7.1 | 1508.798721 | -0.013693 | SSYGVAAPVDFLRK |
| 5.2 | 1508.805893 | -0.020865 | RLELPRASDAEPR |
| 4.7 | 1508.780960 | 0.004068 | TQPPPENLFR |
| 4.6 | 1508.776932 | 0.008096 | LMGADSLQLFRSR |
| 2.1 | 1508.805939 | -0.020911 | SSPEHTTILRGGVR |
| 0.3 | 1508.765701 | 0.019327 | TKPLSMLYVDNGR |
| 0.0 | 1508.794708 | -0.009680 | SGKSGPSPTTPQPLR |

**Mascot:** http://www.matrixscience.com/

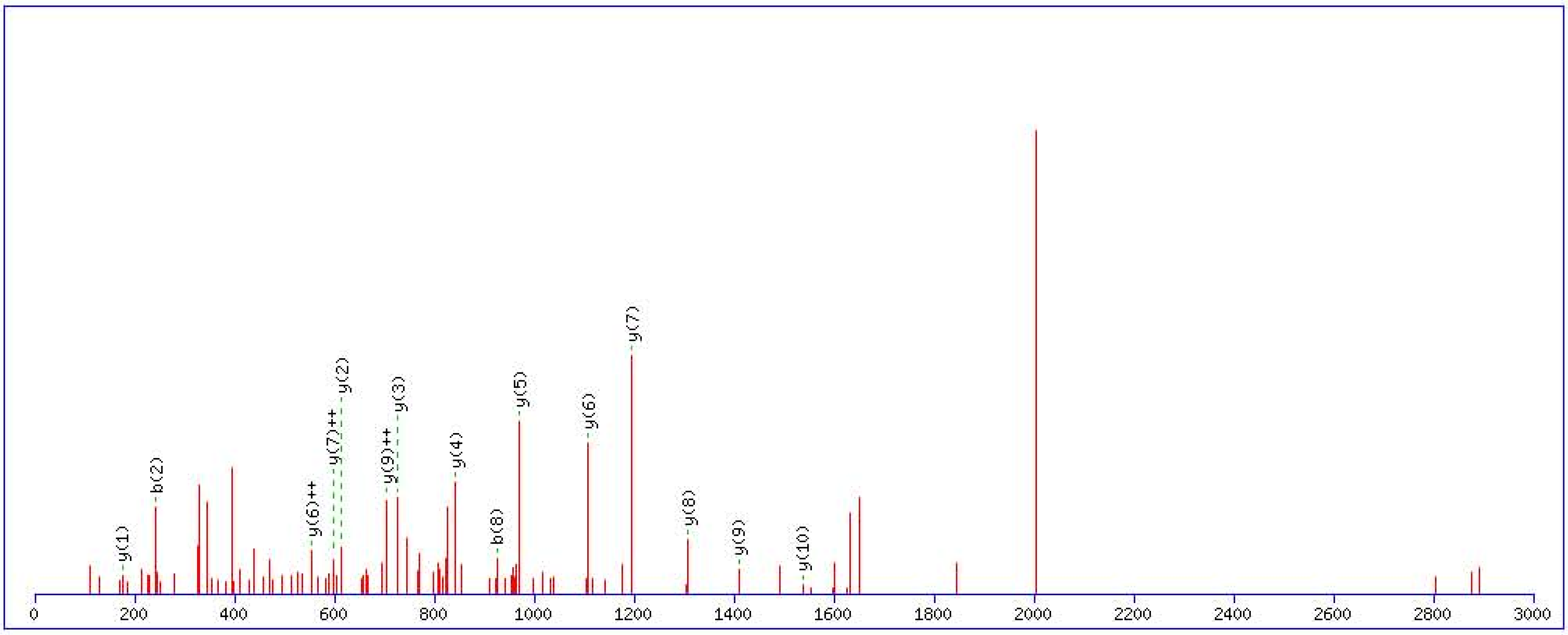
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **IETISHEDLQR**
Found in **PROS_HUMAN**, Vitamin K-dependent protein S OS=Homo sapiens GN=PROS1 PE=1 SV=1

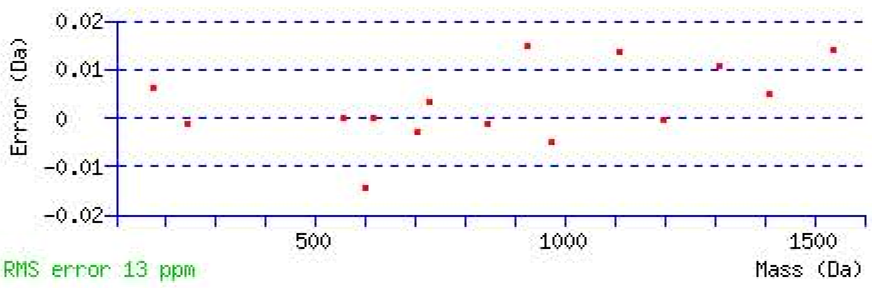
Match to Query 39436: 1650.846148 from(826.430350,2+) rtinseconds(1682) index(50712)
Title: Locus:1.1.1.1201.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

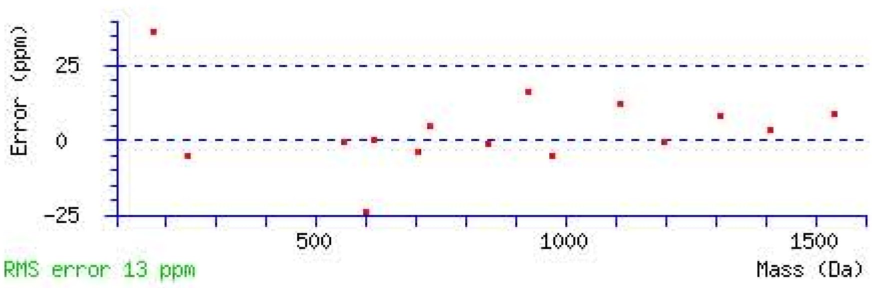
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 3000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1650.839920
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 66  Expect: 8.8e-007
Matches : 15/94 fragment ions using 30 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 11 |
| 2 | **243.133933** | 122.070605 | | | 225.123368 | 113.065322 | E | ***1538.763154*** | 769.885215 | 1521.736605 | 761.371941 | 1520.752589 | 760.879933 | 10 |
| 3 | 344.181612 | 172.594444 | | | 326.171047 | 163.589162 | T | ***1409.720561*** | 705.363919 | 1392.694012 | 696.850644 | 1391.709996 | 696.358636 | 9 |
| 4 | 457.265676 | 229.136476 | | | 439.255111 | 220.131194 | I | ***1308.672882*** | 654.840079 | 1291.646333 | 646.326805 | 1290.662317 | 645.834797 | 8 |
| 5 | 544.297704 | 272.652490 | | | 526.287139 | 263.647208 | S | ***1195.588818*** | 598.298047 | 1178.562269 | 589.784773 | 1177.578253 | 589.292764 | 7 |
| 6 | 681.356616 | 341.181946 | | | 663.346051 | 332.176664 | H | ***1108.556790*** | 554.782033 | 1091.530241 | 546.268759 | 1090.546225 | 545.776751 | 6 |
| 7 | 810.399209 | 405.703243 | | | 792.388644 | 396.697960 | E | ***971.497878*** | 486.252577 | 954.471329 | 477.739303 | 953.487313 | 477.247295 | 5 |
| 8 | **925.426152** | 463.216714 | | | 907.415587 | 454.211432 | D | ***842.455285*** | 421.731281 | 825.428736 | 413.218006 | 824.444720 | 412.725998 | 4 |
| 9 | 1038.510216 | 519.758746 | | | 1020.499651 | 510.753463 | L | ***727.428342*** | 364.217809 | 710.401793 | 355.704535 | | | 3 |
| 10 | 1477.735542 | 739.371409 | 1460.708993 | 730.858135 | 1459.724977 | 730.366127 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of IETISHEDLQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 66.1 | 1650.839920 | 0.006228 | IETISHEDLQR |
| 1.5 | 1650.833389 | 0.012759 | QQLEHIMATNR |
| 0.3 | 1650.868896 | -0.022748 | LELLELDHEQTRR |

**Mascot:** http://www.matrixscience.com/

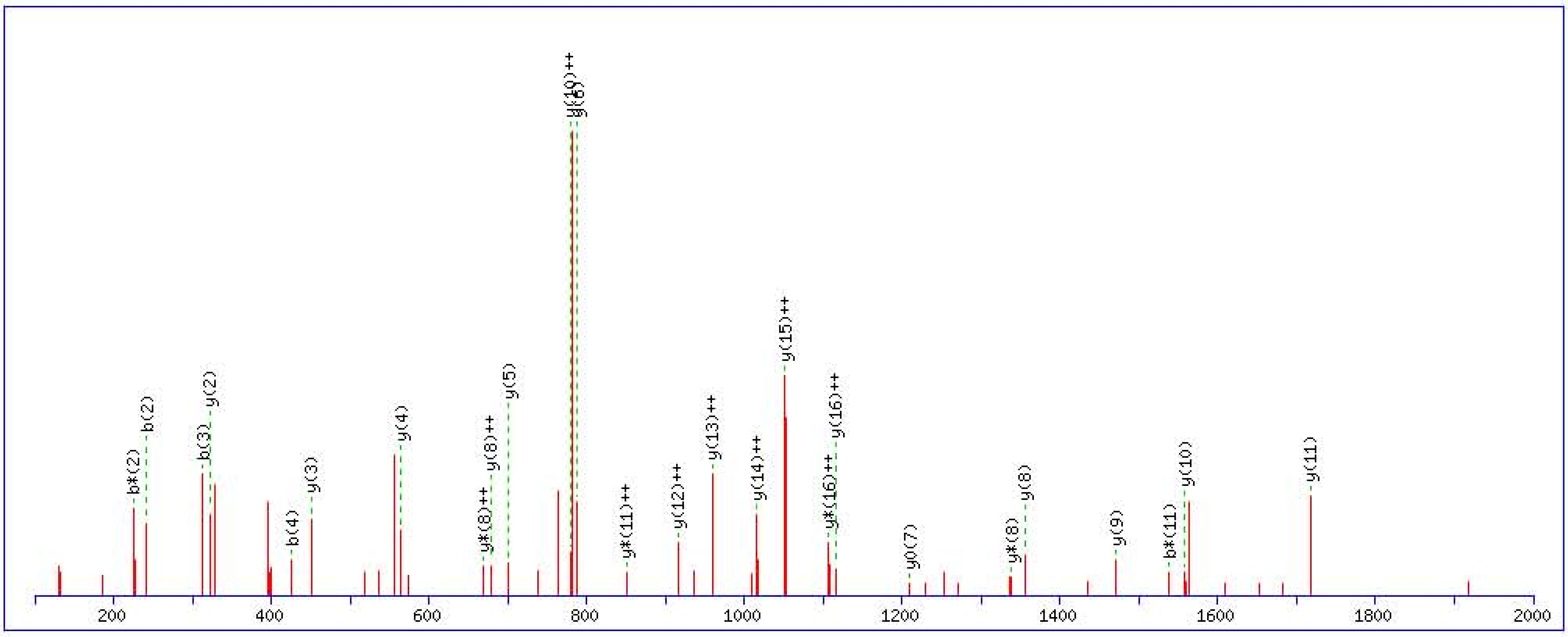
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **IQALSLCSDQQSHLEFR**
Found in **PROS_HUMAN**, Vitamin K-dependent protein S OS=Homo sapiens GN=PROS1 PE=1 SV=1

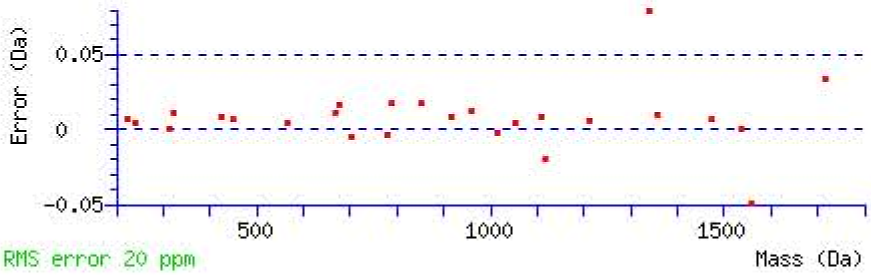
Match to Query 53679: 2342.164332 from(781.728720,3+) rtinseconds(2162) index(22699)
Title: Locus:1.1.1.755.9 File:"2013-07-02 CLN FXIII 60 min 2nd F 2.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

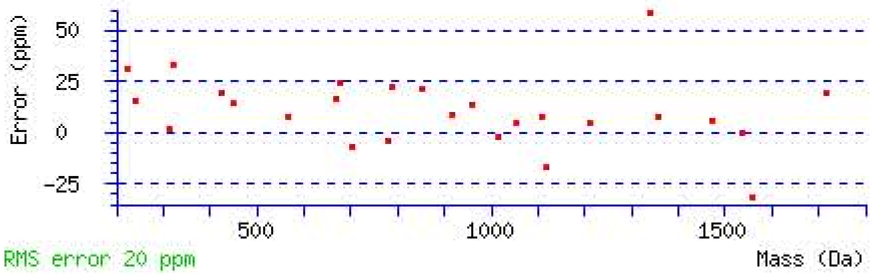
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2342.151108
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q11    : Biotin:Thermo-21345 (Q)
Ions Score: 44  Expect: 0.0012
Matches : 26/178 fragment ions using 60 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 114.091340 | 57.549308 | | | | | I | | | | | | | 17 |
| 2 | **242.149918** | 121.578597 | 225.123369 | 113.065323 | | | Q | 2230.074335 | 1115.540805 | 2213.047786 | 1107.027531 | 2212.063770 | 1106.535523 | 16 |
| 3 | **313.187032** | 157.097154 | 296.160483 | 148.583879 | | | A | 2102.015757 | 1051.511516 | 2084.989208 | 1042.998242 | 2084.005192 | 1042.506234 | 15 |
| 4 | **426.271096** | 213.639186 | 409.244547 | 205.125912 | | | L | 2030.978643 | 1015.992959 | 2013.952094 | 1007.479685 | 2012.968078 | 1006.987677 | 14 |
| 5 | 513.303124 | 257.155200 | 496.276575 | 248.641926 | 495.292559 | 248.149918 | S | 1917.894579 | 959.450927 | 1900.868030 | 950.937653 | 1899.884014 | 950.445645 | 13 |
| 6 | 626.387188 | 313.697232 | 609.360639 | 305.183958 | 608.376623 | 304.691950 | L | 1830.862551 | 915.934913 | 1813.836002 | 907.421639 | 1812.851986 | 906.929631 | 12 |
| 7 | 786.417837 | 393.712557 | 769.391288 | 385.199282 | 768.407272 | 384.707274 | C | ***1717.778487*** | 859.392881 | 1700.751938 | 850.879607 | 1699.767922 | 850.387599 | 11 |
| 8 | 873.449865 | 437.228571 | 856.423316 | 428.715296 | 855.439300 | 428.223288 | S | ***1557.747838*** | 779.377557 | 1540.721289 | 770.864282 | 1539.737273 | 770.372274 | 10 |
| 9 | 988.476808 | 494.742042 | 971.450259 | 486.228768 | 970.466243 | 485.736760 | D | ***1470.715810*** | 735.861543 | 1453.689261 | 727.348268 | 1452.705245 | 726.856260 | 9 |
| 10 | 1116.535386 | 558.771331 | 1099.508837 | 550.258057 | 1098.524821 | 549.766049 | Q | ***1355.688867*** | 678.348071 | 1338.662318 | 669.834797 | 1337.678302 | 669.342789 | 8 |
| 11 | 1555.760712 | 778.383994 | 1538.734163 | 769.870720 | 1537.750147 | 769.378712 | Q | 1227.630289 | 614.318782 | 1210.603740 | 605.805508 | 1209.619724 | 605.313500 | 7 |
| 12 | 1642.792740 | 821.900008 | 1625.766191 | 813.386734 | 1624.782175 | 812.894726 | S | ***788.404963*** | 394.706119 | 771.378414 | 386.192845 | 770.394398 | 385.700837 | 6 |
| 13 | 1779.851652 | 890.429464 | 1762.825103 | 881.916190 | 1761.841087 | 881.424182 | H | ***701.372935*** | 351.190105 | 684.346386 | 342.676831 | 683.362370 | 342.184823 | 5 |
| 14 | 1892.935716 | 946.971496 | 1875.909167 | 938.458222 | 1874.925151 | 937.966213 | L | ***564.314023*** | 282.660649 | 547.287474 | 274.147375 | 546.303458 | 273.655367 | 4 |
| 15 | 2021.978309 | 1011.492793 | 2004.951760 | 1002.979518 | 2003.967744 | 1002.487510 | E | ***451.229959*** | 226.118617 | 434.203410 | 217.605343 | 433.219394 | 217.113335 | 3 |
| 16 | 2169.046723 | 1085.026999 | 2152.020174 | 1076.513725 | 2151.036158 | 1076.021717 | F | ***322.187366*** | 161.597321 | 305.160817 | 153.084046 | | | 2 |
| 17 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of IQALSLCSDQQSHLEFR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 44.1 | 2342.151108 | 0.013224 | IQALSLCSDQQSHLEFR |
| 42.9 | 2342.151108 | 0.013224 | IQALSLCSDQQSHLEFR |

**Mascot:** http://www.matrixscience.com/

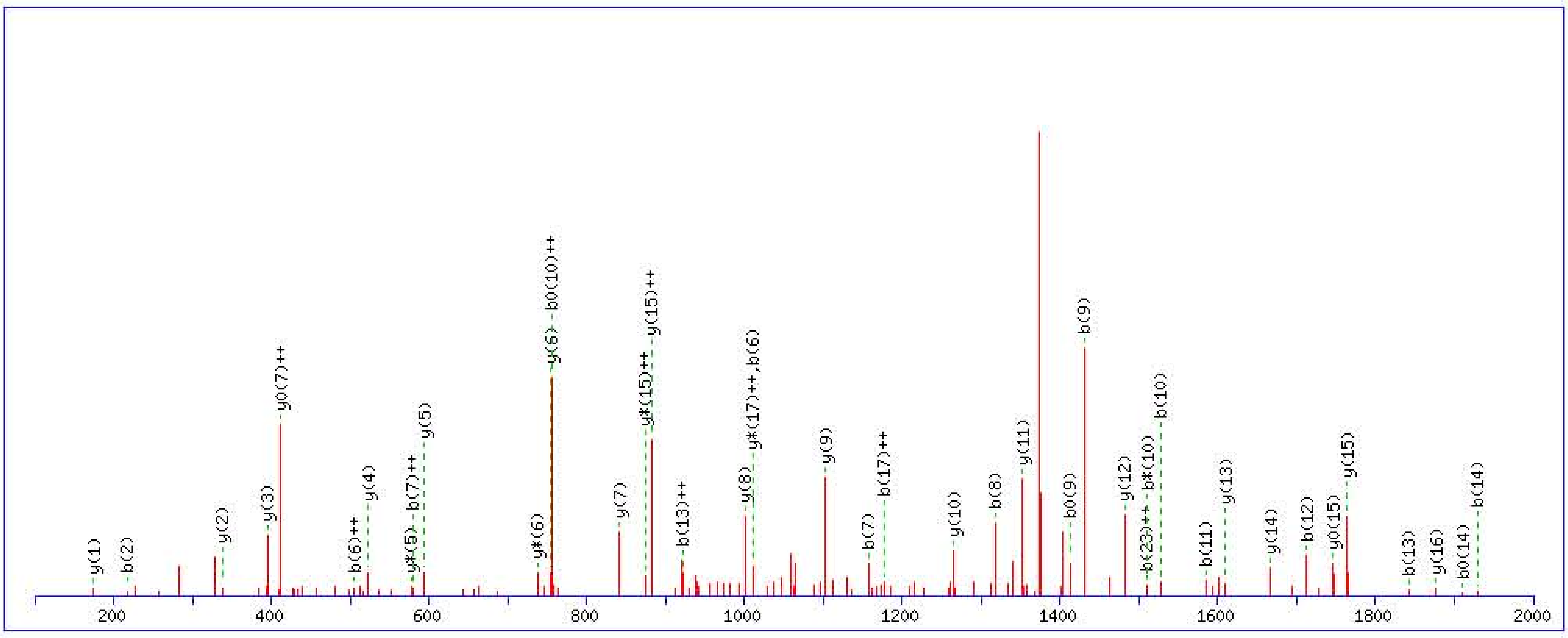
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **TDGCQHFCLPGQESYTCSCAQGYR**
Found in **PROZ_HUMAN**, Vitamin K-dependent protein Z OS=Homo sapiens GN=PROZ PE=1 SV=2

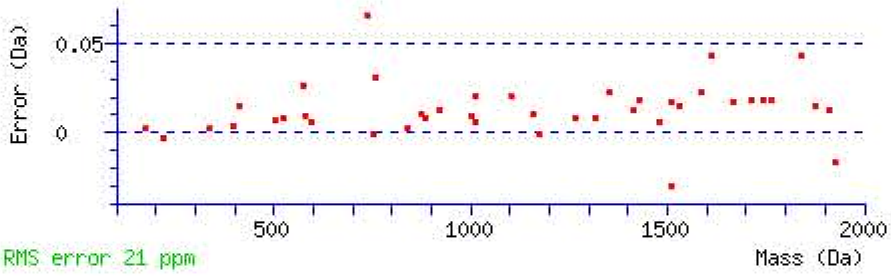
Match to Query 49654: 3192.327132 from(1065.116320,3+) rtinseconds(2067) index(53359)
Title: Locus:1.1.1.1334.13 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

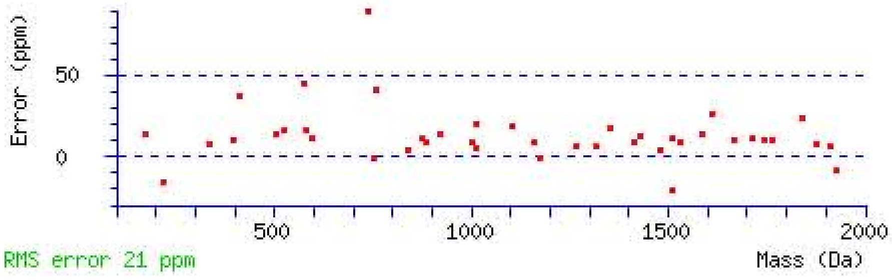
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 2000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3192.298050
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 99  Expect: 1.1e-009
Matches : 42/256 fragment ions using 65 most intense peaks   (help)
```

| # | b | b++ | b* | b*++ | b0 | b0++ | Seq. | y | y++ | y* | y*++ | y0 | y0++ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102.054955 | 51.531116 | | | 84.044390 | 42.525833 | T | | | | | | | 24 |
| 2 | **217.081898** | 109.044587 | | | 199.071333 | 100.039304 | D | 3092.257619 | 1546.632447 | 3075.231070 | 1538.119173 | 3074.247054 | 1537.627165 | 23 |
| 3 | 274.103362 | 137.555319 | | | 256.092797 | 128.550037 | G | 2977.230676 | 1489.118976 | 2960.204127 | 1480.605701 | 2959.220111 | 1480.113693 | 22 |
| 4 | 434.134011 | 217.570644 | | | 416.123446 | 208.565361 | C | 2920.209212 | 1460.608244 | 2903.182663 | 1452.094969 | 2902.198647 | 1451.602961 | 21 |
| 5 | 873.359337 | 437.183307 | 856.332788 | 428.670032 | 855.348772 | 428.178024 | Q | 2760.178563 | 1380.592919 | 2743.152014 | 1372.079645 | 2742.167998 | 1371.587637 | 20 |
| 6 | **1010.418249** | **505.712763** | 993.391700 | 497.199488 | 992.407684 | 496.707480 | H | 2320.953237 | 1160.980256 | 2303.926688 | 1152.466982 | 2302.942672 | 1151.974974 | 19 |
| 7 | **1157.486663** | **579.246970** | 1140.460114 | 570.733695 | 1139.476098 | 570.241687 | F | 2183.894325 | 1092.450800 | 2166.867776 | 1083.937526 | 2165.883760 | 1083.445518 | 18 |
| 8 | **1317.517312** | 659.262294 | 1300.490763 | 650.749020 | 1299.506747 | 650.257012 | C | 2036.825911 | 1018.916594 | 2019.799362 | 1010.403319 | 2018.815346 | 1009.911311 | 17 |
| 9 | **1430.601376** | 715.804326 | 1413.574827 | 707.291052 | 1412.590811 | 706.799044 | L | ***1876.795262*** | 938.901269 | 1859.768713 | 930.387994 | 1858.784697 | 929.895986 | 16 |
| 10 | **1527.654140** | 764.330708 | 1510.627591 | 755.817434 | 1509.643575 | 755.325426 | P | ***1763.711198*** | 882.359237 | 1746.684649 | 873.845963 | 1745.700633 | 873.353954 | 15 |
| 11 | **1584.675604** | 792.841440 | 1567.649055 | 784.328166 | 1566.665039 | 783.836158 | G | ***1666.658434*** | 833.832855 | 1649.631885 | 825.319581 | 1648.647869 | 824.827572 | 14 |
| 12 | **1712.734182** | 856.870729 | 1695.707633 | 848.357455 | 1694.723617 | 847.865446 | Q | ***1609.636970*** | 805.322123 | 1592.610421 | 796.808849 | 1591.626405 | 796.316841 | 13 |
| 13 | **1841.776775** | **921.392026** | 1824.750226 | 912.878751 | 1823.766210 | 912.386743 | E | ***1481.578392*** | 741.292834 | 1464.551843 | 732.779560 | 1463.567827 | 732.287552 | 12 |
| 14 | **1928.808803** | 964.908040 | 1911.782254 | 956.394765 | 1910.798238 | 955.902757 | S | ***1352.535799*** | 676.771538 | 1335.509250 | 668.258263 | 1334.525234 | 667.766255 | 11 |
| 15 | 2091.872132 | 1046.439704 | 2074.845583 | 1037.926429 | 2073.861567 | 1037.434421 | Y | ***1265.503771*** | 633.255523 | 1248.477222 | 624.742249 | 1247.493206 | 624.250241 | 10 |
| 16 | 2192.919811 | 1096.963543 | 2175.893262 | 1088.450269 | 2174.909246 | 1087.958261 | T | ***1102.440442*** | 551.723859 | 1085.413893 | 543.210584 | 1084.429877 | 542.718576 | 9 |
| 17 | 2352.950460 | **1176.978868** | 2335.923911 | 1168.465593 | 2334.939895 | 1167.973585 | C | ***1001.392763*** | 501.200020 | 984.366214 | 492.686745 | 983.382198 | 492.194737 | 8 |
| 18 | 2439.982488 | 1220.494882 | 2422.955939 | 1211.981607 | 2421.971923 | 1211.489599 | S | ***841.362114*** | 421.184695 | 824.335565 | 412.671421 | 823.351549 | 412.179413 | 7 |
| 19 | 2600.013137 | 1300.510206 | 2582.986588 | 1291.996932 | 2582.002572 | 1291.504924 | C | ***754.330086*** | 377.668681 | 737.303537 | 369.155407 | | | 6 |
| 20 | 2671.050251 | 1336.028763 | 2654.023702 | 1327.515489 | 2653.039686 | 1327.023481 | A | ***594.299437*** | 297.653357 | 577.272888 | 289.140082 | | | 5 |
| 21 | 2799.108829 | 1400.058052 | 2782.082280 | 1391.544778 | 2781.098264 | 1391.052770 | Q | ***523.262323*** | 262.134800 | 506.235774 | 253.621525 | | | 4 |
| 22 | 2856.130293 | 1428.568784 | 2839.103744 | 1420.055510 | 2838.119728 | 1419.563502 | G | ***395.203745*** | 198.105510 | 378.177196 | 189.592236 | | | 3 |
| 23 | 3019.193622 | **1510.100449** | 3002.167073 | 1501.587174 | 3001.183057 | 1501.095166 | Y | ***338.182281*** | 169.594778 | 321.155732 | 161.081504 | | | 2 |
| 24 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |

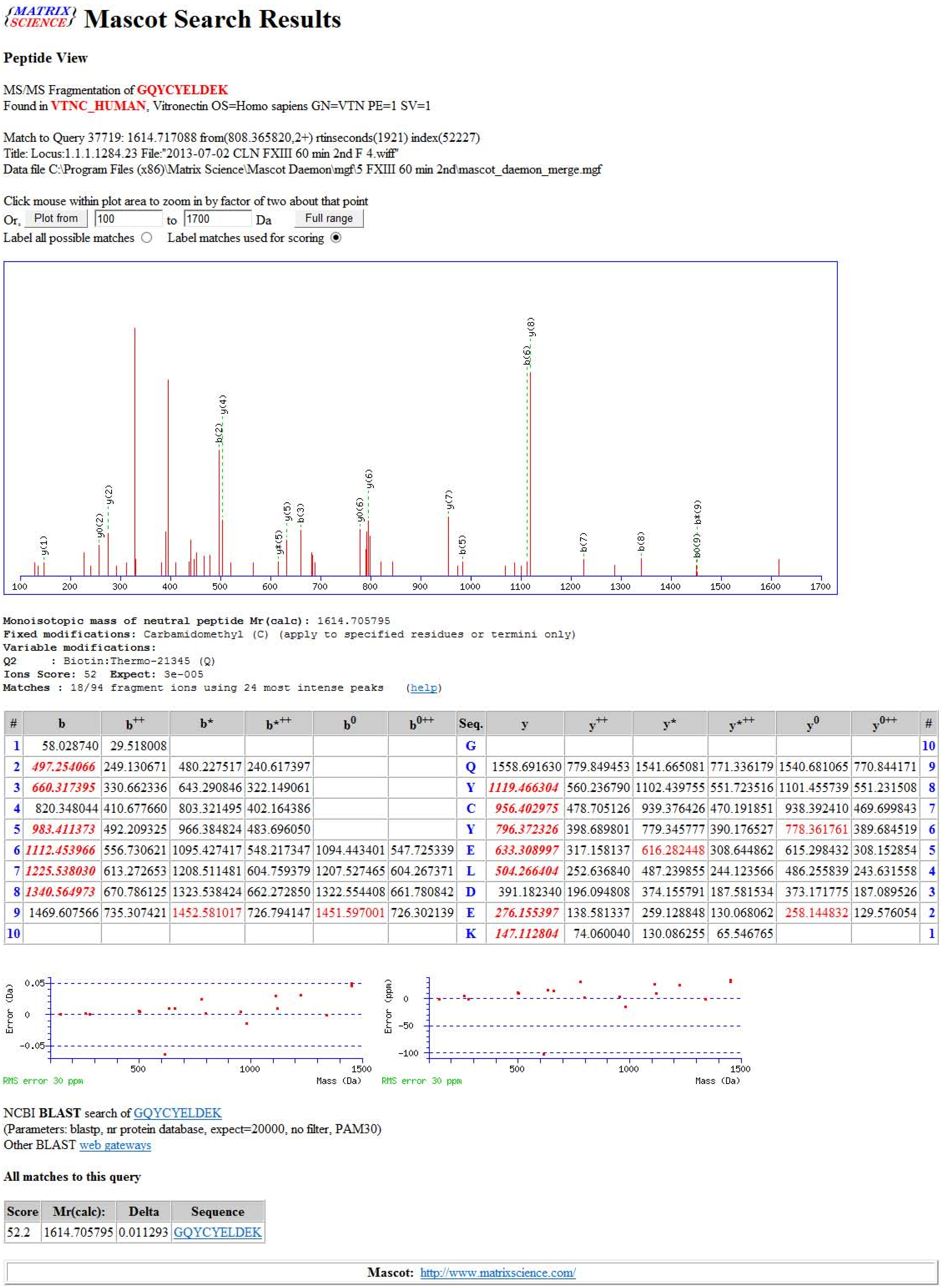




NCBI **BLAST** search of TDGCQHFCLPGQESYTCSCAQGYR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 99.1 | 3192.298050 | 0.029082 | TDGCQHFCLPGQESYTCSCAQGYR |
| 38.3 | 3192.298050 | 0.029082 | TDGCQHFCLPGQESYTCSCAQGYR |



# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GQYCYELDEK**
Found in **VTNC_HUMAN**, Vitronectin OS=Homo sapiens GN=VTN PE=1 SV=1

Match to Query 37719: 1614.717088 from(808.365820,2+) rtinseconds(1921) index(52227)
Title: Locus:1.1.1.1284.23 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

**Monoisotopic mass of neutral peptide Mr(calc):** 1614.705795
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q2** : Biotin:Thermo-21345 (Q)
**Ions Score:** 52 **Expect:** 3e-005
**Matches :** 18/94 fragment ions using 24 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 10 |
| 2 | ***497.254066*** | 249.130671 | 480.227517 | 240.617397 | | | Q | 1558.691630 | 779.849453 | 1541.665081 | 771.336179 | 1540.681065 | 770.844171 | 9 |
| 3 | ***660.317395*** | 330.662336 | 643.290846 | 322.149061 | | | Y | ***1119.466304*** | 560.236790 | 1102.439755 | 551.723516 | 1101.455739 | 551.231508 | 8 |
| 4 | 820.348044 | 410.677660 | 803.321495 | 402.164386 | | | C | ***956.402975*** | 478.705126 | 939.376426 | 470.191851 | 938.392410 | 469.699843 | 7 |
| 5 | ***983.411373*** | 492.209325 | 966.384824 | 483.696050 | | | Y | ***796.372326*** | 398.689801 | 779.345777 | 390.176527 | 778.361761 | 389.684519 | 6 |
| 6 | ***1112.453966*** | 556.730621 | 1095.427417 | 548.217347 | 1094.443401 | 547.725339 | E | ***633.308997*** | 317.158137 | 616.282448 | 308.644862 | 615.298432 | 308.152854 | 5 |
| 7 | ***1225.538030*** | 613.272653 | 1208.511481 | 604.759379 | 1207.527465 | 604.267371 | L | ***504.266404*** | 252.636840 | 487.239855 | 244.123566 | 486.255839 | 243.631558 | 4 |
| 8 | ***1340.564973*** | 670.786125 | 1323.538424 | 662.272850 | 1322.554408 | 661.780842 | D | 391.182340 | 196.094808 | 374.155791 | 187.581534 | 373.171775 | 187.089526 | 3 |
| 9 | 1469.607566 | 735.307421 | 1452.581017 | 726.794147 | 1451.597001 | 726.302139 | E | ***276.155397*** | 138.581337 | 259.128848 | 130.068062 | 258.144832 | 129.576054 | 2 |
| 10 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |

NCBI **BLAST** search of GQYCYELDEK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.2 | 1614.705795 | 0.011293 | GQYCYELDEK |

**Mascot:** http://www.matrixscience.com/

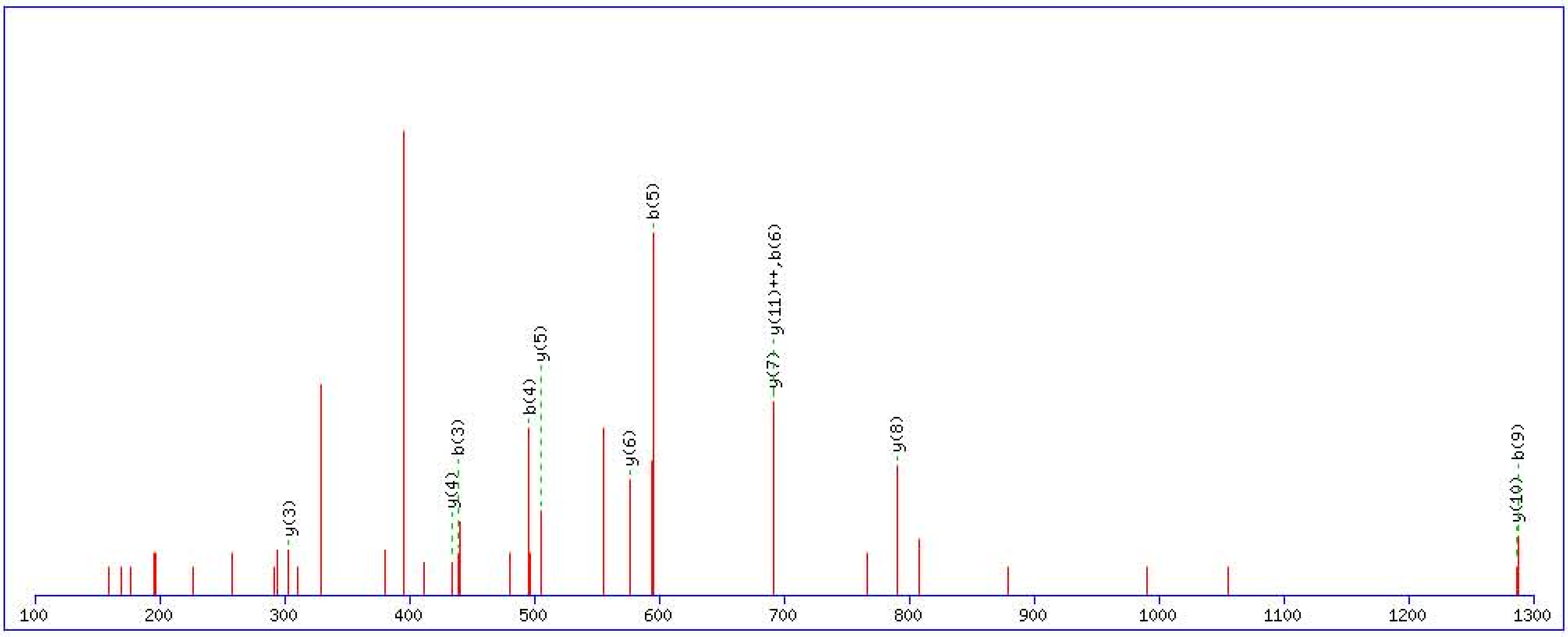
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **DWHGVPGQVDAAMAGR**
Found in **VTNC_HUMAN**, Vitronectin OS=Homo sapiens GN=VTN PE=1 SV=1

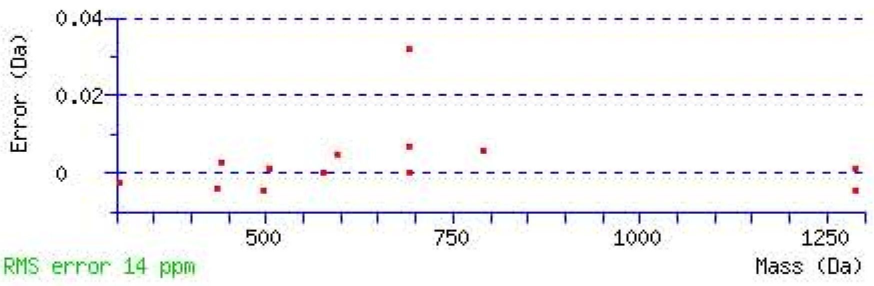
Match to Query 46051: 1976.941452 from(659.987760,3+) rtinseconds(2165) index(37424)
Title: Locus:1.1.1.3173.14 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

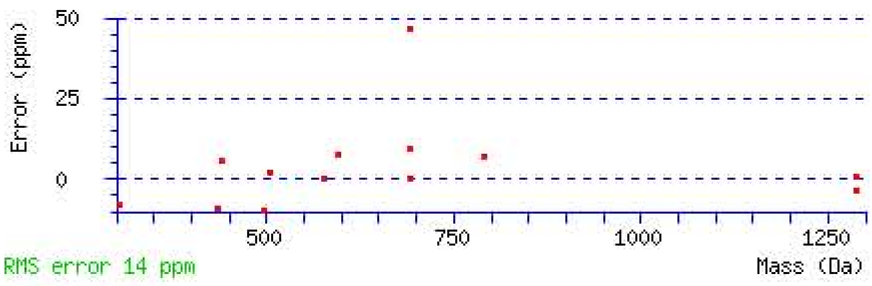
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1300 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1976.934937
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q8      : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.021
Matches : 13/154 fragment ions using 36 most intense peaks   (help)
```

| # | b | b$^{++}$ | b* | b*$^{++}$ | b$^{0}$ | b$^{0++}$ | Seq. | y | y$^{++}$ | y* | y*$^{++}$ | y$^{0}$ | y$^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 116.034219 | 58.520748 | | | 98.023654 | 49.515465 | D | | | | | | | 16 |
| 2 | 302.113532 | 151.560404 | | | 284.102967 | 142.555122 | W | 1862.915257 | 931.961266 | 1845.888708 | 923.447992 | 1844.904692 | 922.955984 | 15 |
| 3 | ***439.172444*** | 220.089860 | | | 421.161879 | 211.084577 | H | 1676.835944 | 838.921610 | 1659.809395 | 830.408336 | 1658.825379 | 829.916327 | 14 |
| 4 | ***496.193908*** | 248.600592 | | | 478.183343 | 239.595309 | G | 1539.777032 | 770.392154 | 1522.750483 | 761.878880 | 1521.766467 | 761.386871 | 13 |
| 5 | ***595.262322*** | 298.134799 | | | 577.251757 | 289.129517 | V | 1482.755568 | 741.881422 | 1465.729019 | 733.368148 | 1464.745003 | 732.876140 | 12 |
| 6 | ***692.315086*** | 346.661181 | | | 674.304521 | 337.655899 | P | 1383.687154 | 692.347215 | 1366.660605 | 683.833941 | 1365.676589 | 683.341932 | 11 |
| 7 | 749.336550 | 375.171913 | | | 731.325985 | 366.166631 | G | ***1286.634390*** | 643.820833 | 1269.607841 | 635.307559 | 1268.623825 | 634.815550 | 10 |
| 8 | 1188.561876 | 594.784576 | 1171.535327 | 586.271302 | 1170.551311 | 585.779293 | Q | 1229.612926 | 615.310101 | 1212.586377 | 606.796827 | 1211.602361 | 606.304819 | 9 |
| 9 | ***1287.630290*** | 644.318783 | 1270.603741 | 635.805509 | 1269.619725 | 635.313501 | V | ***790.387600*** | 395.697438 | 773.361051 | 387.184164 | 772.377035 | 386.692156 | 8 |
| 10 | 1402.657233 | 701.832255 | 1385.630684 | 693.318980 | 1384.646668 | 692.826972 | D | ***691.319186*** | 346.163231 | 674.292637 | 337.649956 | 673.308621 | 337.157948 | 7 |
| 11 | 1473.694347 | 737.350812 | 1456.667798 | 728.837537 | 1455.683782 | 728.345529 | A | ***576.292243*** | 288.649759 | 559.265694 | 280.136485 | | | 6 |
| 12 | 1544.731461 | 772.869369 | 1527.704912 | 764.356094 | 1526.720896 | 763.864086 | A | ***505.255129*** | 253.131202 | 488.228580 | 244.617928 | | | 5 |
| 13 | 1675.771946 | 838.389611 | 1658.745397 | 829.876337 | 1657.761381 | 829.384329 | M | ***434.218015*** | 217.612645 | 417.191466 | 209.099371 | | | 4 |
| 14 | 1746.809060 | 873.908168 | 1729.782511 | 865.394894 | 1728.798495 | 864.902886 | A | ***303.177530*** | 152.092403 | 286.150981 | 143.579128 | | | 3 |
| 15 | 1803.830524 | 902.418900 | 1786.803975 | 893.905626 | 1785.819959 | 893.413617 | G | 232.140416 | 116.573846 | 215.113867 | 108.060571 | | | 2 |
| 16 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of DWHGVPGQVDAAMAGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 27.6 | 1976.934937 | 0.006515 | DWHGVPGQVDAAMAGR |
| 9.3 | 1976.918793 | 0.022659 | DDGLQYRPDVKDASDQR |
| 1.7 | 1976.959854 | -0.018402 | HLTSRHQEAEMAQNAVR |
| 1.4 | 1976.918808 | 0.022644 | GSPGSDGPKGEKGDPGPEGPR |

**Mascot:** http://www.matrixscience.com/

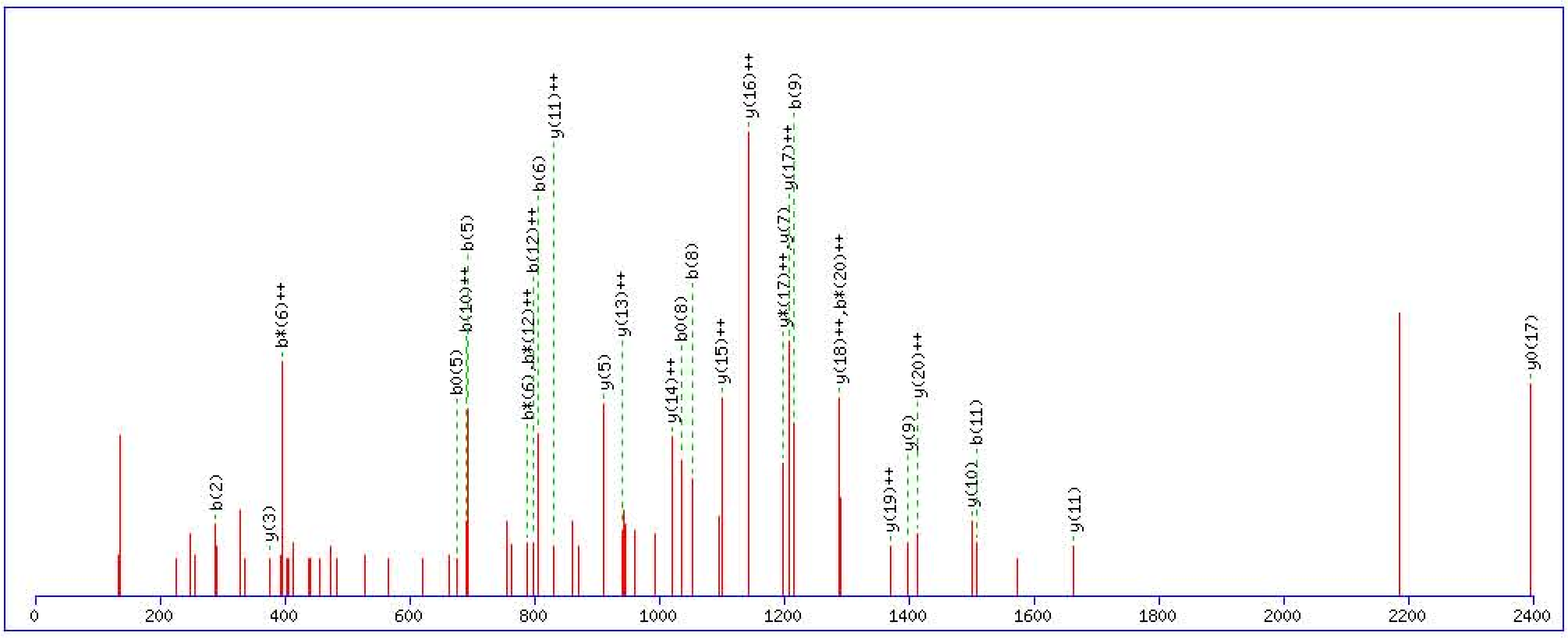
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **CQCDELCSYYQSCCTDYTAECKPQVTR**
Found in **VTNC_HUMAN**, Vitronectin OS=Homo sapiens GN=VTN PE=1 SV=1

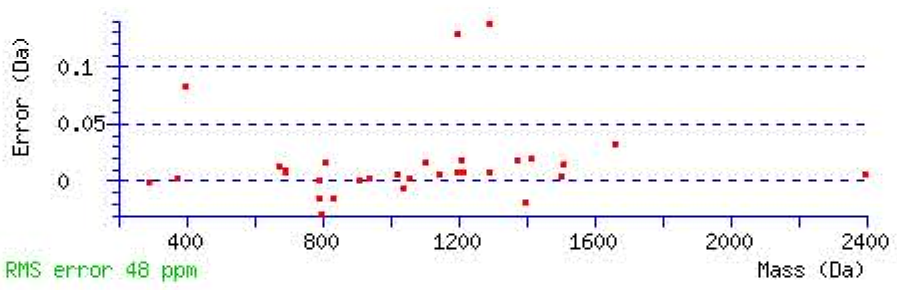
Match to Query 68758: 3792.533416 from(949.140630,4+) rtinseconds(1980) index(52726)
Title: Locus:1.1.1.1304.26 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

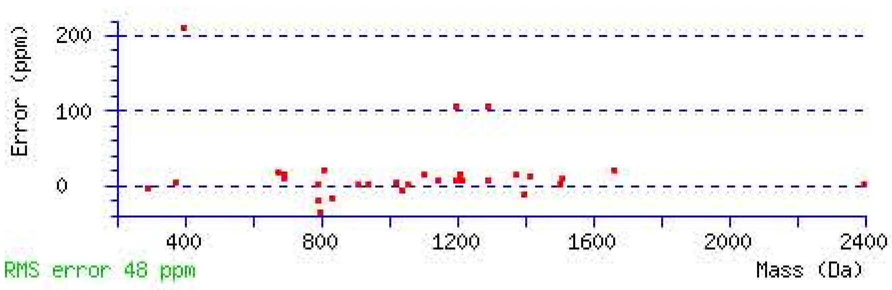
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 3792.511536
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q24    : Biotin:Thermo-21345 (Q)
Ions Score: 34  Expect: 0.00041
Matches : 31/302 fragment ions using 64 most intense peaks   (help)
```

| # | b | $b^{++}$ | b* | $b^{*++}$ | $b^0$ | $b^{0++}$ | Seq. | y | $y^{++}$ | y* | $y^{*++}$ | $y^0$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 161.037925 | 81.022600 | | | | | C | | | | | | | 27 |
| 2 | ***289.096503*** | 145.051890 | 272.069954 | 136.538615 | | | Q | 3633.488150 | 1817.247713 | 3616.461601 | 1808.734438 | 3615.477585 | 1808.242431 | 26 |
| 3 | 449.127152 | 225.067214 | 432.100603 | 216.553940 | | | C | 3505.429572 | 1753.218424 | 3488.403023 | 1744.705149 | 3487.419007 | 1744.213141 | 25 |
| 4 | 564.154095 | 282.580686 | 547.127546 | 274.067411 | 546.143530 | 273.575403 | D | 3345.398923 | 1673.203099 | 3328.372374 | 1664.689825 | 3327.388358 | 1664.197817 | 24 |
| 5 | ***693.196688*** | 347.101982 | 676.170139 | 338.588708 | 675.186123 | 338.096700 | E | 3230.371980 | 1615.689628 | 3213.345431 | 1607.176353 | 3212.361415 | 1606.684345 | 23 |
| 6 | ***806.280752*** | 403.644014 | 789.254203 | 395.130740 | 788.270187 | 394.638732 | L | 3101.329387 | 1551.168331 | 3084.302838 | 1542.655057 | 3083.318822 | 1542.163049 | 22 |
| 7 | 966.311401 | 483.659339 | 949.284852 | 475.146064 | 948.300836 | 474.654056 | C | 2988.245323 | 1494.626299 | 2971.218774 | 1486.113025 | 2970.234758 | 1485.621017 | 21 |
| 8 | ***1053.343429*** | 527.175353 | 1036.316880 | 518.662078 | 1035.332864 | 518.170070 | S | 2828.214674 | 1414.610975 | 2811.188125 | 1406.097700 | 2810.204109 | 1405.605692 | 20 |
| 9 | ***1216.406758*** | 608.707017 | 1199.380209 | 600.193743 | 1198.396193 | 599.701735 | Y | 2741.182646 | 1371.094961 | 2724.156097 | 1362.581686 | 2723.172081 | 1362.089678 | 19 |
| 10 | 1379.470087 | **690.238682** | 1362.443538 | 681.725407 | 1361.459522 | 681.233399 | Y | 2578.119317 | 1289.563296 | 2561.092768 | 1281.050022 | 2560.108752 | 1280.558014 | 18 |
| 11 | ***1507.528665*** | 754.267971 | 1490.502116 | 745.754696 | 1489.518100 | 745.262688 | Q | 2415.055988 | 1208.031632 | 2398.029439 | 1199.518357 | 2397.045423 | 1199.026349 | 17 |
| 12 | 1594.560693 | **797.783985** | 1577.534144 | 789.270710 | 1576.550128 | 788.778702 | S | 2286.997410 | 1144.002343 | 2269.970861 | 1135.489068 | 2268.986845 | 1134.997060 | 16 |
| 13 | 1754.591342 | 877.799309 | 1737.564793 | 869.286035 | 1736.580777 | 868.794027 | C | 2199.965382 | 1100.486329 | 2182.938833 | 1091.973054 | 2181.954817 | 1091.481046 | 15 |
| 14 | 1914.621991 | 957.814634 | 1897.595442 | 949.301359 | 1896.611426 | 948.809351 | C | 2039.934733 | 1020.471005 | 2022.908184 | 1011.957730 | 2021.924168 | 1011.465722 | 14 |
| 15 | 2015.669670 | 1008.338473 | 1998.643121 | 999.825199 | 1997.659105 | 999.333191 | T | 1879.904084 | 940.455680 | 1862.877535 | 931.942406 | 1861.893519 | 931.450398 | 13 |
| 16 | 2130.696613 | 1065.851945 | 2113.670064 | 1057.338670 | 2112.686048 | 1056.846662 | D | 1778.856405 | 889.931841 | 1761.829856 | 881.418566 | 1760.845840 | 880.926558 | 12 |
| 17 | 2293.759942 | 1147.383609 | 2276.733393 | 1138.870335 | 2275.749377 | 1138.378327 | Y | ***1663.829462*** | 832.418369 | 1646.802913 | 823.905095 | 1645.818897 | 823.413086 | 11 |
| 18 | 2394.807621 | 1197.907449 | 2377.781072 | 1189.394174 | 2376.797056 | 1188.902166 | T | ***1500.766133*** | 750.886704 | 1483.739584 | 742.373430 | 1482.755568 | 741.881422 | 10 |
| 19 | 2465.844735 | 1233.426006 | 2448.818186 | 1224.912731 | 2447.834170 | 1224.420723 | A | ***1399.718454*** | 700.362865 | 1382.691905 | 691.849591 | 1381.707889 | 691.357583 | 9 |
| 20 | 2594.887328 | 1297.947302 | 2577.860779 | 1289.434028 | 2576.876763 | 1288.942020 | E | 1328.681340 | 664.844308 | 1311.654791 | 656.331033 | 1310.670775 | 655.839025 | 8 |
| 21 | 2754.917977 | 1377.962627 | 2737.891428 | 1369.449352 | 2736.907412 | 1368.957344 | C | ***1199.638747*** | 600.323011 | 1182.612198 | 591.809737 | 1181.628182 | 591.317729 | 7 |
| 22 | 2883.012940 | 1442.010108 | 2865.986391 | 1433.496834 | 2865.002375 | 1433.004826 | K | 1039.608098 | 520.307687 | 1022.581549 | 511.794412 | 1021.597533 | 511.302404 | 6 |
| 23 | 2980.065704 | 1490.536490 | 2963.039155 | 1482.023216 | 2962.055139 | 1481.531208 | P | ***911.513135*** | 456.260205 | 894.486586 | 447.746931 | 893.502570 | 447.254923 | 5 |
| 24 | 3419.291030 | 1710.149153 | 3402.264481 | 1701.635879 | 3401.280465 | 1701.143871 | Q | 814.460371 | 407.733823 | 797.433822 | 399.220549 | 796.449806 | 398.728541 | 4 |
| 25 | 3518.359444 | 1759.683360 | 3501.332895 | 1751.170086 | 3500.348879 | 1750.678078 | V | ***375.235045*** | 188.121160 | 358.208496 | 179.607886 | 357.224480 | 179.115878 | 3 |
| 26 | 3619.407123 | 1810.207200 | 3602.380574 | 1801.693925 | 3601.396558 | 1801.201917 | T | 276.166631 | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 27 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of CQCDELCSYYQSCCTDYTAECKPQVTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 33.9 | 3792.511536 | 0.021880 | CQCDELCSYYQSCCTDYTAECKPQVTR |
| 4.8 | 3792.511536 | 0.021880 | CQCDELCSYYQSCCTDYTAECKPQVTR |

**Mascot:** http://www.matrixscience.com/

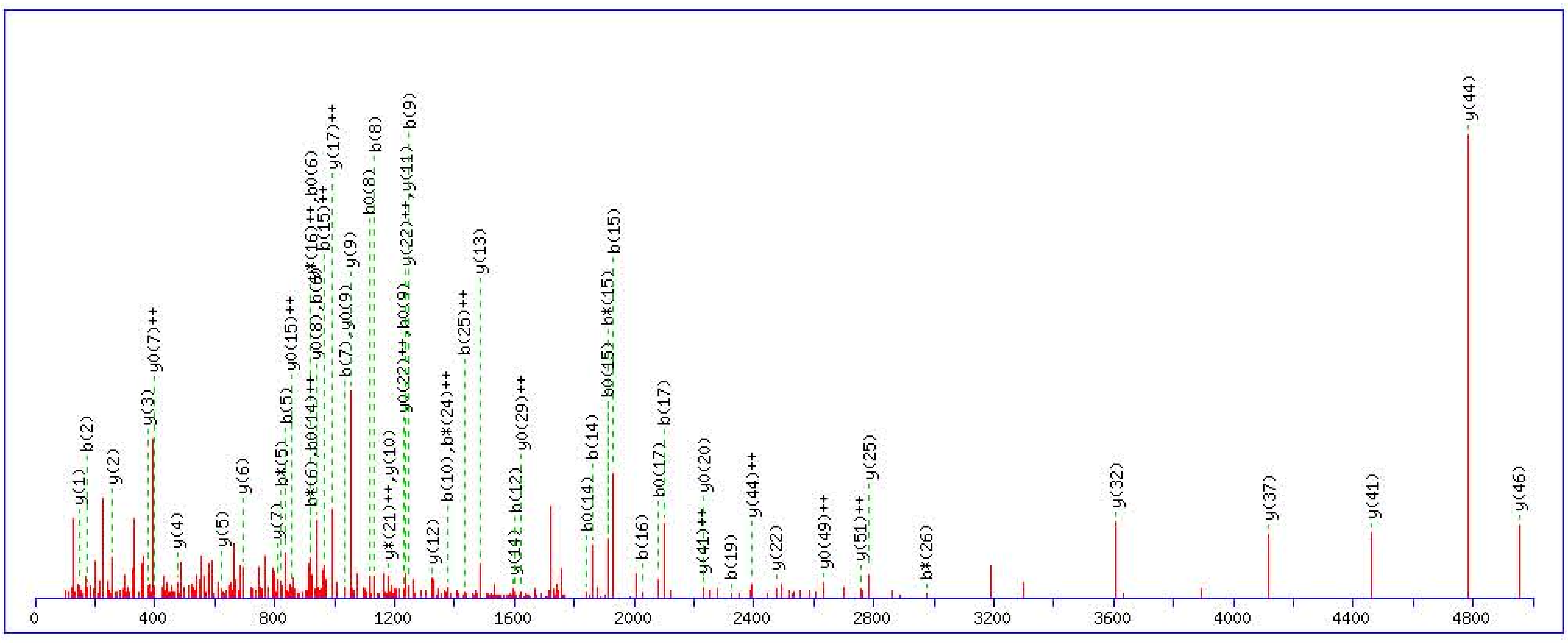
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GNPEQTPVLKPEEEAPAPEVGASKPEGIDSRPETLHPGRPQPPAEEELCSGKPFDAFTDLK**
Found in **VTNC_HUMAN**, Vitronectin OS=Homo sapiens GN=VTN PE=1 SV=1

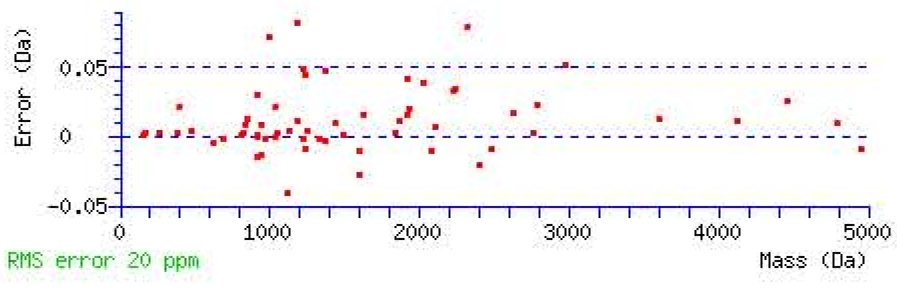
Match to Query 77390: 6883.432352 from(861.436320,8+) rtinseconds(2117) index(53682)
Title: Locus:1.1.1.1352.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 4.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

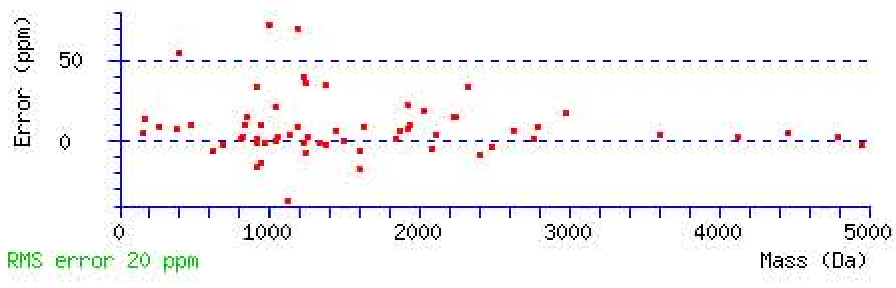
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 5000 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 6883.374893
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q5      : Biotin:Thermo-21345 (Q)
Ions Score: 35  Expect: 0.0034
Matches : 62/708 fragment ions using 195 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 61 |
| 2 | ***172.071667*** | 86.539471 | 155.045118 | 78.026197 | | | N | 6827.360757 | 3414.184017 | 6810.334208 | 3405.670742 | 6809.350192 | 3405.178734 | 60 |
| 3 | 269.124431 | 135.065854 | 252.097882 | 126.552579 | | | P | 6713.317830 | 3357.162553 | 6696.291281 | 3348.649279 | 6695.307265 | 3348.157271 | 59 |
| 4 | 398.167024 | 199.587150 | 381.140475 | 191.073876 | 380.156459 | 190.581868 | E | 6616.265066 | 3308.636171 | 6599.238517 | 3300.122897 | 6598.254501 | 3299.630889 | 58 |
| 5 | ***837.392350*** | 419.199813 | 820.365801 | 410.686539 | 819.381785 | 410.194531 | Q | 6487.222473 | 3244.114875 | 6470.195924 | 3235.601600 | 6469.211908 | 3235.109592 | 57 |
| 6 | ***938.440029*** | 469.723653 | 921.413480 | 461.210378 | 920.429464 | 460.718370 | T | 6047.997147 | 3024.502212 | 6030.970598 | 3015.988937 | 6029.986582 | 3015.496929 | 56 |
| 7 | ***1035.492793*** | 518.250035 | 1018.466244 | 509.736760 | 1017.482228 | 509.244752 | P | 5946.949468 | 2973.978372 | 5929.922919 | 2965.465098 | 5928.938903 | 2964.973090 | 55 |
| 8 | ***1134.561207*** | 567.784242 | 1117.534658 | 559.270967 | 1116.550642 | 558.778959 | V | 5849.896704 | 2925.451990 | 5832.870155 | 2916.938716 | 5831.886139 | 2916.446708 | 54 |
| 9 | ***1247.645271*** | 624.326274 | 1230.618722 | 615.812999 | 1229.634706 | 615.320991 | L | 5750.828290 | 2875.917783 | 5733.801741 | 2867.404509 | 5732.817725 | 2866.912501 | 53 |
| 10 | ***1375.740234*** | 688.373755 | 1358.713685 | 679.860481 | 1357.729669 | 679.368473 | K | 5637.744226 | 2819.375751 | 5620.717677 | 2810.862477 | 5619.733661 | 2810.370469 | 52 |
| 11 | 1472.792998 | 736.900137 | 1455.766449 | 728.386863 | 1454.782433 | 727.894855 | P | 5509.649263 | 2755.328270 | 5492.622714 | 2746.814995 | 5491.638698 | 2746.322987 | 51 |
| 12 | ***1601.835591*** | 801.421434 | 1584.809042 | 792.908159 | 1583.825026 | 792.416151 | E | 5412.596499 | 2706.801888 | 5395.569950 | 2698.288613 | 5394.585934 | 2697.796605 | 50 |
| 13 | 1730.878184 | 865.942730 | 1713.851635 | 857.429456 | 1712.867619 | 856.937448 | E | 5283.553906 | 2642.280591 | 5266.527357 | 2633.767317 | 5265.543341 | 2633.275309 | 49 |
| 14 | ***1859.920777*** | 930.464027 | 1842.894228 | 921.950752 | 1841.910212 | 921.458744 | E | 5154.511313 | 2577.759295 | 5137.484764 | 2569.246020 | 5136.500748 | 2568.754012 | 48 |
| 15 | ***1930.957891*** | 965.982584 | 1913.931342 | 957.469309 | 1912.947326 | 956.977301 | A | 5025.468720 | 2513.237998 | 5008.442171 | 2504.724724 | 5007.458155 | 2504.232716 | 47 |
| 16 | ***2028.010655*** | 1014.508966 | 2010.984106 | 1005.995691 | 2010.000090 | 1005.503683 | P | ***4954.431606*** | 2477.719441 | 4937.405057 | 2469.206167 | 4936.421041 | 2468.714159 | 46 |
| 17 | ***2099.047769*** | 1050.027523 | 2082.021220 | 1041.514248 | 2081.037204 | 1041.022240 | A | 4857.378842 | 2429.193059 | 4840.352293 | 2420.679785 | 4839.368277 | 2420.187777 | 45 |
| 18 | 2196.100533 | 1098.553905 | 2179.073984 | 1090.040630 | 2178.089968 | 1089.548622 | P | ***4786.341728*** | 2393.674502 | 4769.315179 | 2385.161228 | 4768.331163 | 2384.669220 | 44 |
| 19 | ***2325.143126*** | 1163.075201 | 2308.116577 | 1154.561927 | 2307.132561 | 1154.069919 | E | 4689.288964 | 2345.148120 | 4672.262415 | 2336.634846 | 4671.278399 | 2336.142838 | 43 |
| 20 | 2424.211540 | 1212.609408 | 2407.184991 | 1204.096134 | 2406.200975 | 1203.604126 | V | 4560.246371 | 2280.626824 | 4543.219822 | 2272.113549 | 4542.235806 | 2271.621541 | 42 |
| 21 | 2481.233004 | 1241.120140 | 2464.206455 | 1232.606865 | 2463.222439 | 1232.114858 | G | ***4461.177957*** | 2231.092617 | 4444.151408 | 2222.579342 | 4443.167392 | 2222.087334 | 41 |
| 22 | 2552.270118 | 1276.638697 | 2535.243569 | 1268.125423 | 2534.259553 | 1267.633415 | A | 4404.156493 | 2202.581885 | 4387.129944 | 2194.068610 | 4386.145928 | 2193.576602 | 40 |
| 23 | 2639.302146 | 1320.154711 | 2622.275597 | 1311.641437 | 2621.291581 | 1311.149429 | S | 4333.119379 | 2167.063328 | 4316.092830 | 2158.550053 | 4315.108814 | 2158.058045 | 39 |
| 24 | 2767.397109 | 1384.202193 | 2750.370560 | 1375.688918 | 2749.386544 | 1375.196910 | K | 4246.087351 | 2123.547314 | 4229.060802 | 2115.034039 | 4228.076786 | 2114.542031 | 38 |
| 25 | 2864.449873 | 1432.728575 | 2847.423324 | 1424.215300 | 2846.439308 | 1423.723292 | P | ***4117.992388*** | 2059.499832 | 4100.965839 | 2050.986558 | 4099.981823 | 2050.494550 | 37 |
| 26 | 2993.492466 | 1497.249871 | 2976.465917 | 1488.736597 | 2975.481901 | 1488.244589 | E | 4020.939624 | 2010.973450 | 4003.913075 | 2002.460176 | 4002.929059 | 2001.968168 | 36 |
| 27 | 3050.513930 | 1525.760603 | 3033.487381 | 1517.247329 | 3032.503365 | 1516.755321 | G | 3891.897031 | 1946.452154 | 3874.870482 | 1937.938879 | 3873.886466 | 1937.446871 | 35 |
| 28 | 3163.597994 | 1582.302635 | 3146.571445 | 1573.789361 | 3145.587429 | 1573.297353 | I | 3834.875567 | 1917.941422 | 3817.849018 | 1909.428147 | 3816.865002 | 1908.936139 | 34 |
| 29 | 3278.624937 | 1639.816107 | 3261.598388 | 1631.302832 | 3260.614372 | 1630.810824 | D | 3721.791503 | 1861.399390 | 3704.764954 | 1852.886115 | 3703.780938 | 1852.394107 | 33 |
| 30 | 3365.656965 | 1683.332121 | 3348.630416 | 1674.818846 | 3347.646400 | 1674.326838 | S | ***3606.764560*** | 1803.885918 | 3589.738011 | 1795.372644 | 3588.753995 | 1794.880636 | 32 |
| 31 | 3521.758076 | 1761.382676 | 3504.731527 | 1752.869402 | 3503.747511 | 1752.377394 | R | 3519.732532 | 1760.369904 | 3502.705983 | 1751.856630 | 3501.721967 | 1751.364622 | 31 |
| 32 | 3618.810840 | 1809.909058 | 3601.784291 | 1801.395784 | 3600.800275 | 1800.903776 | P | 3363.631421 | 1682.319349 | 3346.604872 | 1673.806074 | 3345.620856 | 1673.314066 | 30 |
| 33 | 3747.853433 | 1874.430355 | 3730.826884 | 1865.917080 | 3729.842868 | 1865.425072 | E | 3266.578657 | 1633.792967 | 3249.552108 | 1625.279692 | 3248.568092 | 1624.787684 | 29 |
| 34 | 3848.901112 | 1924.954194 | 3831.874563 | 1916.440920 | 3830.890547 | 1915.948912 | T | 3137.536064 | 1569.271670 | 3120.509515 | 1560.758396 | 3119.525499 | 1560.266388 | 28 |
| 35 | 3961.985176 | 1981.496226 | 3944.958627 | 1972.982952 | 3943.974611 | 1972.490944 | L | 3036.488385 | 1518.747831 | 3019.461836 | 1510.234556 | 3018.477820 | 1509.742548 | 27 |
| 36 | 4099.044088 | 2050.025682 | 4082.017539 | 2041.512408 | 4081.033523 | 2041.020400 | H | 2923.404321 | 1462.205799 | 2906.377772 | 1453.692524 | 2905.393756 | 1453.200516 | 26 |
| 37 | 4196.096852 | 2098.552064 | 4179.070303 | 2090.038790 | 4178.086287 | 2089.546782 | P | ***2786.345409*** | 1393.676343 | 2769.318860 | 1385.163068 | 2768.334844 | 1384.671060 | 25 |
| 38 | 4253.118316 | 2127.062796 | 4236.091767 | 2118.549522 | 4235.107751 | 2118.057514 | G | 2689.292645 | 1345.149961 | 2672.266096 | 1336.636686 | 2671.282080 | 1336.144678 | 24 |
| 39 | 4409.219427 | 2205.113352 | 4392.192878 | 2196.600077 | 4391.208862 | 2196.108069 | R | 2632.271181 | 1316.639229 | 2615.244632 | 1308.125954 | 2614.260616 | 1307.633946 | 23 |
| 40 | 4506.272191 | 2253.639734 | 4489.245642 | 2245.126459 | 4488.261626 | 2244.634451 | P | ***2476.170070*** | 1238.588673 | 2459.143521 | 1230.075399 | 2458.159505 | 1229.583391 | 22 |
| 41 | 4634.330769 | 2317.669023 | 4617.304220 | 2309.155748 | 4616.320204 | 2308.663740 | Q | 2379.117306 | 1190.062291 | 2362.090757 | 1181.549017 | 2361.106741 | 1181.057009 | 21 |
| 42 | 4731.383533 | 2366.195405 | 4714.356984 | 2357.682130 | 4713.372968 | 2357.190122 | P | 2251.058728 | 1126.033002 | 2234.032179 | 1117.519728 | 2233.048163 | 1117.027720 | 20 |
| 43 | 4828.436297 | 2414.721787 | 4811.409748 | 2406.208512 | 4810.425732 | 2405.716504 | P | 2154.005964 | 1077.506620 | 2136.979415 | 1068.993346 | 2135.995399 | 1068.501338 | 19 |
| 44 | 4899.473411 | 2450.240344 | 4882.446862 | 2441.727069 | 4881.462846 | 2441.235061 | A | 2056.953200 | 1028.980238 | 2039.926651 | 1020.466964 | 2038.942635 | 1019.974956 | 18 |
| 45 | 5028.516004 | 2514.761640 | 5011.489455 | 2506.248366 | 5010.505439 | 2505.756358 | E | 1985.916086 | 993.461681 | 1968.889537 | 984.948407 | 1967.905521 | 984.456399 | 17 |
| 46 | 5157.558597 | 2579.282937 | 5140.532048 | 2570.769662 | 5139.548032 | 2570.277654 | E | 1856.873493 | 928.940385 | 1839.846944 | 920.427110 | 1838.862928 | 919.935102 | 16 |
| 47 | 5286.601190 | 2643.804233 | 5269.574641 | 2635.290959 | 5268.590625 | 2634.798951 | E | 1727.830900 | 864.419088 | 1710.804351 | 855.905814 | 1709.820335 | 855.413806 | 15 |
| 48 | 5399.685254 | 2700.346265 | 5382.658705 | 2691.832991 | 5381.674689 | 2691.340983 | L | ***1598.788307*** | 799.897792 | 1581.761758 | 791.384517 | 1580.777742 | 790.892509 | 14 |
| 49 | 5559.715903 | 2780.361590 | 5542.689354 | 2771.848315 | 5541.705338 | 2771.356307 | C | ***1485.704243*** | 743.355760 | 1468.677694 | 734.842485 | 1467.693678 | 734.350477 | 13 |
| 50 | 5646.747931 | 2823.877604 | 5629.721382 | 2815.364329 | 5628.737366 | 2814.872321 | S | ***1325.673594*** | 663.340435 | 1308.647045 | 654.827161 | 1307.663029 | 654.335153 | 12 |
| 51 | 5703.769395 | 2852.388336 | 5686.742846 | 2843.875061 | 5685.758830 | 2843.383053 | G | ***1238.641566*** | 619.824421 | 1221.615017 | 611.311147 | 1220.631001 | 610.819139 | 11 |
| 52 | 5831.864358 | 2916.435817 | 5814.837809 | 2907.922543 | 5813.853793 | 2907.430535 | K | ***1181.620102*** | 591.313689 | 1164.593553 | 582.800415 | 1163.609537 | 582.308407 | 10 |
| 53 | 5928.917122 | 2964.962199 | 5911.890573 | 2956.448925 | 5910.906557 | 2955.956917 | P | ***1053.525139*** | 527.266208 | 1036.498590 | 518.752933 | 1035.514574 | 518.260925 | 9 |
| 54 | 6075.985536 | 3038.496406 | 6058.958987 | 3029.983132 | 6057.974971 | 3029.491124 | F | 956.472375 | 478.739826 | 939.445826 | 470.226551 | 938.461810 | 469.734543 | 8 |
| 55 | 6191.012479 | 3096.009878 | 6173.985930 | 3087.496603 | 6173.001914 | 3087.004595 | D | ***809.403961*** | 405.205619 | 792.377412 | 396.692344 | 791.393396 | 396.200336 | 7 |
| 56 | 6262.049593 | 3131.528435 | 6245.023044 | 3123.015160 | 6244.039028 | 3122.523152 | A | ***694.377018*** | 347.692147 | 677.350469 | 339.178873 | 676.366453 | 338.686865 | 6 |
| 57 | 6409.118007 | 3205.062642 | 6392.091458 | 3196.549367 | 6391.107442 | 3196.057359 | F | ***623.339904*** | 312.173590 | 606.313355 | 303.660316 | 605.329339 | 303.168308 | 5 |
| 58 | 6510.165686 | 3255.586481 | 6493.139137 | 3247.073207 | 6492.155121 | 3246.581199 | T | ***476.271490*** | 238.639383 | 459.244941 | 230.126109 | 458.260925 | 229.634101 | 4 |
| 59 | 6625.192629 | 3313.099953 | 6608.166080 | 3304.586678 | 6607.182064 | 3304.094670 | D | ***375.223811*** | 188.115543 | 358.197262 | 179.602269 | 357.213246 | 179.110261 | 3 |
| 60 | 6738.276693 | 3369.641985 | 6721.250144 | 3361.128710 | 6720.266128 | 3360.636702 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 61 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546766 | | | 1 |





NCBI **BLAST** search of GNPEQTPVLKPEEEAPAPEVGASKPEGIDSRPETLHPGRPQPPAEEELCSGKPFDAFTDLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 35.4 | 6883.374893 | 0.057459 | GNPEQTPVLKPEEEAPAPEVGASKPEGIDSRPETLHPGRPQPPAEEELCSGKPFDAFTDLK |

**Mascot:** http://www.matrixscience.com/

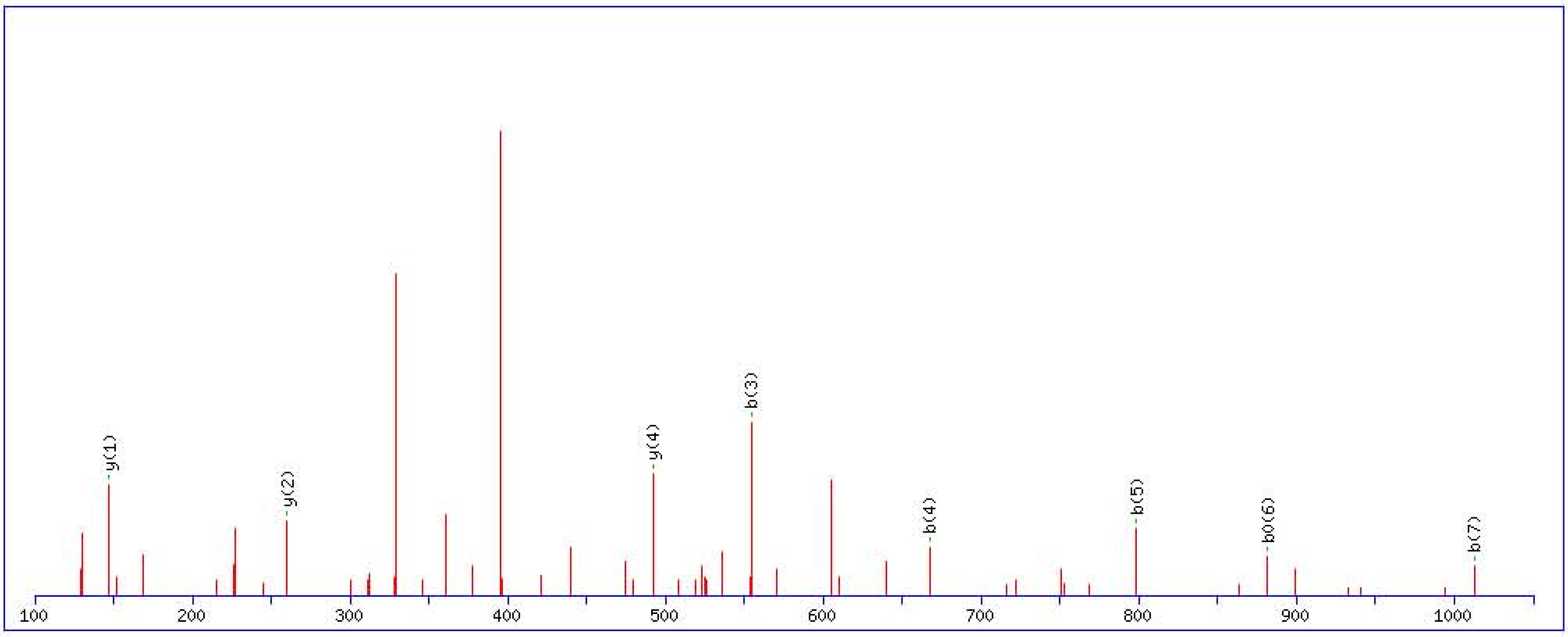
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **GGQIMTLK**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

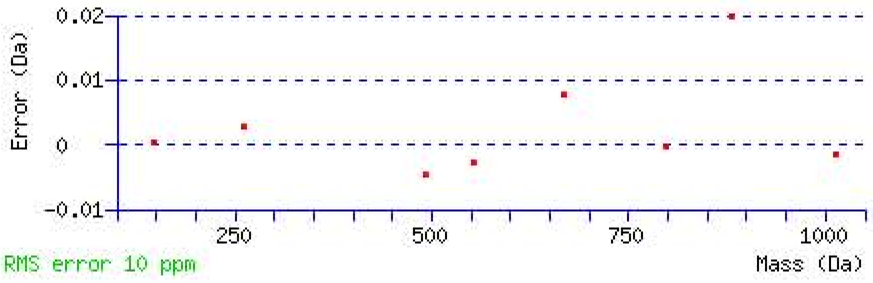
Match to Query 21859: 1157.628448 from(579.821500,2+) rtinseconds(1906) index(35717)
Title: Locus:1.1.1.3083.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

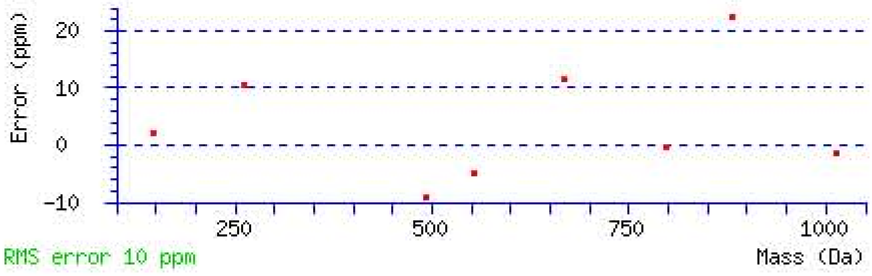
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1050 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1157.630066
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
Q3 : Biotin:Thermo-21345 (Q)
**Ions Score:** 33 **Expect:** 0.015
**Matches :** 8/66 fragment ions using 9 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 8 |
| 2 | 115.050204 | 58.028740 | | | | | G | 1101.615886 | 551.311581 | 1084.589337 | 542.798307 | 1083.605321 | 542.306299 | 7 |
| 3 | ***554.275530*** | 277.641403 | 537.248981 | 269.128129 | | | Q | 1044.594422 | 522.800849 | 1027.567873 | 514.287575 | 1026.583857 | 513.795567 | 6 |
| 4 | ***667.359594*** | 334.183435 | 650.333045 | 325.670161 | | | I | 605.369096 | 303.188186 | 588.342547 | 294.674912 | 587.358531 | 294.182904 | 5 |
| 5 | ***798.400079*** | 399.703678 | 781.373530 | 391.190403 | | | M | ***492.285032*** | 246.646154 | 475.258483 | 238.132880 | 474.274467 | 237.640872 | 4 |
| 6 | 899.447758 | 450.227517 | 882.421209 | 441.714243 | 881.437193 | 441.222235 | T | 361.244547 | 181.125912 | 344.217998 | 172.612637 | 343.233982 | 172.120629 | 3 |
| 7 | ***1012.531822*** | 506.769549 | 995.505273 | 498.256275 | 994.521257 | 497.764267 | L | ***260.196868*** | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GGQIMTLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 32.8 | 1157.630066 | -0.001618 | GGQIMTLK |
| 12.7 | 1157.619293 | 0.009155 | TNFEGPPRLK |
| 12.4 | 1157.630051 | -0.001603 | QLSQMLK |
| 11.9 | 1157.630051 | -0.001603 | QLSQMLK |
| 11.3 | 1157.630051 | -0.001603 | QIKSMLQ |
| 10.2 | 1157.640411 | -0.011963 | AQQLLSSGNLK |
| 8.4 | 1157.630051 | -0.001603 | QAGAMLLK |
| 8.2 | 1157.630081 | -0.001633 | CVTLVQK |
| 7.9 | 1157.640411 | -0.011963 | SPGKNSSIQLK |
| 7.3 | 1157.633209 | -0.004761 | LLDPEPSFLK |

**Mascot:** http://www.matrixscience.com/

{MATRIX SCIENCE}

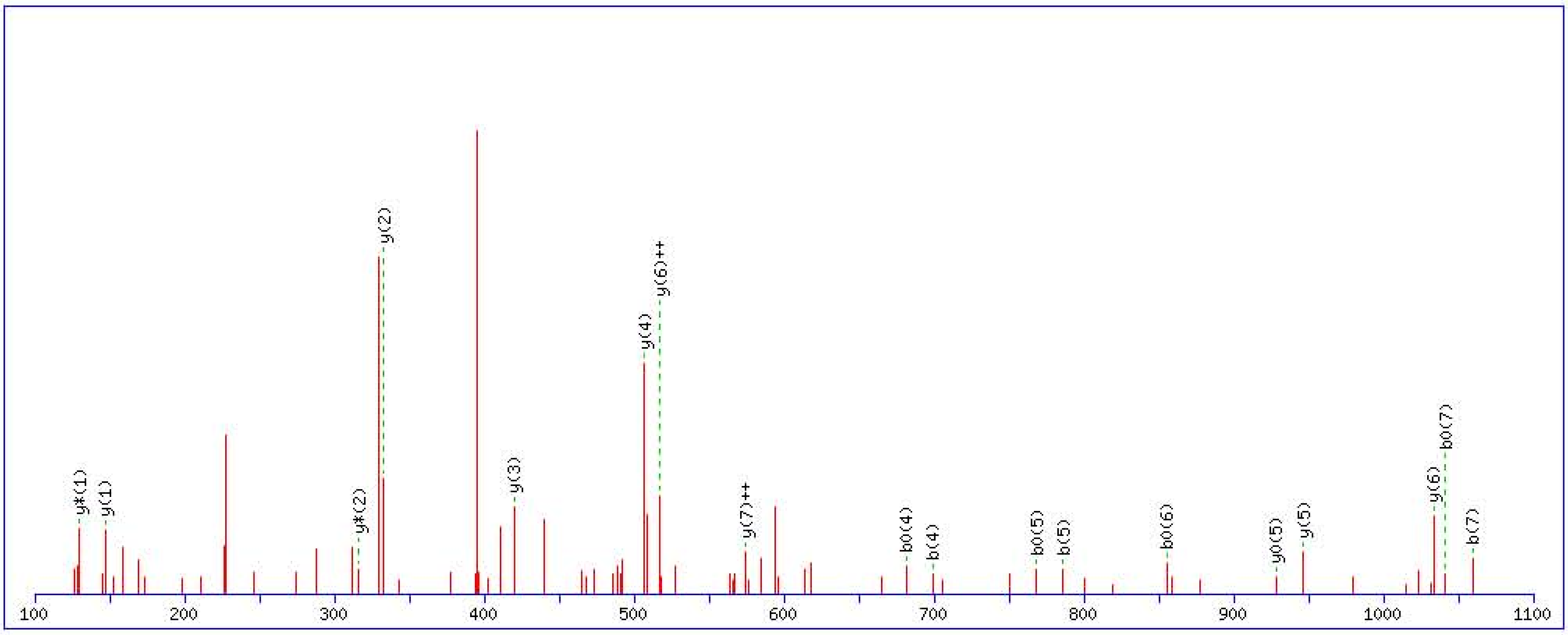
# Mascot Search Results

### Peptide View

MS/MS Fragmentation of **GDSQSSWK**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

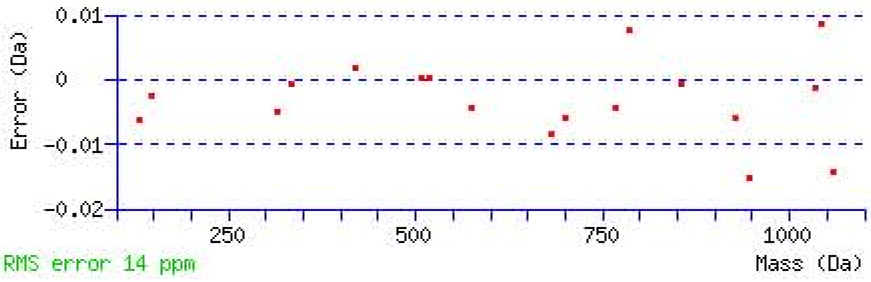
Match to Query 23399: 1204.553808 from(603.284180,2+) rtinseconds(1541) index(33557)
Title: Locus:1.1.1.2956.7 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

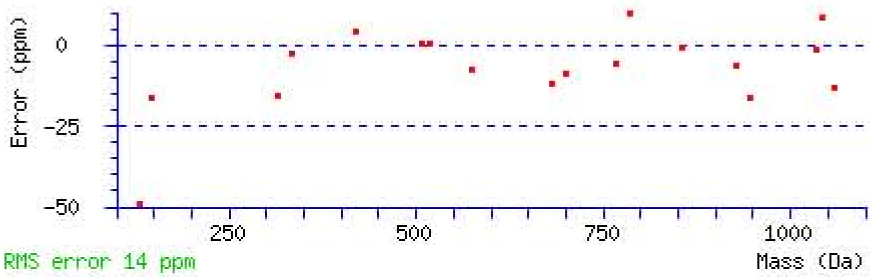
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1100 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1204.554657
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q4      : Biotin:Thermo-21345 (Q)
Ions Score: 28  Expect: 0.0047
Matches : 18/72 fragment ions using 39 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.028740 | 29.518008 | | | | | G | | | | | | | 8 |
| 2 | 173.055683 | 87.031479 | | | 155.045118 | 78.026197 | D | 1148.540470 | 574.773873 | 1131.513921 | 566.260599 | 1130.529905 | 565.768591 | 7 |
| 3 | 260.087711 | 130.547493 | | | 242.077146 | 121.542211 | S | ***1033.513527*** | 517.260402 | 1016.486978 | 508.747127 | 1015.502962 | 508.255119 | 6 |
| 4 | **699.313037** | 350.160157 | 682.286488 | 341.646882 | 681.302472 | 341.154874 | Q | ***946.481499*** | 473.744388 | 929.454950 | 465.231113 | 928.470934 | 464.739105 | 5 |
| 5 | **786.345065** | 393.676171 | 769.318516 | 385.162896 | 768.334500 | 384.670888 | S | ***507.256173*** | 254.131724 | 490.229624 | 245.618450 | 489.245608 | 245.126442 | 4 |
| 6 | 873.377093 | 437.192185 | 856.350544 | 428.678910 | 855.366528 | 428.186902 | S | ***420.224145*** | 210.615711 | 403.197596 | 202.102436 | 402.213580 | 201.610428 | 3 |
| 7 | **1059.456406** | 530.231841 | 1042.429857 | 521.718567 | 1041.445841 | 521.226559 | W | ***333.192117*** | 167.099697 | 316.165568 | 158.586422 | | | 2 |
| 8 | | | | | | | K | ***147.112804*** | 74.060040 | 130.086255 | 65.546765 | | | 1 |





NCBI **BLAST** search of GDSQSSWK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

**All matches to this query**

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 28.5 | 1204.554657 | -0.000849 | GDSQSSWK |
| 3.7 | 1204.540253 | 0.013555 | QMQECAK |

**Mascot:** http://www.matrixscience.com/

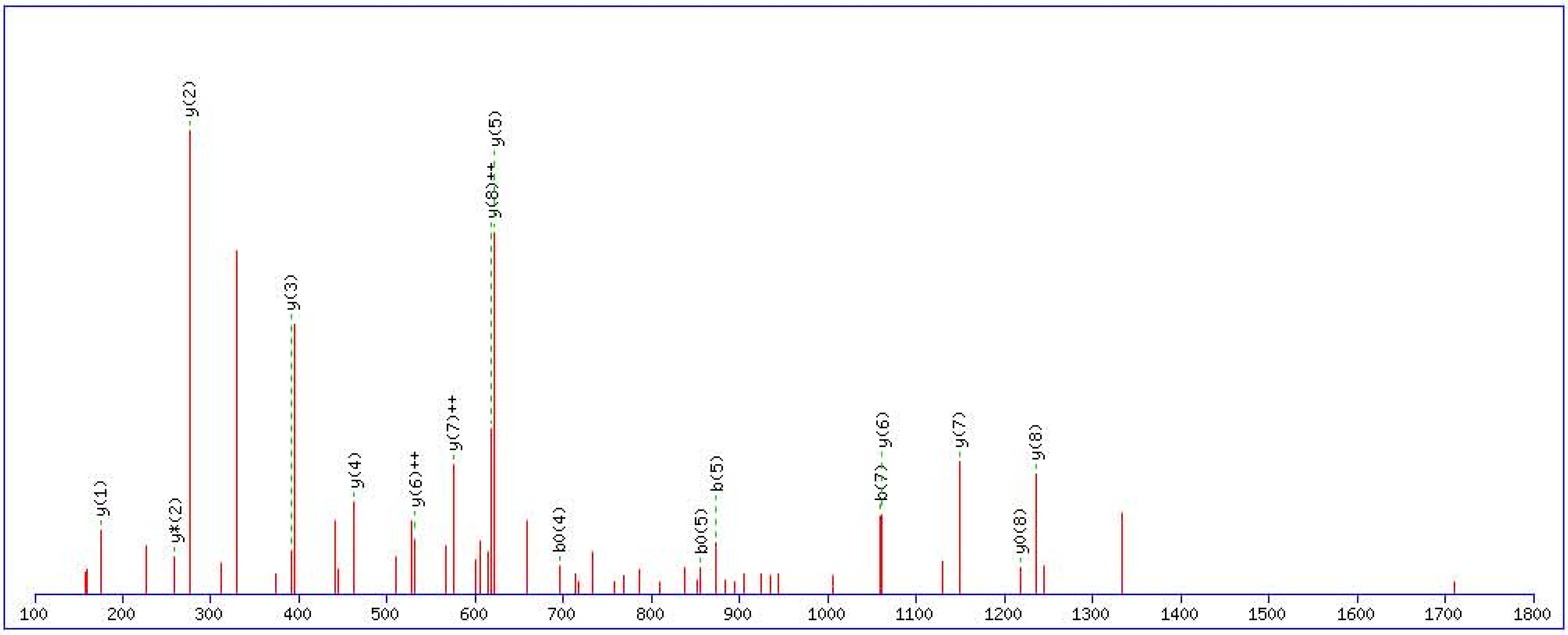
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VSSQCADTR**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

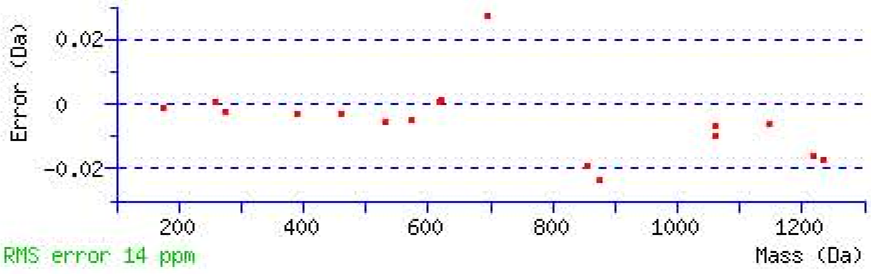
Match to Query 26804: 1333.612128 from(667.813340,2+) rtinseconds(1245) index(31560)
Title: Locus:1.1.1.2852.19 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

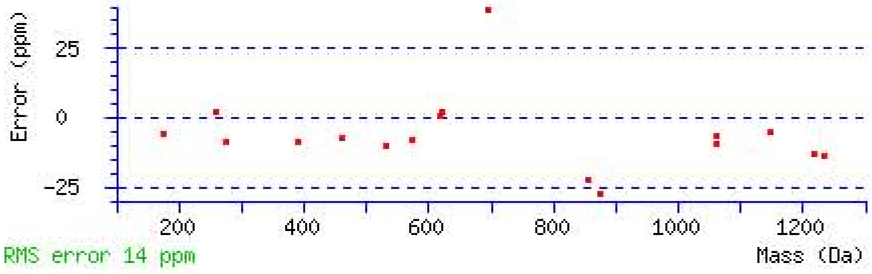
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



**Monoisotopic mass of neutral peptide Mr(calc):** 1333.611862
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)
**Variable modifications:**
**Q4** : Biotin:Thermo-21345 (Q)
**Ions Score:** 52 **Expect:** 2.1e-005
**Matches** : 17/86 fragment ions using 31 most intense peaks (help)

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 9 |
| 2 | 187.107718 | 94.057497 | | | 169.097153 | 85.052214 | S | ***1235.550719*** | 618.278998 | 1218.524170 | 609.765723 | 1217.540154 | 609.273715 | 8 |
| 3 | 274.139746 | 137.573511 | | | 256.129181 | 128.568229 | S | ***1148.518691*** | 574.762984 | 1131.492142 | 566.249709 | 1130.508126 | 565.757701 | 7 |
| 4 | 713.365072 | 357.186174 | 696.338523 | 348.672900 | 695.354507 | 348.180892 | Q | ***1061.486663*** | 531.246970 | 1044.460114 | 522.733695 | 1043.476098 | 522.241687 | 6 |
| 5 | **873.395721** | 437.201499 | 856.369172 | 428.688224 | 855.385156 | 428.196216 | C | ***622.261337*** | 311.634307 | 605.234788 | 303.121032 | 604.250772 | 302.629024 | 5 |
| 6 | 944.432835 | 472.720056 | 927.406286 | 464.206781 | 926.422270 | 463.714773 | A | ***462.230688*** | 231.618982 | 445.204139 | 223.105707 | 444.220123 | 222.613700 | 4 |
| 7 | **1059.459778** | 530.233527 | 1042.433229 | 521.720253 | 1041.449213 | 521.228245 | D | ***391.193574*** | 196.100425 | 374.167025 | 187.587151 | 373.183009 | 187.095143 | 3 |
| 8 | 1160.507457 | 580.757367 | 1143.480908 | 572.244092 | 1142.496892 | 571.752084 | T | ***276.166631*** | 138.586953 | 259.140082 | 130.073679 | 258.156066 | 129.581671 | 2 |
| 9 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VSSQCADTR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.5 | 1333.611862 | 0.000266 | VSSQCADTR |
| 2.6 | 1333.601105 | 0.011023 | VDNRPDGFGDSR |

**Mascot:** http://www.matrixscience.com/

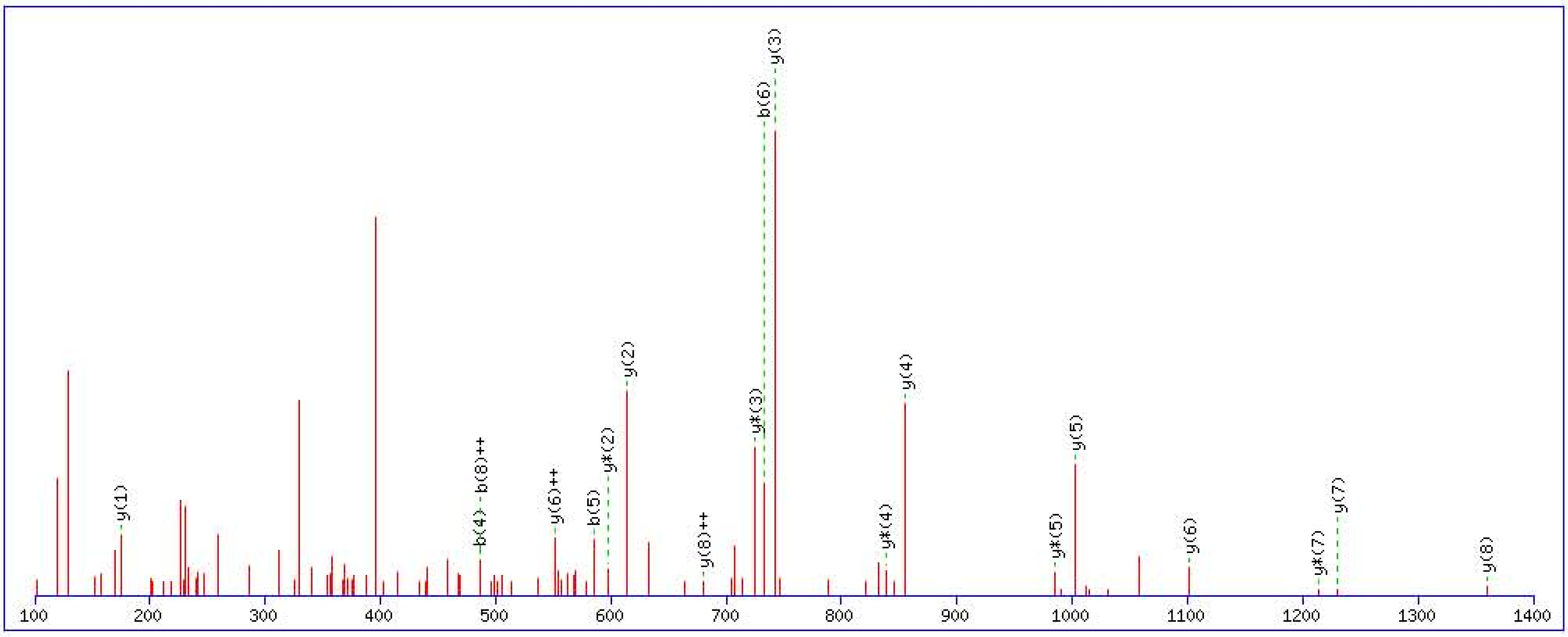
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **VKEEVFIQQR**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

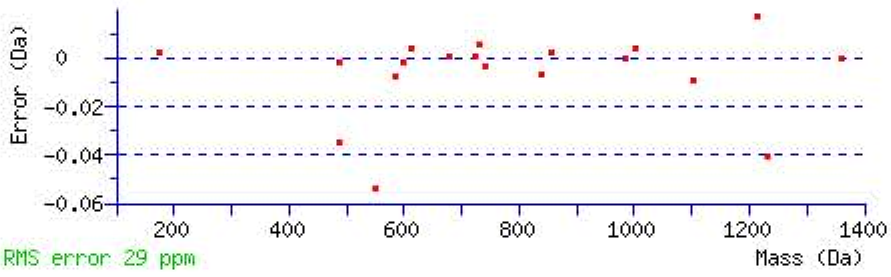
Match to Query 36520: 1585.859472 from(529.627100,3+) rtinseconds(1765) index(34856)
Title: Locus:1.1.1.3034.11 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

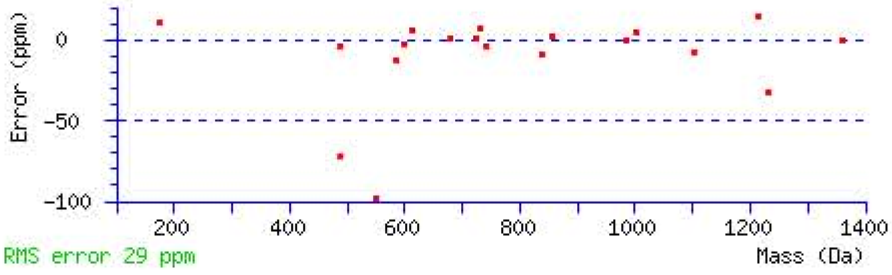
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1585.865021
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q9      : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 0.00055
Matches : 19/90 fragment ions using 32 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 10 |
| 2 | 228.170653 | 114.588965 | 211.144104 | 106.075690 | | | K | 1487.803897 | 744.405587 | 1470.777348 | 735.892312 | 1469.793332 | 735.400304 | 9 |
| 3 | 357.213246 | 179.110261 | 340.186697 | 170.596987 | 339.202681 | 170.104979 | E | ***1359.708934*** | 680.358105 | 1342.682385 | 671.844831 | 1341.698369 | 671.352823 | 8 |
| 4 | **486.255839** | 243.631558 | 469.229290 | 235.118283 | 468.245274 | 234.626275 | E | ***1230.666341*** | 615.836809 | 1213.639792 | 607.323534 | 1212.655776 | 606.831526 | 7 |
| 5 | **585.324253** | 293.165765 | 568.297704 | 284.652490 | 567.313688 | 284.160482 | V | ***1101.623748*** | 551.315512 | 1084.597199 | 542.802238 | | | 6 |
| 6 | **732.392667** | 366.699972 | 715.366118 | 358.186697 | 714.382102 | 357.694689 | F | ***1002.555334*** | 501.781305 | 985.528785 | 493.268031 | | | 5 |
| 7 | 845.476731 | 423.242004 | 828.450182 | 414.728729 | 827.466166 | 414.236721 | I | ***855.486920*** | 428.247098 | 838.460371 | 419.733824 | | | 4 |
| 8 | 973.535309 | 487.271293 | 956.508760 | 478.758018 | 955.524744 | 478.266010 | Q | ***742.402856*** | 371.705066 | 725.376307 | 363.191792 | | | 3 |
| 9 | 1412.760635 | 706.883956 | 1395.734086 | 698.370681 | 1394.750070 | 697.878673 | Q | ***614.344278*** | 307.675777 | 597.317729 | 299.162503 | | | 2 |
| 10 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VKEEVFIQQR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 46.5 | 1585.865021 | -0.005549 | VKEEVFIQQR |
| 33.5 | 1585.865021 | -0.005549 | VKEEVFIQQR |
| 11.6 | 1585.842392 | 0.017080 | EIQTTTGNQQVLVR |
| 10.3 | 1585.857605 | 0.001867 | QEEVAGIRAKFPNK |
| 1.4 | 1585.842361 | 0.017111 | QSVLVKSNEEGIQR |
| 0.6 | 1585.838531 | 0.020941 | DLKEVTPEGLQMVK |

**Mascot:** http://www.matrixscience.com/

{MATRIX}
{SCIENCE}

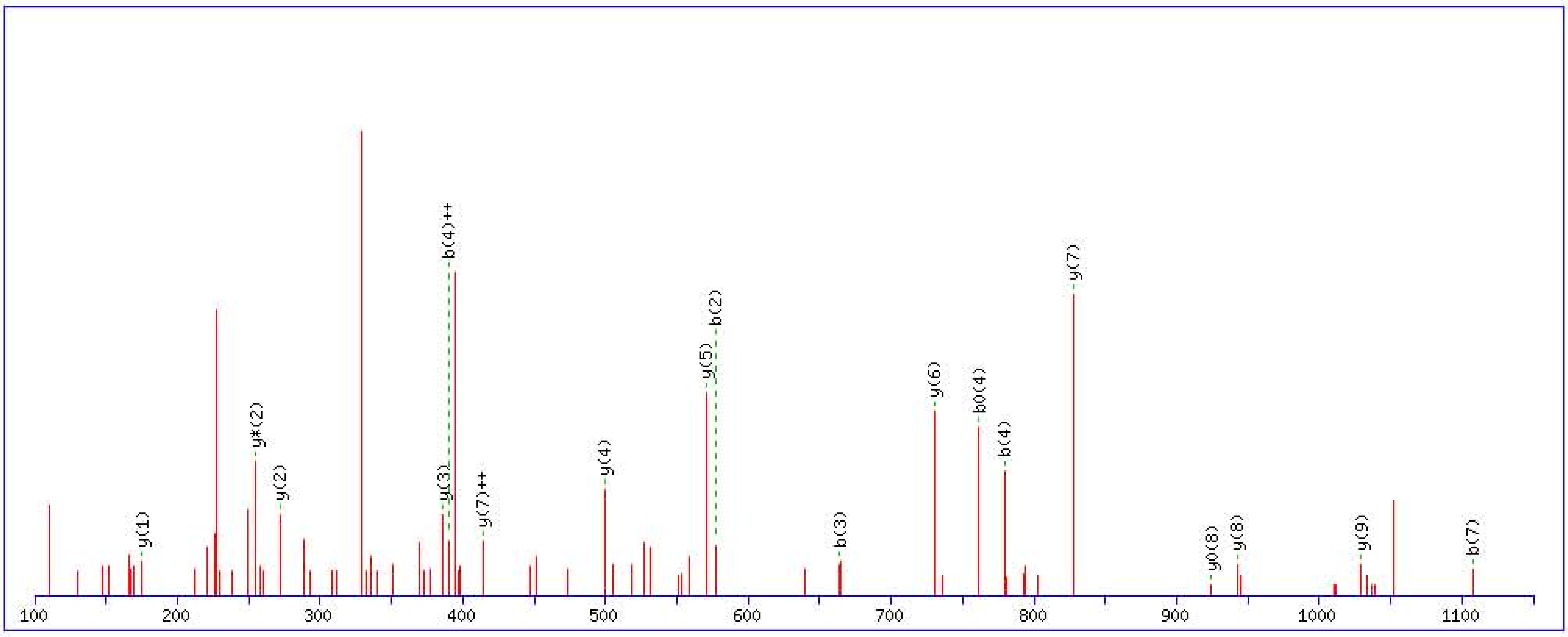
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **QHSDPCALNPR**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

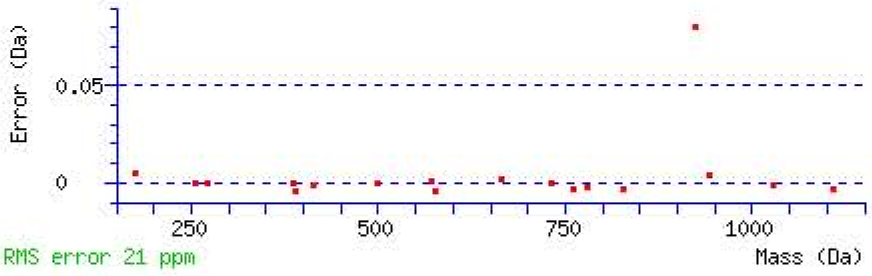
Match to Query 37301: 1604.749152 from(535.923660,3+) rtinseconds(1402) index(32537)
Title: Locus:1.1.1.2907.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

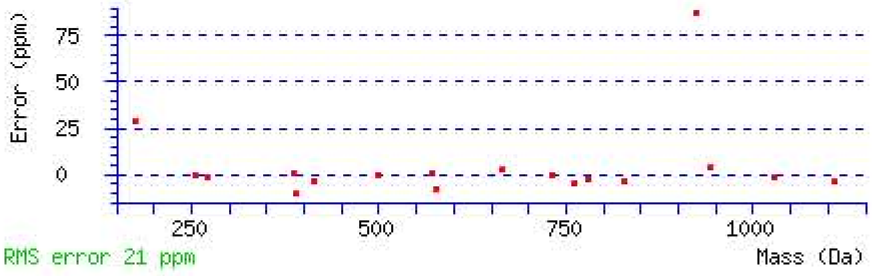
Click mouse within plot area to zoom in by factor of two about that point
Or, [Plot from] [100] to [1150] Da [Full range]
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 1604.755157
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q1      : Biotin:Thermo-21345 (Q)
Ions Score: 51  Expect: 6.7e-005
Matches : 18/102 fragment ions using 35 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 440.232602 | 220.619939 | 423.206053 | 212.106664 | | | Q | | | | | | | 11 |
| 2 | **577.291514** | 289.149395 | 560.264965 | 280.636121 | | | H | 1166.537117 | 583.772196 | 1149.510568 | 575.258922 | 1148.526552 | 574.766914 | 10 |
| 3 | **664.323542** | 332.665409 | 647.296993 | 324.152134 | 646.312977 | 323.660126 | S | ***1029.478205*** | 515.242740 | 1012.451656 | 506.729466 | 1011.467640 | 506.237458 | 9 |
| 4 | **779.350485** | 390.178880 | 762.323936 | 381.665606 | 761.339920 | 381.173598 | D | ***942.446177*** | 471.726726 | 925.419628 | 463.213452 | 924.435612 | 462.721444 | 8 |
| 5 | 876.403249 | 438.705263 | 859.376700 | 430.191988 | 858.392684 | 429.699980 | P | ***827.419234*** | 414.213255 | 810.392685 | 405.699980 | | | 7 |
| 6 | 1036.433898 | 518.720587 | 1019.407349 | 510.207313 | 1018.423333 | 509.715305 | C | ***730.366470*** | 365.686873 | 713.339921 | 357.173598 | | | 6 |
| 7 | **1107.471012** | 554.239144 | 1090.444463 | 545.725870 | 1089.460447 | 545.233861 | A | ***570.335821*** | 285.671548 | 553.309272 | 277.158274 | | | 5 |
| 8 | 1220.555076 | 610.781176 | 1203.528527 | 602.267901 | 1202.544511 | 601.775893 | L | ***499.298707*** | 250.152991 | 482.272158 | 241.639717 | | | 4 |
| 9 | 1334.598003 | 667.802639 | 1317.571454 | 659.289365 | 1316.587438 | 658.797357 | N | ***386.214643*** | 193.610959 | 369.188094 | 185.097685 | | | 3 |
| 10 | 1431.650767 | 716.329021 | 1414.624218 | 707.815747 | 1413.640202 | 707.323739 | P | ***272.171716*** | 136.589496 | 255.145167 | 128.076221 | | | 2 |
| 11 | | | | | | | R | ***175.118952*** | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of QHSDPCALNPR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 50.6 | 1604.755157 | -0.006005 | QHSDPCALNPR |
| 5.7 | 1604.736725 | 0.012427 | EGMGWSYLVFCLK |
| 4.2 | 1604.732529 | 0.016623 | GDVGDRGDKQQGMAR |
| 1.5 | 1604.772247 | -0.023095 | TDDIPVWDQEFLK |
| 0.4 | 1604.754288 | -0.005136 | GPSPASSSSSSPPAHPR |

**Mascot:** http://www.matrixscience.com/

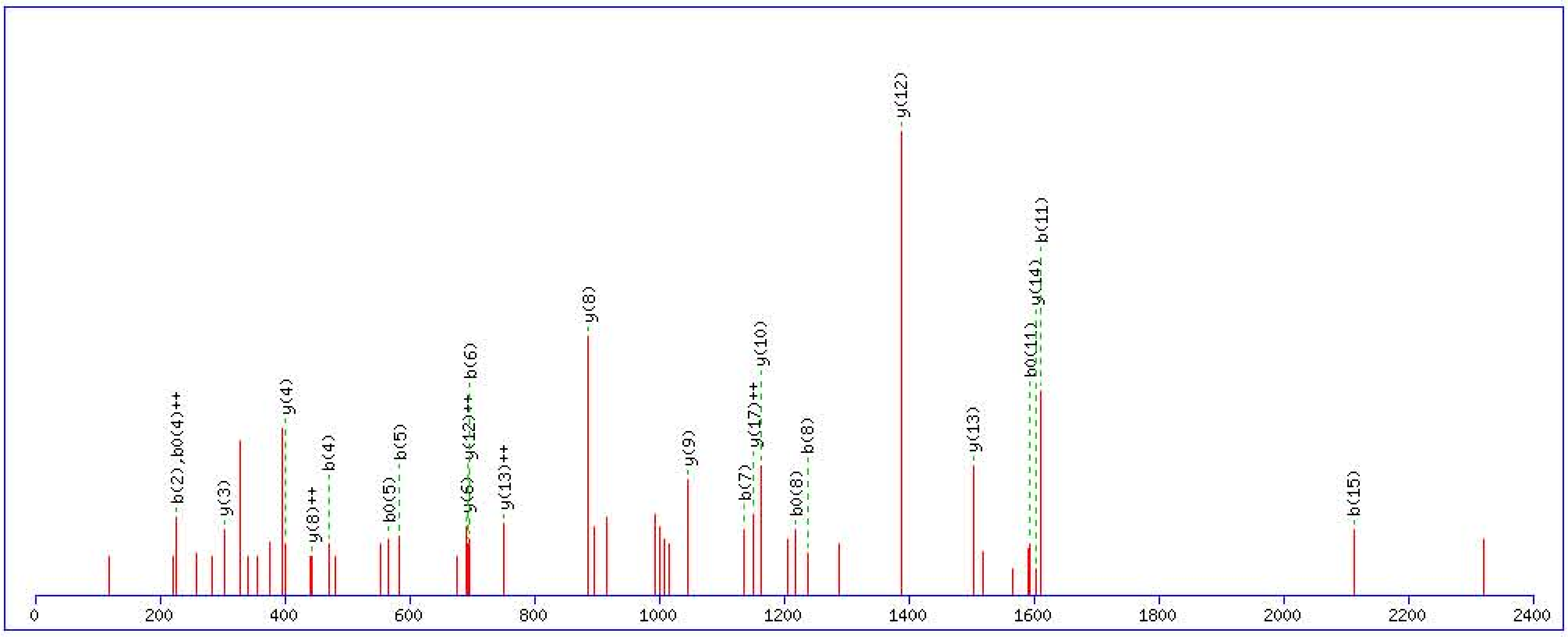
# {MATRIX SCIENCE} Mascot Search Results

## Peptide View

MS/MS Fragmentation of **ILDELLQTCVDPEDCPVCEVAGR**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

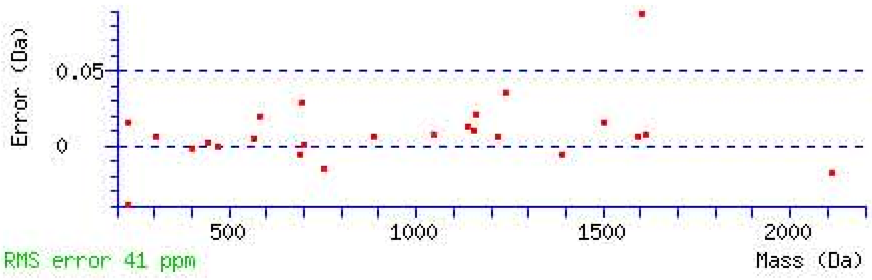
Match to Query 46475: 2998.419972 from(1000.480600,3+) rtinseconds(2606) index(40196)
Title: Locus:1.1.1.3326.24 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

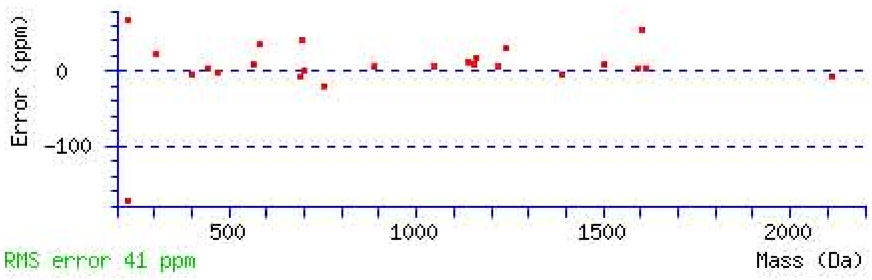
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2400 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2998.390854
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q7      : Biotin:Thermo-21345 (Q)
Ions Score: 52  Expect: 0.00037
Matches : 25/240 fragment ions using 49 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 114.091340 | 57.549308 | | | | | **I** | | | | | | | **23** |
| **2** | ***227.175404*** | 114.091340 | | | | | **L** | 2886.314052 | 1443.660664 | 2869.287503 | 1435.147389 | 2868.303487 | 1434.655381 | **22** |
| **3** | 342.202347 | 171.604811 | | | 324.191782 | 162.599529 | **D** | 2773.229988 | 1387.118632 | 2756.203439 | 1378.605357 | 2755.219423 | 1378.113349 | **21** |
| **4** | ***471.244940*** | 236.126108 | | | 453.234375 | 227.120826 | **E** | 2658.203045 | 1329.605160 | 2641.176496 | 1321.091886 | 2640.192480 | 1320.599878 | **20** |
| **5** | ***584.329004*** | 292.668140 | | | 566.318439 | 283.662858 | **L** | 2529.160452 | 1265.083864 | 2512.133903 | 1256.570589 | 2511.149887 | 1256.078581 | **19** |
| **6** | ***697.413068*** | 349.210172 | | | 679.402503 | 340.204890 | **L** | 2416.076388 | 1208.541832 | 2399.049839 | 1200.028557 | 2398.065823 | 1199.536549 | **18** |
| **7** | ***1136.638394*** | 568.822835 | 1119.611845 | 560.309561 | 1118.627829 | 559.817553 | **Q** | 2302.992324 | 1151.999800 | 2285.965775 | 1143.486525 | 2284.981759 | 1142.994517 | **17** |
| **8** | ***1237.686073*** | 619.346675 | 1220.659524 | 610.833400 | 1219.675508 | 610.341392 | **T** | 1863.766998 | 932.387137 | 1846.740449 | 923.873863 | 1845.756433 | 923.381855 | **16** |
| **9** | 1397.716722 | 699.361999 | 1380.690173 | 690.848725 | 1379.706157 | 690.356717 | **C** | 1762.719319 | 881.863298 | 1745.692770 | 873.350023 | 1744.708754 | 872.858015 | **15** |
| **10** | 1496.785136 | 748.896206 | 1479.758587 | 740.382932 | 1478.774571 | 739.890924 | **V** | ***1602.688670*** | 801.847973 | 1585.662121 | 793.334699 | 1584.678105 | 792.842691 | **14** |
| **11** | ***1611.812079*** | 806.409678 | 1594.785530 | 797.896403 | 1593.801514 | 797.404395 | **D** | ***1503.620256*** | 752.313766 | 1486.593707 | 743.800492 | 1485.609691 | 743.308483 | **13** |
| **12** | 1708.864843 | 854.936060 | 1691.838294 | 846.422785 | 1690.854278 | 845.930777 | **P** | ***1388.593313*** | 694.800294 | 1371.566764 | 686.287020 | 1370.582748 | 685.795012 | **12** |
| **13** | 1837.907436 | 919.457356 | 1820.880887 | 910.944082 | 1819.896871 | 910.452074 | **E** | 1291.540549 | 646.273912 | 1274.514000 | 637.760638 | 1273.529984 | 637.268630 | **11** |
| **14** | 1952.934379 | 976.970828 | 1935.907830 | 968.457553 | 1934.923814 | 967.965545 | **D** | ***1162.497956*** | 581.752616 | 1145.471407 | 573.239342 | 1144.487391 | 572.747333 | **10** |
| **15** | ***2112.965028*** | 1056.986152 | 2095.938479 | 1048.472877 | 2094.954463 | 1047.980869 | **C** | ***1047.471013*** | 524.239144 | 1030.444464 | 515.725870 | 1029.460448 | 515.233862 | **9** |
| **16** | 2210.017792 | 1105.512534 | 2192.991243 | 1096.999259 | 2192.007227 | 1096.507251 | **P** | ***887.440364*** | 444.223820 | 870.413815 | 435.710545 | 869.429799 | 435.218537 | **8** |
| **17** | 2309.086206 | 1155.046741 | 2292.059657 | 1146.533466 | 2291.075641 | 1146.041458 | **V** | 790.387600 | 395.697438 | 773.361051 | 387.184163 | 772.377035 | 386.692155 | **7** |
| **18** | 2469.116855 | 1235.062065 | 2452.090306 | 1226.548791 | 2451.106290 | 1226.056783 | **C** | ***691.319186*** | 346.163231 | 674.292637 | 337.649956 | 673.308621 | 337.157948 | **6** |
| **19** | 2598.159448 | 1299.583362 | 2581.132899 | 1291.070087 | 2580.148883 | 1290.578079 | **E** | 531.288537 | 266.147907 | 514.261988 | 257.634632 | 513.277972 | 257.142624 | **5** |
| **20** | 2697.227862 | 1349.117569 | 2680.201313 | 1340.604294 | 2679.217297 | 1340.112286 | **V** | ***402.245944*** | 201.626610 | 385.219395 | 193.113335 | | | **4** |
| **21** | 2768.264976 | 1384.636126 | 2751.238427 | 1376.122851 | 2750.254411 | 1375.630843 | **A** | ***303.177530*** | 152.092403 | 286.150981 | 143.579129 | | | **3** |
| **22** | 2825.286440 | 1413.146858 | 2808.259891 | 1404.633583 | 2807.275875 | 1404.141575 | **G** | 232.140416 | 116.573846 | 215.113867 | 108.060571 | | | **2** |
| **23** | | | | | | | **R** | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | **1** |





NCBI **BLAST** search of ILDELLQTCVDPEDCPVCEVAGR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 52.0 | 2998.390854 | 0.029118 | ILDELLQTCVDPEDCPVCEVAGR |

**Mascot:** http://www.matrixscience.com/

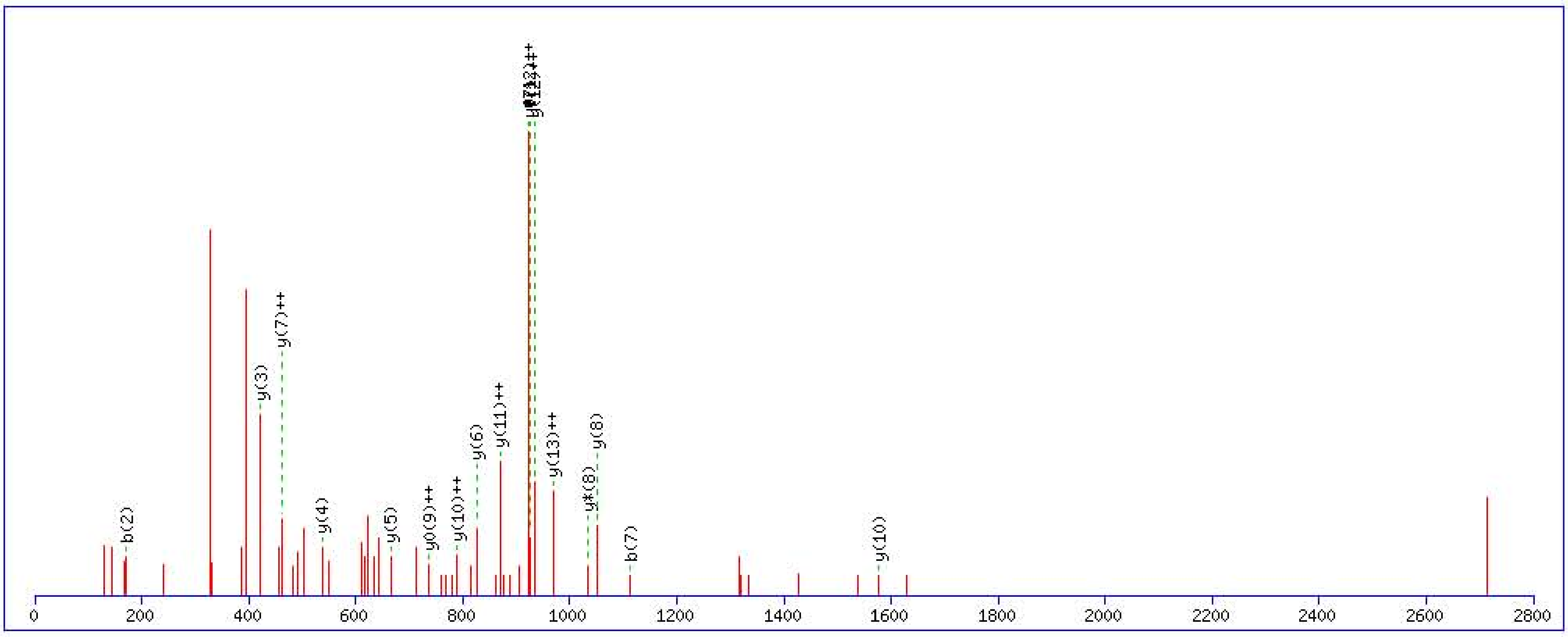
# {MATRIX SCIENCE} Mascot Search Results

### Peptide View

MS/MS Fragmentation of **VAQCSQKPCEDSCR**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

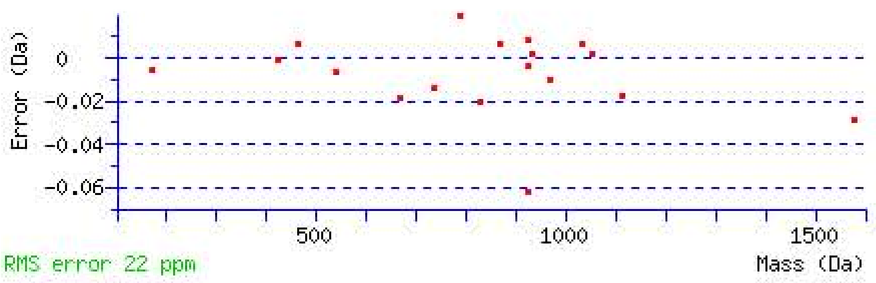
Match to Query 47961: 2034.870492 from(679.297440,3+) rtinseconds(1158) index(31220)
Title: Locus:1.1.1.2822.18 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

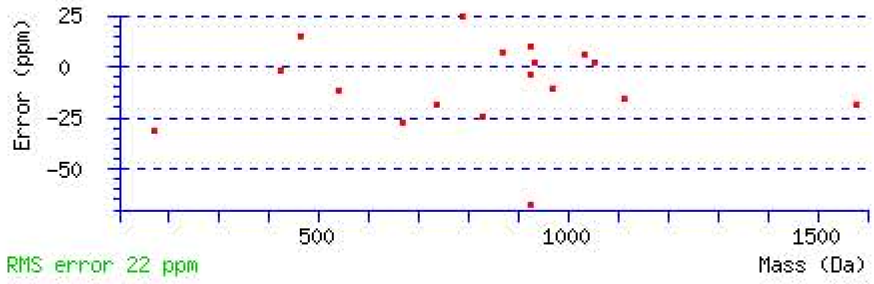
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 0 to 2800 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2034.874374
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q6     : Biotin:Thermo-21345 (Q)
Ions Score: 30  Expect: 0.0036
Matches : 18/140 fragment ions using 42 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.075690 | 50.541483 | | | | | V | | | | | | | 14 |
| 2 | **171.112804** | 86.060040 | | | | | A | 1936.813236 | 968.910256 | 1919.786687 | 960.396982 | 1918.802671 | 959.904973 | 13 |
| 3 | 299.171382 | 150.089329 | 282.144833 | 141.576055 | | | Q | 1865.776122 | 933.391699 | 1848.749573 | 924.878425 | 1847.765557 | 924.386417 | 12 |
| 4 | 459.202031 | 230.104653 | 442.175482 | 221.591379 | | | C | 1737.717544 | 869.362410 | 1720.690995 | 860.849136 | 1719.706979 | 860.357128 | 11 |
| 5 | 546.234059 | 273.620668 | 529.207510 | 265.107393 | 528.223494 | 264.615385 | S | ***1577.686895*** | 789.347086 | 1560.660346 | 780.833811 | 1559.676330 | 780.341803 | 10 |
| 6 | 985.459385 | 493.233331 | 968.432836 | 484.720056 | 967.448820 | 484.228048 | Q | 1490.654867 | 745.831072 | 1473.628318 | 737.317797 | 1472.644302 | 736.825789 | 9 |
| 7 | **1113.554348** | 557.280812 | 1096.527799 | 548.767538 | 1095.543783 | 548.275529 | K | ***1051.429541*** | 526.218409 | 1034.402992 | 517.705134 | 1033.418976 | 517.213126 | 8 |
| 8 | 1210.607112 | 605.807194 | 1193.580563 | 597.293920 | 1192.596547 | 596.801911 | P | ***923.334578*** | 462.170927 | 906.308029 | 453.657653 | 905.324013 | 453.165645 | 7 |
| 9 | 1370.637761 | 685.822519 | 1353.611212 | 677.309244 | 1352.627196 | 676.817236 | C | ***826.281814*** | 413.644545 | 809.255265 | 405.131271 | 808.271249 | 404.639263 | 6 |
| 10 | 1499.680354 | 750.343815 | 1482.653805 | 741.830540 | 1481.669789 | 741.338532 | E | ***666.251165*** | 333.629221 | 649.224616 | 325.115946 | 648.240600 | 324.623938 | 5 |
| 11 | 1614.707297 | 807.857286 | 1597.680748 | 799.344012 | 1596.696732 | 798.852004 | D | ***537.208572*** | 269.107924 | 520.182023 | 260.594650 | 519.198007 | 260.102642 | 4 |
| 12 | 1701.739325 | 851.373301 | 1684.712776 | 842.860026 | 1683.728760 | 842.368018 | S | ***422.181629*** | 211.594453 | 405.155080 | 203.081178 | 404.171064 | 202.589170 | 3 |
| 13 | 1861.769974 | 931.388625 | 1844.743425 | 922.875351 | 1843.759409 | 922.383343 | C | 335.149601 | 168.078438 | 318.123052 | 159.565164 | | | 2 |
| 14 | | | | | | | R | 175.118952 | 88.063114 | 158.092403 | 79.549839 | | | 1 |





NCBI **BLAST** search of VAQCSQKPCEDSCR
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 30.1 | 2034.874374 | -0.003882 | VAQCSQKPCEDSCR |
| 24.1 | 2034.874374 | -0.003882 | VAQCSQKPCEDSCR |

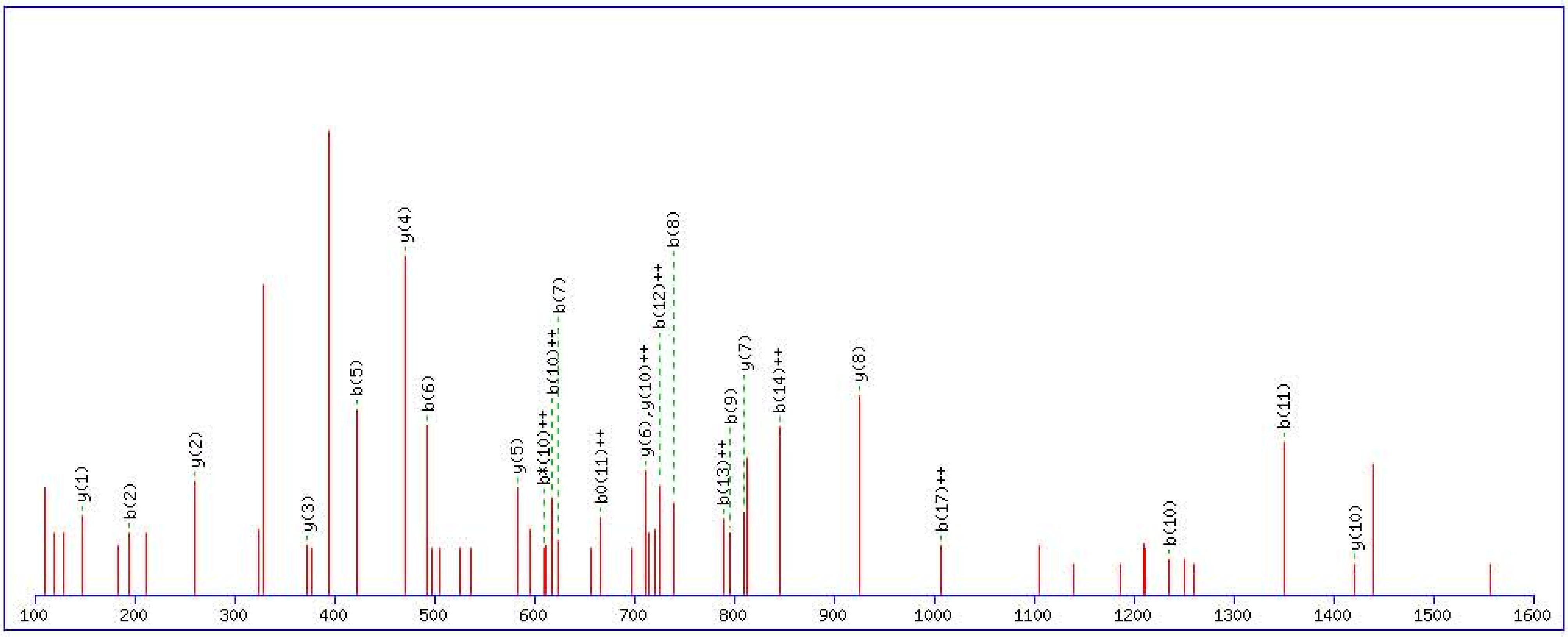
# Mascot Search Results

## Peptide View

MS/MS Fragmentation of **HGAGVAMDGQDVQLPLLK**
Found in **VWF_HUMAN**, von Willebrand factor OS=Homo sapiens GN=VWF PE=1 SV=4

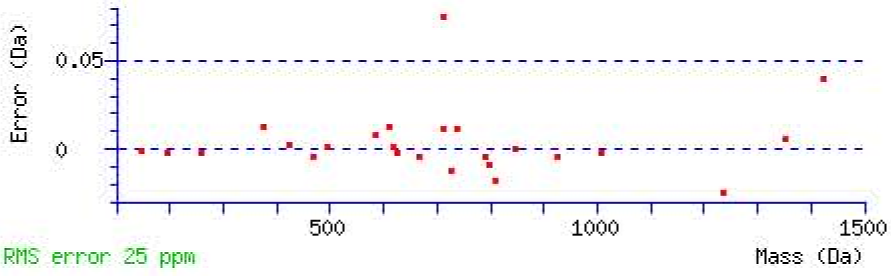
Match to Query 50130: 2159.133072 from(720.718300,3+) rtinseconds(2357) index(38595)
Title: Locus:1.1.1.3240.20 File:"2013-07-02 CLN FXIII 60 min 2nd F 3.wiff"
Data file C:\Program Files (x86)\Matrix Science\Mascot Daemon\mgf\5 FXIII 60 min 2nd\mascot_daemon_merge.mgf

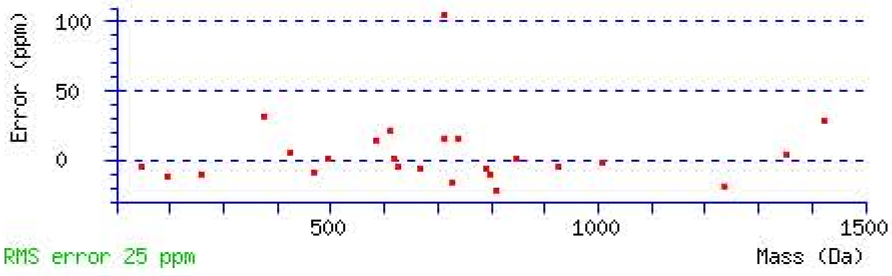
Click mouse within plot area to zoom in by factor of two about that point
Or, Plot from 100 to 1600 Da Full range
Label all possible matches ○ Label matches used for scoring ●



```
Monoisotopic mass of neutral peptide Mr(calc): 2159.123123
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)
Variable modifications:
Q10     : Biotin:Thermo-21345 (Q)
Ions Score: 47  Expect: 5.6e-005
Matches : 25/158 fragment ions using 55 most intense peaks   (help)
```

| # | b | $b^{++}$ | $b^{*}$ | $b^{*++}$ | $b^{0}$ | $b^{0++}$ | Seq. | y | $y^{++}$ | $y^{*}$ | $y^{*++}$ | $y^{0}$ | $y^{0++}$ | # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 138.066188 | 69.536732 | | | | | H | | | | | | | 18 |
| 2 | *195.087652* | 98.047464 | | | | | G | 2023.071483 | 1012.039380 | 2006.044934 | 1003.526105 | 2005.060918 | 1003.034097 | 17 |
| 3 | 266.124766 | 133.566021 | | | | | A | 1966.050019 | 983.528648 | 1949.023470 | 975.015373 | 1948.039454 | 974.523365 | 16 |
| 4 | 323.146230 | 162.076753 | | | | | G | 1895.012905 | 948.010091 | 1877.986356 | 939.496816 | 1877.002340 | 939.004808 | 15 |
| 5 | *422.214644* | 211.610960 | | | | | V | 1837.991441 | 919.499359 | 1820.964892 | 910.986084 | 1819.980876 | 910.494076 | 14 |
| 6 | *493.251758* | 247.129517 | | | | | A | 1738.923027 | 869.965152 | 1721.896478 | 861.451877 | 1720.912462 | 860.959869 | 13 |
| 7 | *624.292243* | 312.649760 | | | | | M | 1667.885913 | 834.446595 | 1650.859364 | 825.933320 | 1649.875348 | 825.441312 | 12 |
| 8 | *739.319186* | 370.163231 | | | 721.308621 | 361.157948 | D | 1536.845428 | 768.926352 | 1519.818879 | 760.413078 | 1518.834863 | 759.921070 | 11 |
| 9 | *796.340650* | 398.673963 | | | 778.330085 | 389.668680 | G | *1421.818485* | 711.412881 | 1404.791936 | 702.899606 | 1403.807920 | 702.407598 | 10 |
| 10 | *1235.565976* | **618.286626** | 1218.539427 | 609.773352 | 1217.555411 | 609.281344 | Q | 1364.797021 | 682.902149 | 1347.770472 | 674.388874 | 1346.786456 | 673.896866 | 9 |
| 11 | *1350.592919* | 675.800098 | 1333.566370 | 667.286823 | 1332.582354 | 666.794815 | D | *925.571695* | 463.289486 | 908.545146 | 454.776211 | 907.561130 | 454.284203 | 8 |
| 12 | 1449.661333 | **725.334305** | 1432.634784 | 716.821030 | 1431.650768 | 716.329022 | V | *810.544752* | 405.776014 | 793.518203 | 397.262740 | | | 7 |
| 13 | 1577.719911 | **789.363594** | 1560.693362 | 780.850319 | 1559.709346 | 780.358311 | Q | *711.476338* | 356.241807 | 694.449789 | 347.728533 | | | 6 |
| 14 | 1690.803975 | **845.905626** | 1673.777426 | 837.392351 | 1672.793410 | 836.900343 | L | *583.417760* | 292.212518 | 566.391211 | 283.699244 | | | 5 |
| 15 | 1787.856739 | 894.432008 | 1770.830190 | 885.918733 | 1769.846174 | 885.426725 | P | *470.333696* | 235.670486 | 453.307147 | 227.157212 | | | 4 |
| 16 | 1900.940803 | 950.974040 | 1883.914254 | 942.460765 | 1882.930238 | 941.968757 | L | *373.280932* | 187.144104 | 356.254383 | 178.630830 | | | 3 |
| 17 | 2014.024867 | **1007.516072** | 1996.998318 | 999.002797 | 1996.014302 | 998.510789 | L | *260.196868* | 130.602072 | 243.170319 | 122.088798 | | | 2 |
| 18 | | | | | | | K | *147.112804* | 74.060040 | 130.086255 | 65.546766 | | | 1 |





NCBI **BLAST** search of HGAGVAMDGQDVQLPLLK
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)
Other BLAST web gateways

### All matches to this query

| Score | Mr(calc): | Delta | Sequence |
|---|---|---|---|
| 47.0 | 2159.123123 | 0.009949 | HGAGVAMDGQDVQLPLLK |
| 20.4 | 2159.123123 | 0.009949 | HGAGVAMDGQDVQLPLLK |
| 1.6 | 2159.161957 | -0.028885 | ILQDQILTSKQKELEMAR |
| 0.7 | 2159.112350 | 0.020722 | AAQATGEFEVFVNGRLVHSK |

**Mascot:** http://www.matrixscience.com/