

Sample	Substrate	E2
1	RFP-BARD-BRCA-Ub	5C
2	RFP-BARD-BRCA-Ub	D3
3	RFP-BARD-BRCA-Ub	E1
4	RFP-BARD-BRCA-Ub	E2
5	RFP-BARD-BRCA-Ub	E3
6	RFP-BARD-BRCA-Ub	N+V1
7	RFP-BARD-BRCA-Ub	N+V2
8	RFP-BARD-BRCA-Ub	W
9	RFP-BARD-BRCA-Ub	25K
10	RFP-BARD-BRCA-Ub	W+25K
11	RFP-BARD-BRCA-Ub	W+N+V1
12	RFP-BARD-BRCA-Ub	- E2
13	RFP-BARD-BRCA	5C
14	RFP-BARD-BRCA	D3
15	RFP-BARD-BRCA	E1
16	RFP-BARD-BRCA	E2
17	RFP-BARD-BRCA	E3
18	RFP-BARD-BRCA	N+V1
19	RFP-BARD-BRCA	N+V2
20	RFP-BARD-BRCA	W
21	RFP-BARD-BRCA	25K
22	RFP-BARD-BRCA	W+25K
23	RFP-BARD-BRCA	W+N+V1
24	RFP-BARD-BRCA	- E2

(MATRIX) SCIENCE Mascot Search Results

Protein View

Match to: YD\_RFP-BARD-BCRA-Ub Score: 4904

YD\_RFP-BARD-BCRA-Ub

Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

Nominal mass (M<sub>r</sub>): 60628; Calculated pI value: 6.10

NCBI BLAST search of YD\_RFP-BARD-BCRA-Ub against nr

Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)

Variable modifications: GlyGly (K), Oxidation (M)

Cleavage by Trypsin: cuts C-term side of KR unless next residue is P

Sequence Coverage: 61%

Matched peptides shown in Bold Red

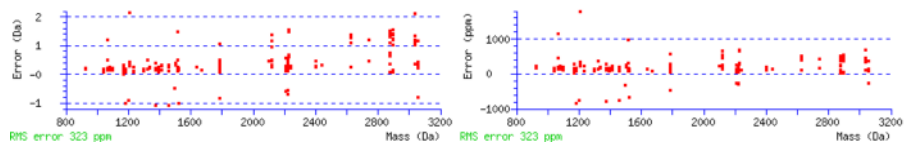
1 MHHHHHHASS EDVKEFMRF KVRMEGSVNG HEFEIEGEGE GRPYEGTQTA
51 KIKVTKGGPL PFAMWLLSPO FQYGSKAYVK HPADIPDYLK LSFPEGFKWE
101 RVNMFEDGGV VVTQDSSLQ DGEFIYKVKL RGTNFPDGP VMQRKTMGWE
151 ASTERMFPEP GALKGEIKMR LKLDKGGHYD AENVKTYMAK KPVQLPGAYK
201 TDIKLDTFSH NEDTIVIEQY ERAEGRHSYGC AENLIPQGLE EPDGRGAWAH
251 SRALLDRLEK LLRCSGLGK LREPVCLGCI EHLFCSNOVS DCIQTGCPVC
301 VTPAWIQDLK INRQLDSMIQ LCSKLRNLLH DNELSDIKED GSGGCDLSAL
351 RVEEYQNVIN AMQKILCEPI CLEELKEPVS TKCDHIFCKF CMLKLLNQKK
401 GFSQCPCKNK DITKRSIQES TRFSQALVEK LKILCARQLD TGLEYSANYN
451 FAKQIFVKTL TGTITLIEVE PSTTIENVA KIQDKREGIPP DQQRILFAGK
501 QLEDGRSLD YNIQKRESLH LVLRLRGG

Show predicted peptides also

Sort Peptides By Residue Number Increasing Mass Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. Contains a list of peptides with their observed and calculated masses, delta values, and search scores.





Mascot: <http://www.matrixscience.com/>

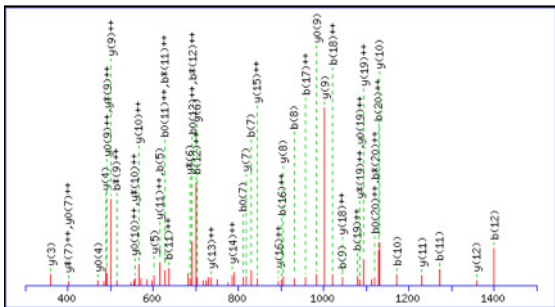
**(MATRIX SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **TLTGKTITLEVEPSDTIENVK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

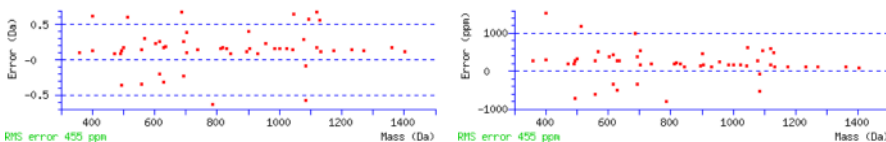
Match to Query 793: 2401.721172 from(801.581000,3+) intensity(3478311.0000)  
 Title: Cmpd 116, +MSn(802.15), 27.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 300 to 1500 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2401.2588  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K5 : GlyGly (K)  
 Ions Score: 104 Expect: 2.4e-07  
 Matches : 52/226 fragment ions using 54 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>s++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>s++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							21
2	215.1390	108.0731			197.1285	99.0679	L	2301.2184	1151.1128	2284.1918	1142.5996	2283.2078	1142.1076	20
3	316.1867	158.5970			298.1761	149.5917	T	2188.1343	1094.5708	2171.1078	1086.0575	2170.1238	1085.5655	19
4	373.2082	187.1077			355.1976	178.1024	G	2087.0867	1044.0470	2070.0601	1035.5337	2069.0761	1035.0417	18
5	615.3461	308.1767	598.3195	299.6634	597.3355	299.1714	K	2030.0652	1015.5362	2013.0386	1007.0230	2012.0546	1006.5310	17
6	716.3937	358.7005	699.3672	350.1872	698.3832	349.6952	T	1787.9273	894.4673	1770.9008	885.9540	1769.9167	885.4620	16
7	829.4778	415.2425	812.4512	406.7293	811.4672	406.2373	I	1686.8796	843.9434	1669.8531	835.4302	1668.8691	834.9382	15
8	930.5255	465.7664	913.4989	457.2531	912.5149	456.7611	T	1573.7956	787.4014	1556.7690	778.8881	1555.7850	778.3961	14
9	1043.6095	522.3084	1026.5830	513.7951	1025.5990	513.3031	L	1472.7479	736.8776	1455.7213	728.3643	1454.7373	727.8723	13
10	1172.6521	586.8297	1155.6256	578.3164	1154.6416	577.8244	E	1359.6638	680.3355	1342.6373	671.8223	1341.6533	671.3303	12
11	1271.7205	636.3639	1254.6940	627.8506	1253.7100	627.3586	V	1230.6212	615.8142	1213.5947	607.3010	1212.6107	606.8090	11
12	1400.7631	700.8852	1383.7366	692.3719	1382.7526	691.8799	E	1131.5528	566.2800	1114.5263	557.7668	1113.5422	557.2748	10
13	1497.8159	749.4116	1480.7894	740.8983	1479.8053	740.4063	P	1002.5102	501.7587	985.4837	493.2455	984.4997	492.7535	9
14	1584.8479	792.9276	1567.8214	784.4143	1566.8374	783.9223	S	905.4575	453.2324	888.4309	444.7191	887.4469	444.2271	8
15	1699.8749	850.4411	1682.8483	841.9278	1681.8643	841.4358	D	818.4254	409.7163	801.3989	401.2031	800.4149	400.7111	7
16	1800.9226	900.9649	1783.8960	892.4516	1782.9120	891.9596	T	703.3985	352.2029	686.3719	343.6896	685.3879	343.1976	6
17	1914.0066	957.5069	1896.9801	948.9937	1895.9961	948.5017	I	602.3508	301.6790	585.3243	293.1658	584.3402	292.6738	5
18	2043.0492	1022.0282	2026.0227	1013.5150	2025.0386	1013.0230	E	489.2667	245.1370	472.2402	236.6237	471.2562	236.1317	4
19	2157.0921	1079.0497	2140.0656	1070.5364	2139.0816	1070.0444	N	360.2241	180.6157	343.1976	172.1024			3
20	2256.1605	1128.5839	2239.1340	1120.0706	2238.1500	1119.5786	V	246.1812	123.5942	229.1547	115.0810			2
21							K	147.1128	74.0600	130.0863	65.5468			1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
103.7	2401.2588	0.4624	<a href="#">TLTGKTITLEVEPSDTIENVK</a>
36.8	2401.3039	0.4173	<a href="#">MKKIGSIEVPOEAFNLILK</a>
34.6	2401.2377	0.4835	<a href="#">VFLKDDIDGNLDDDDLIIGLK</a>
34.2	2402.2185	-0.4973	<a href="#">MAKIQEIIAQMEVTGEGAGLVK</a>
34.0	2401.3216	0.3995	<a href="#">SVNVTASLASLEVWSKLDLIK</a>
31.4	2401.2965	0.4247	<a href="#">RAVEEVENVKVESVNTINGLGK</a>
30.9	2402.2442	-0.5230	<a href="#">TVIGTFVVEGATVEATVEKQGR</a>
29.0	2401.3216	0.3995	<a href="#">KVNIASYQVKPGDVIEVKEASK</a>
28.3	2400.4257	1.2955	<a href="#">FLIQHVRVFEISNOKLNVK</a>
28.2	2401.3216	0.3995	<a href="#">SVNVTASLASLEVWSKLDLIK</a>

**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

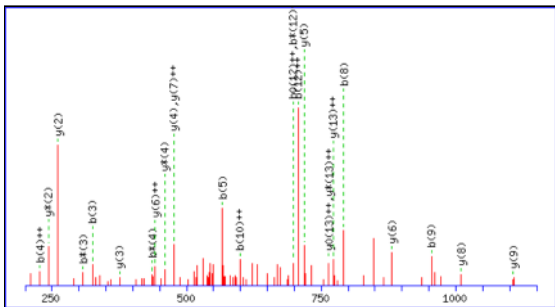
MS/MS Fragmentation of **KPVQLPGAYKTDIK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 534: 1671.089172 from(558.037000,3+) intensity(612517.0000)  
 Title: Cmpd 46, +MSn(558.29), 21.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

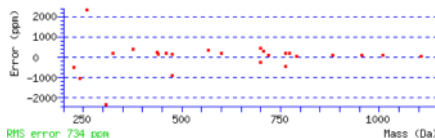
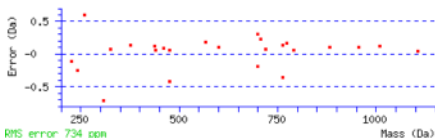
Or, Plot from 200 to 1150 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1670.9355  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K10 : GlyGly (K)  
 Ions Score: 42 Expect: 0.012  
 Matches : 26/132 fragment ions using 34 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	129.1022	65.0548	112.0757	56.5415			K							14
2	226.1550	113.5811	209.1285	105.0679			P	1543.8479	772.4276	1526.8213	763.9143	1525.8373	763.4223	13
3	325.2234	163.1153	308.1969	154.6021			V	1446.7951	723.9012	1429.7686	715.3879	1428.7845	714.8959	12
4	453.2820	227.1446	436.2554	218.6314			Q	1347.7267	674.3670	1330.7001	665.8537	1329.7161	665.3617	11
5	566.3661	283.6867	549.3395	275.1734			L	1219.6681	610.3377	1202.6416	601.8244	1201.6576	601.3324	10
6	663.4188	332.2130	646.3923	323.6998			P	1106.5841	553.7957	1089.5575	545.2824	1088.5735	544.7904	9
7	720.4403	360.7238	703.4137	352.2105			G	1009.5313	505.2693	992.5047	496.7560	991.5207	496.2640	8
8	791.4774	396.2423	774.4509	387.7291			A	952.5098	476.7585	935.4833	468.2453	934.4993	467.7533	7
9	954.5407	477.7740	937.5142	469.2607			Y	881.4727	441.2400	864.4462	432.7267	863.4621	432.2347	6
10	1196.6786	598.8429	1179.6521	590.3297			K	718.4094	359.7083	701.3828	351.1951	700.3988	350.7030	5
11	1297.7263	649.3668	1280.6998	640.8535	1279.7157	640.3615	T	476.2715	238.6394	459.2449	230.1261	458.2609	229.6341	4
12	1412.7532	706.8803	1395.7267	698.3670	1394.7427	697.8750	D	375.2238	188.1155	358.1973	179.6023	357.2132	179.1103	3
13	1525.8373	763.4223	1508.8108	754.9090	1507.8267	754.4170	I	260.1969	130.6021	243.1703	122.0888			2
14							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
42.0	1670.9355	0.1536	<a href="#">KPVQLPGAYKTDIK</a>
28.5	1670.9355	0.1536	<a href="#">KPVQLPGAYKTDIK</a>
20.9	1670.9315	0.1577	<a href="#">YTLNNVALGLGSGKSK</a>
18.9	1671.9236	-0.8344	<a href="#">IFLESKYNTFLGIK</a>
18.6	1670.8951	0.1940	<a href="#">YQVNVGDLEKSKK</a>
17.1	1670.9202	0.1689	<a href="#">EELLKVLQENSKNK</a>
17.0	1669.9502	1.1390	<a href="#">LAVITDSTATLPIDLK</a>
16.3	1670.8151	0.2741	<a href="#">NKYNESEFLEALK</a>
16.2	1671.8679	-0.7787	<a href="#">QIOTLEIELESQK</a>
16.0	1669.7698	1.3194	<a href="#">MSMRATRIVGEQMK</a>

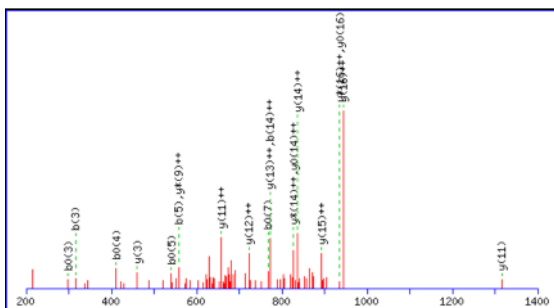
**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **TITLEVEPSDTIENVKAK**  
 Found in **YD\_RFP-p53-Ub**, YD\_RFP-p53-Ub

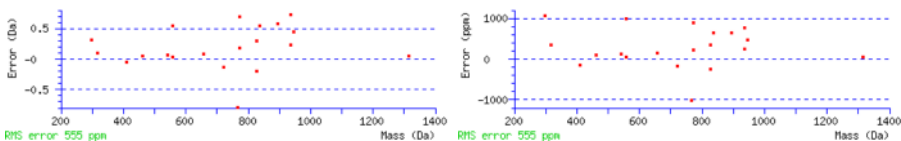
Match to Query 660: 2100.551172 from(701.191000,3+) intensity(337221.0000)  
 Title: Cmpd 88, +MSn(701.69), 26.4 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 200 to 1400 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2100.0950  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K16 : GlyGly (K)  
 Ions Score: 34 Expect: 0.71  
 Matches : 20/168 Fragment ions using 23 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	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	I	2000.0546	1000.5310	1983.0281	992.0177	1982.0441	991.5257	17
3	<b>316.1867</b>	158.5970			<b>298.1761</b>	149.5917	T	1886.9706	<b>943.9889</b>	1869.9440	<b>935.4756</b>	1868.9600	<b>934.9836</b>	16
4	429.2708	215.1390			<b>411.2602</b>	206.1337	L	1785.9229	<b>893.4651</b>	1768.8963	884.9518	1767.9123	884.4598	15
5	<b>558.3134</b>	279.6603			<b>540.3028</b>	270.6550	E	1672.8388	<b>836.9230</b>	1655.8123	<b>828.4098</b>	1654.8283	<b>827.9178</b>	14
6	657.3818	329.1945			639.3712	320.1892	V	1543.7962	<b>772.4018</b>	1526.7697	763.8885	1525.7857	763.3965	13
7	786.4244	393.7158			<b>768.4138</b>	384.7105	E	1444.7278	<b>722.8675</b>	1427.7013	714.3543	1426.7172	713.8623	12
8	883.4771	442.2422			865.4666	433.2369	P	<b>1315.6852</b>	<b>658.3462</b>	1298.6587	649.8330	1297.6747	649.3410	11
9	970.5092	485.7582			952.4986	476.7529	S	1218.6325	609.8199	1201.6059	601.3066	1200.6219	600.8146	10
10	1085.5361	543.2717			1067.5255	534.2664	D	1131.6004	566.3039	1114.5739	<b>557.7906</b>	1113.5899	557.2986	9
11	1186.5838	593.7955			1168.5732	584.7902	T	1016.5735	508.7904	999.5469	500.2771	998.5629	499.7851	8
12	1299.6678	650.3376			1281.6573	641.3323	I	915.5258	458.2665	898.4993	449.7533	897.5152	449.2613	7
13	1428.7104	714.8589			1410.6999	705.8536	E	802.4417	401.7245	785.4152	393.2112	784.4312	392.7192	6
14	1542.7534	<b>771.8803</b>	1525.7268	763.3670	1524.7428	762.8750	N	673.3991	337.2032	656.3726	328.6899			5
15	1641.8218	821.4145	1624.7952	812.9013	1623.8112	812.4092	V	559.3562	280.1817	542.3297	271.6685			4
16	1883.9597	942.4835	1866.9331	933.9702	1865.9491	933.4782	K	<b>460.2878</b>	230.6475	443.2613	222.1343			3
17	1954.9968	978.0020	1937.9702	969.4888	1936.9862	968.9967	A	218.1499	109.5786	201.1234	101.0653			2
18							K	147.1128	74.0600	130.0863	65.5468			1



NCBI BLAST search of **TITLEVEPSDTIENVKAK**  
 (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	2100.0950	0.4562	<a href="#">TITLEVEPSDTIENVKAK</a>
34.5	2100.0950	0.4562	<a href="#">TITLEVEPSDTIENVKAK</a>
31.8	2100.1116	0.4396	<a href="#">EWLEQRIDLVPYLRDR</a>
29.9	2101.0287	-0.4775	<a href="#">ELEGEVDAEQKRSAAVAK</a>
25.9	2101.1630	-0.6118	<a href="#">TLSQENLVKLTLESNATLK</a>
23.5	2101.0803	-0.5292	<a href="#">NNSLEDLQWTLIKKDNK</a>
23.2	2099.0494	1.5017	<a href="#">RGVKTEIEGEQVAAIAIQ</a>
20.2	2099.9728	0.5784	<a href="#">TNGDFSTNMAMQLARVAK</a>
19.9	2100.1579	0.3933	<a href="#">NVTPELLGKVKELTEGK</a>
19.1	2101.1280	-0.5768	<a href="#">TLTLEAGRFAEQANGAVVVR</a>

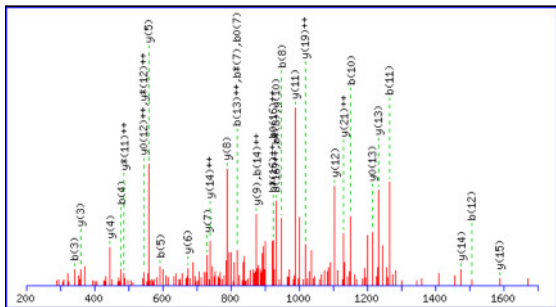
**(MATRIX SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **NLLHDNELSDLKEDGGSGGDL SALR**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

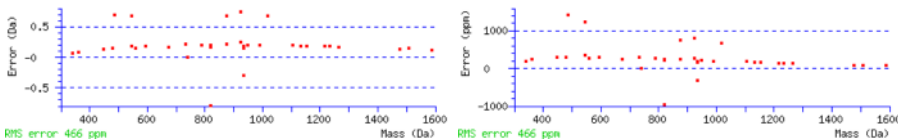
Match to Query 845: 2738.774172 from(913.932000,3+) intensity(1061195.0000)  
 Title: Cmpd 117, +MSn(914.43), 27.7 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

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): 2738.3107  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications: K12 : GlyGly (K)  
 Ions Score: 94 Expect: 2.9e-07  
 Matches : 35/274 Fragment ions using 39 most intense peaks (help)

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	115.0502	58.0287	98.0237	49.5155			N							25
2	228.1343	114.5708	211.1077	106.0575			L	2625.2751	1313.1412	2608.2485	1304.6279	2607.2645	1304.1359	24
3	<b>341.2183</b>	171.1128	324.1918	162.5995			L	2512.1910	1256.5991	2495.1645	1248.0859	2494.1804	1247.5939	23
4	<b>478.2772</b>	239.6423	461.2507	231.1290			H	2399.1069	1200.0571	2382.0804	1191.5438	2381.0964	1191.0518	22
5	<b>593.3042</b>	297.1557	576.2776	288.6425	575.2936	288.1504	D	2262.0480	<b>1131.5277</b>	2245.0215	1123.0144	2244.0375	1122.5224	21
6	707.3471	354.1772	690.3206	345.6639	689.3365	345.1719	N	2147.0211	1074.0142	2129.9945	1065.5009	2129.0105	1065.0089	20
7	836.3897	418.6985	<b>819.3632</b>	410.1852	<b>818.3791</b>	409.6932	E	2032.9782	<b>1016.9927</b>	2015.9516	1008.4794	2014.9676	1007.9874	19
8	<b>949.4738</b>	475.2405	<b>932.4472</b>	466.7272	931.4632	466.2352	L	1903.9356	952.4714	1886.9090	943.9582	1885.9250	943.4661	18
9	1036.5058	518.7565	1019.4792	510.2433	1018.4952	509.7513	S	1790.8515	895.9294	1773.8250	887.4161	1772.8409	886.9241	17
10	<b>1151.5327</b>	576.2700	1134.5062	567.7567	1133.5222	567.2647	D	1703.8195	852.4134	1686.7929	843.9001	1685.8089	843.4081	16
11	<b>1264.6168</b>	632.8120	1247.5903	624.2988	1246.6062	623.8068	L	<b>1588.7925</b>	794.8999	1571.7660	786.3866	1570.7820	785.8946	15
12	<b>1506.7547</b>	753.8810	1489.7281	745.3677	1488.7441	744.8757	K	<b>1475.7085</b>	<b>738.3579</b>	1458.6819	729.8446	1457.6979	729.3526	14
13	1635.7973	<b>818.4023</b>	1618.7707	809.8890	1617.7867	809.3970	E	<b>1233.5706</b>	617.2889	1216.5440	608.7757	<b>1215.5600</b>	608.2836	13
14	1750.8242	<b>875.9158</b>	1733.7977	867.4025	1732.8137	866.9105	D	<b>1104.5280</b>	552.7676	1087.5014	<b>544.2544</b>	1086.5174	<b>543.7624</b>	12
15	1807.8457	904.4265	1790.8191	895.9132	1789.8351	895.4212	G	<b>989.5010</b>	495.2542	972.4745	<b>486.7409</b>	971.4905	486.2489	11
16	1864.8672	<b>932.9372</b>	1847.8406	<b>924.4239</b>	1846.8566	<b>923.9319</b>	G	<b>932.4796</b>	466.7434	915.4530	458.2302	914.4690	457.7381	10
17	1951.8992	976.4532	1934.8726	967.9400	1933.8886	967.4479	S	<b>875.4581</b>	438.2327	858.4316	429.7194	857.4476	429.2274	9
18	2008.9207	1004.9640	1991.8941	996.4507	1990.9101	995.9587	G	<b>788.4261</b>	394.7167	771.3995	386.2034	770.4155	385.7114	8
19	2065.9421	1033.4747	2048.9156	1024.9614	2047.9315	1024.4694	G	<b>731.4046</b>	366.2060	714.3781	357.6927	713.3941	357.2007	7
20	2180.9691	1090.9882	2163.9425	1082.4749	2162.9585	1081.9829	D	<b>674.3832</b>	337.6952	657.3566	329.1819	656.3726	328.6899	6
21	2294.0531	1147.5302	2277.0266	1139.0169	2276.0426	1138.5249	L	<b>559.3562</b>	280.1817	542.3297	271.6685	541.3457	271.1765	5
22	2381.0851	1191.0462	2364.0586	1182.5329	2363.0746	1182.0409	S	<b>446.2722</b>	223.6397	429.2456	215.1264	428.2616	214.6344	4
23	2452.1223	1226.5648	2435.0957	1218.0515	2434.1117	1217.5595	A	<b>359.2401</b>	180.1237	342.2136	171.6104			3
24	2565.2063	1283.1068	2548.1798	1274.5935	2547.1958	1274.1015	L	288.2030	144.6051	271.1765	136.0919			2
25							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **NLLHDNELSDLKEDGGSGGDL SALR**  
 (Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)  
 Other BLAST [web gateways](#)

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
93.5	2738.3107	0.4635	<a href="#">NLLHDNELSDLKEDGGSGGDL SALR</a>
23.2	2738.3376	0.4366	<a href="#">MIIPANINHVNLEPMCIGIASOCK</a>
22.6	2738.3448	0.4294	<a href="#">MSRALMIQGTGSNVGKSMLAAGLCR</a>
20.8	2739.2156	-0.4415	<a href="#">KDLNPGDNPEAEFPVEMASDFMVR</a>
20.6	2738.2469	0.5273	<a href="#">AAMGHPEPFELKYVAVGNEDCFK</a>
20.6	2738.3029	0.4713	<a href="#">KQTSTKSMIGLLVQDTNDSDEK</a>
20.4	2739.3062	-0.5320	<a href="#">FGGOVLDTMAIENFISVQETEGPK</a>
19.6	2737.3415	1.4327	<a href="#">KGGKVFVDDQEGMATILAMVNAEK</a>
18.0	2739.2698	-0.4956	<a href="#">EDQVFLGDLPLMTDDGSEVINGADR</a>



17.1	2738.2784	0.4958	<a href="#">DADLGSNTTYKVAEGINPNAFDGOK</a>
------	-----------	--------	---

<b>Mascot:</b> <a href="http://www.matrixscience.com/">http://www.matrixscience.com/</a>
--

**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 438: 1460.037448 from(731.026000,2+) intensity(2409720.0000)

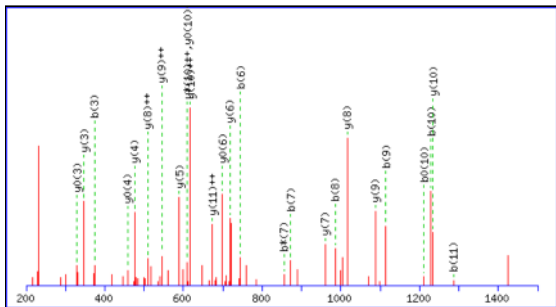
Title: Cmpd 82, +MSn(731.22), 24.4 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1500 Da Full range

Label all possible matches Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

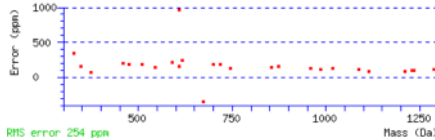
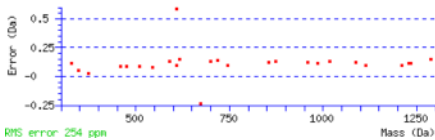
Variable modifications:

K6 : GlyGly (K)

Ions Score: 74 Expect: 4.9e-05

Matches : 26/102 Fragment ions using 32 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)

Other BLAST [web gateways](#)

All matches to this query

Score	Mr(calc):	Delta	Sequence
74.3	1459.7783	0.2591	<a href="#">LIFAGKQLEDGR</a>
27.4	1459.6725	0.3649	<a href="#">EAAALQCQLEDGR</a>
26.6	1460.7987	-0.7613	<a href="#">AGVFVKVDEIK</a>
26.6	1460.7987	-0.7613	<a href="#">AGVFVKVDELK</a>
21.3	1459.6903	0.3472	<a href="#">DEEKKEEVQGR</a>
21.2	1460.7544	-0.7170	<a href="#">NIEMQQLLSK</a>
20.5	1459.8432	0.1942	<a href="#">SGMVTLKLEKIK</a>
20.2	1459.8293	0.2082	<a href="#">LTRMIRTAGALK</a>
19.8	1459.8068	0.2307	<a href="#">ILQEKMEKAIK</a>
19.2	1459.7307	0.3068	<a href="#">ALENALPYLEDGR</a>

Mascot: <http://www.matrixscience.com/>

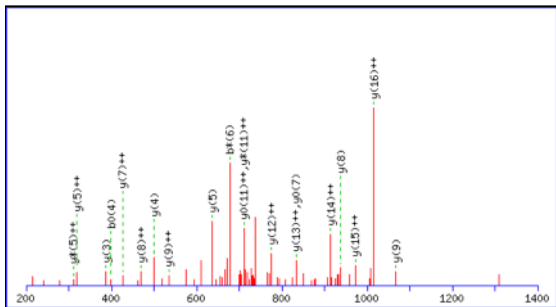
**MASCOT** (SCIENCE) Mascot Search Results

Peptide View

MS/MS Fragmentation of **TLSDYNIQKESTLHLVLR**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

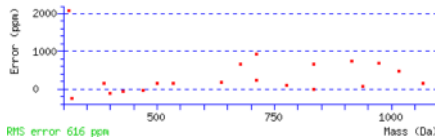
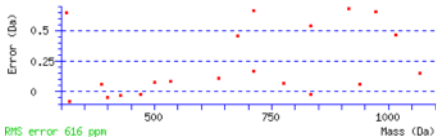
Match to Query 748: 2243.468172 from(748.830000,3+) intensity(240773.0000)  
 Title: Cmpd 103, +MSn(749.43), 27.7 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00808\_YD\_2\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 200 to 1400 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2243.1910  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K9 : GlyGly (K)  
 Ions Score: 57 Expect: 0.0026  
 Matches : 20/182 Fragment ions using 26 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>s++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>s++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	L	2143.1506	1072.0789	2126.1240	1063.5657	2125.1400	1063.0737	17
3	302.1710	151.5892			284.1605	142.5839	S	2030.0665	1015.5369	2013.0400	1007.0236	2012.0560	1006.5316	16
4	417.1980	209.1026			399.1874	200.0974	D	1943.0345	972.0209	1926.0080	963.5076	1925.0239	963.0156	15
5	580.2613	290.6343			562.2508	281.6290	Y	1828.0076	914.5074	1810.9810	905.9941	1809.9970	905.5021	14
6	694.3042	347.6558	677.2777	339.1425	676.2937	338.6505	N	1664.9442	832.9758	1647.9177	824.4625	1646.9337	823.9705	13
7	807.3883	404.1978	790.3618	395.6845	789.3777	395.1925	I	1550.9013	775.9543	1533.8748	767.4410	1532.8907	766.9490	12
8	935.4469	468.2271	918.4203	459.7138	917.4363	459.2218	Q	1437.8172	719.4123	1420.7907	710.8990	1419.8067	710.4070	11
9	1177.5848	589.2960	1160.5582	580.7828	1159.5742	580.2907	K	1309.7587	655.3830	1292.7321	646.8697	1291.7481	646.3777	10
10	1306.6274	653.8173	1289.6008	645.3040	1288.6168	644.8120	E	1067.6208	534.3140	1050.5942	525.8007	1049.6102	525.3087	9
11	1393.6594	697.3333	1376.6329	688.8201	1375.6488	688.3281	S	938.5782	469.7927	921.5516	461.2795	920.5676	460.7874	8
12	1494.7071	747.8572	1477.6805	739.3439	1476.6965	738.8519	T	851.5461	426.2767	834.5196	417.7634	833.5356	417.2714	7
13	1607.7911	804.3992	1590.7646	795.8859	1589.7806	795.3939	L	750.4985	375.7529	733.4719	367.2396			6
14	1744.8501	872.9287	1727.8235	864.4154	1726.8395	863.9234	H	637.4144	319.2108	620.3879	310.6976			5
15	1857.9341	929.4707	1840.9076	920.9574	1839.9236	920.4654	L	500.3555	250.6814	483.3289	242.1681			4
16	1957.0025	979.0049	1939.9760	970.4916	1938.9920	969.9996	V	387.2714	194.1394	370.2449	185.6261			3
17	2070.0866	1035.5469	2053.0600	1027.0337	2052.0760	1026.5417	L	288.2030	144.6051	271.1765	136.0919			2
18							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **TLSDYNIQKESTLHLVLR**  
 (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	2243.1910	0.2772	<a href="#">TLSDYNIQKESTLHLVLR</a>
28.0	2243.9582	-0.4900	<a href="#">EGSPYPMHGEGETGEPAYFR</a>
18.6	2244.1718	-0.7037	<a href="#">TNQMPNAVOKLLLVMDKR</a>
18.6	2244.1718	-0.7037	<a href="#">TNQMPNAVOKLLLVMDKR</a>
17.3	2244.0667	-0.5985	<a href="#">KFMYSQSSIPMTPNGKVDR</a>
17.3	2243.9827	-0.5146	<a href="#">VMGDAEMTSELGEHFGFSR</a>
17.2	2244.2954	-0.8272	<a href="#">KSLLIKGISYQQAVSVLGAR</a>
16.5	2244.1361	-0.6679	<a href="#">TAKLPEKPDNCGEIHWGG</a>
15.8	2244.1514	-0.6832	<a href="#">TALMNYLFAKHYNGSFIVR</a>
15.6	2243.8947	-0.4265	<a href="#">GENVTIDEDEGFEACMEEQR</a>

(MATRIX) Mascot Search Results (SCIENCE)

Protein View

Match to: YD\_RFP-BARD-BRCA-Ub Score: 4780

YD\_RFP-BARD-BRCA-Ub

Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00810\_YD\_3\_merge.mgf

Nominal mass (M+): 60628; Calculated pI value: 6.10

NCBI BLAST search of YD\_RFP-BARD-BRCA-Ub against nr

Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)

Variable modifications: GlyGly (K), Oxidation (M)

Cleavage by Trypsin: cuts C-term side of KR unless next residue is P

Sequence Coverage: 60%

Matched peptides shown in Bold Red

1 MHHHHHHHASS EDVKEFMRF KVRMEGSVNG HEFEEI EGEE GRPYEGTQTA
51 KLKVTKGGPL PFAMWLLSPQ FQYQSKAYVK HPADIPDYLK LSFPEGFKWE
101 RVAMNFDGGV VVTQDSSLQ DGEFIYKVKL RGTNFFSDGP VMQKRTMGEW
151 ASTERMPYED GALKGEIKMR LKLDGGHYD AENVTTYMAK KPVQLPGAYK
201 TDIKLDTFSH NEDTIVTEQR ERLEGHSHGYS AENLLYQGLE EFDGGAWAH
251 SRALLDRLEK LLRCSRWLT LRPVCLGGC EHLFOSNOVS DCLGTGCPVC
301 YTPAIIQDLK INRQLDSMIQ LCSKLRNLLH DNELSDLIKED GSGGSDLSAL
351 RVREYQNVIN AMQKILCEPI CLEELKEPVS TKCDHIFCKF CMLKLLNQKK
401 GFSQCPLCKN DITRSLQES TRFSQLEVER LKILICARQLD TGLEYSANYN
451 FAKQIFVKTL TKGKTTIEVE PSTTIENVKA KIQKREGIPP DQQRLLIFAGK
501 QLEDGRSLD YNIQKRESLH LVLRLRGG

Show predicted peptides also

Sort Peptides By \* Residue Number \* Increasing Mass \* Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. It lists 338 peptides with their mass, Mr values, and sequences. Many sequences include score links like (Ions score 45) or (Ions score 12).



**MASCOT** Mascot Search Results

Peptide View

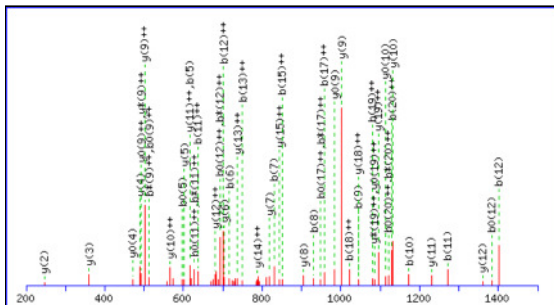
MS/MS Fragmentation of **TLTGKTITLEVEPSDTIENVK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 791: 2401.583172 from(801.535000,3+) intensity(1561290.0000)  
 Title: Cmpd 114, +MSn(801.89), 27.1 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00810\_YD\_3\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

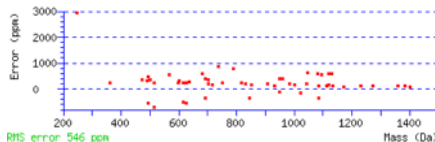
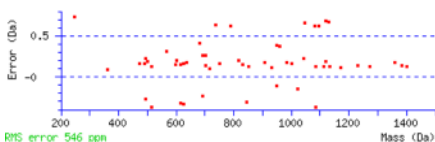
Or, Plot from 200 to 1500 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2401.2588  
**Fixed modifications:** Carbamidomethyl (C) (apply to specified residues or termini only)  
**Variable modifications:**  
 K5 : GlyGly (K)  
**Ions Score:** 105 **Expect:** 1.8e-07  
**Matches :** 55/226 fragment ions using 58 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>s++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>s++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							21
2	215.1390	108.0731			197.1285	99.0679	L	2301.2184	1151.1128	2284.1918	1142.5996	2283.2078	1142.1076	20
3	316.1867	158.5970			298.1761	149.5917	T	2188.1343	1094.5708	2171.1078	1086.0575	2170.1238	1085.5655	19
4	373.2082	187.1077			355.1976	178.1024	G	2087.0867	1044.0470	2070.0601	1035.5337	2069.0761	1035.0417	18
5	615.3461	308.1767	598.3195	299.6634	597.3355	299.1714	K	2030.0652	1015.5362	2013.0386	1007.0230	2012.0546	1006.5310	17
6	716.3937	358.7005	699.3672	350.1872	698.3832	349.6952	T	1787.9273	894.4673	1770.9008	885.9540	1769.9167	885.4620	16
7	829.4778	415.2425	812.4512	406.7293	811.4672	406.2373	I	1686.8796	843.9434	1669.8531	835.4302	1668.8691	834.9382	15
8	930.5255	465.7664	913.4989	457.2531	912.5149	456.7611	T	1573.7956	787.4014	1556.7690	778.8881	1555.7850	778.3961	14
9	1043.6095	522.3084	1026.5830	513.7951	1025.5990	513.3031	L	1472.7479	736.8776	1455.7213	728.3643	1454.7373	727.8723	13
10	1172.6521	586.8297	1155.6256	578.3164	1154.6416	577.8244	E	1359.6638	680.3355	1342.6373	671.8223	1341.6533	671.3303	12
11	1271.7205	636.3639	1254.6940	627.8506	1253.7100	627.3586	V	1230.6212	615.8142	1213.5947	607.3010	1212.6107	606.8090	11
12	1400.7631	700.8852	1383.7366	692.3719	1382.7526	691.8799	E	1131.5528	566.2800	1114.5263	557.7668	1113.5422	557.2748	10
13	1497.8159	749.4116	1480.7894	740.8983	1479.8053	740.4063	P	1002.5102	501.7587	985.4837	493.2455	984.4997	492.7535	9
14	1584.8479	792.9276	1567.8214	784.4143	1566.8374	783.9223	S	905.4575	453.2324	888.4309	444.7191	887.4469	444.2271	8
15	1699.8749	850.4411	1682.8483	841.9278	1681.8643	841.4358	D	818.4254	409.7163	801.3989	401.2031	800.4149	400.7111	7
16	1800.9226	900.9649	1783.8960	892.4516	1782.9120	891.9596	T	703.3985	352.2029	686.3719	343.6896	685.3879	343.1976	6
17	1914.0066	957.5069	1896.9801	948.9937	1895.9961	948.5017	I	602.3508	301.6790	585.3243	293.1658	584.3402	292.6738	5
18	2043.0492	1022.0282	2026.0227	1013.5150	2025.0386	1013.0230	E	489.2667	245.1370	472.2402	236.6237	471.2562	236.1317	4
19	2157.0921	1079.0497	2140.0656	1070.5364	2139.0816	1070.0444	N	360.2241	180.6157	343.1976	172.1024			3
20	2256.1605	1128.5839	2239.1340	1120.0706	2238.1500	1119.5786	V	246.1812	123.5942	229.1547	115.0810			2
21							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
105.0	2401.2588	0.3244	<a href="#">TLTGKTITLEVEPSDTIENVK</a>
32.4	2401.3216	0.2615	<a href="#">KVNIASYQVKPGDVIEVKEASK</a>
30.5	2401.1543	0.4288	<a href="#">SGGNEVSIEERLGMADIDTHKK</a>
30.4	2401.3953	0.1879	<a href="#">MNATKFLVLLVIGVLCIAVTAR</a>
29.5	2401.2022	0.3810	<a href="#">LADELDMVGVVVEHGLFNGMVK</a>
28.4	2401.1253	0.4579	<a href="#">DMEIAELKKNIEQMDTDHK</a>
26.6	2401.1981	0.3850	<a href="#">GMTMPGHLGSEKTTVQNLEIVK</a>
25.8	2402.1358	-0.5527	<a href="#">MPGNPYSSNEPGIGPLMRDIK</a>
24.4	2401.2965	0.2867	<a href="#">RAVEEVFNKVESVNTINGLQK</a>
24.1	2400.3273	1.2559	<a href="#">LMLLLDTPSRDVFILPALR</a>

**MASCOT** **SCIENCE** Mascot Search Results

**Peptide View**

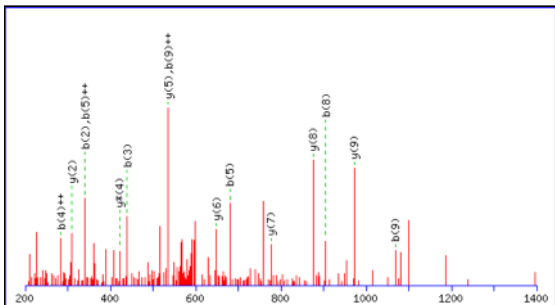
MS/MS Fragmentation of **KPVQLPGAYK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 299: 1214.849448 from(608.432000,2+) intensity(258859.0000)  
 Title: Cmpd 32, +MSn(608.85), 20.4 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00810\_YD\_3\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

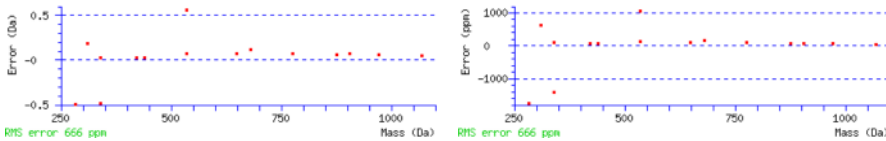
Or, Plot from 200 to 1400 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1213.6819  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K1 : GlyGly (K)  
 Ions Score: 46 Expect: 0.048  
 Matches : 15/72 fragment ions using 19 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b*	b <sup>*++</sup>	Seq.	y	y <sup>++</sup>	y*	y <sup>*++</sup>	#
1	243.1452	122.0762	226.1186	113.5629	K					10
2	<b>340.1979</b>	170.6026	323.1714	162.0893	P	<b>972.5513</b>	486.7793	955.5247	478.2660	9
3	<b>439.2663</b>	220.1368	422.2398	211.6235	V	<b>875.4985</b>	438.2529	858.4720	429.7396	8
4	567.3249	<b>284.1661</b>	550.2984	275.6528	Q	<b>776.4301</b>	388.7187	759.4036	380.2054	7
5	<b>680.4090</b>	<b>340.7081</b>	663.3824	332.1949	L	<b>648.3715</b>	324.6894	631.3450	316.1761	6
6	777.4618	389.2345	760.4352	380.7212	P	<b>535.2875</b>	268.1474	518.2609	259.6341	5
7	834.4832	417.7452	817.4567	409.2320	G	438.2347	219.6210	<b>421.2082</b>	211.1077	4
8	<b>905.5203</b>	453.2638	888.4938	444.7505	A	381.2132	191.1103	364.1867	182.5970	3
9	<b>1068.5837</b>	<b>534.7955</b>	1051.5571	526.2822	Y	<b>310.1761</b>	155.5917	293.1496	147.0784	2
10					K	147.1128	74.0600	130.0863	65.5468	1



NCBI BLAST search of **KPVQLPGAYK**  
 (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	1213.6819	1.1676	<a href="#">KPVQLPGAYK</a>
30.7	1213.5615	1.2879	<a href="#">NFDITGLQEYK</a>
20.4	1213.6203	1.2291	<a href="#">KNHPGKEYK</a>
18.4	1213.6125	1.2369	<a href="#">VTTHQLQEMK</a>
17.3	1214.5311	0.3183	<a href="#">MDECIEKYK</a>
16.6	1213.7394	1.1101	<a href="#">LHVNNSSVKK</a>
16.6	1212.7230	2.1264	<a href="#">QLPLNLFQIK</a>
15.7	1213.6091	1.2403	<a href="#">KEGIHPEYK</a>
14.8	1213.6495	1.1999	<a href="#">FYKLDWVK</a>
14.6	1214.7023	0.1472	<a href="#">IPAVAGGIYNIK</a>

Mascot: <http://www.matrixscience.com/>

**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 435: 1459.903448 from (730.959000,2+) intensity(727233.0000)

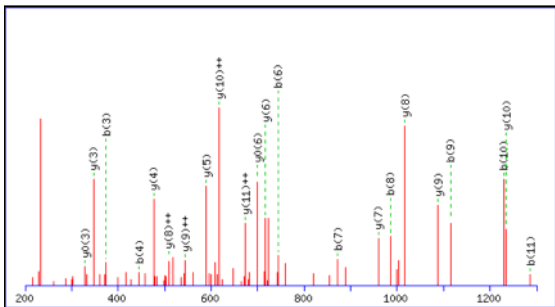
Title: Cmpd 76, +MSn(731.36), 24.5 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00810\_YD\_3\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

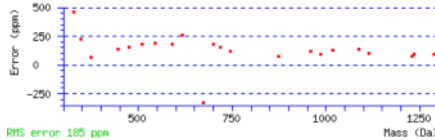
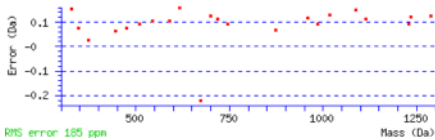
Variable modifications:

K6 : GlyGly (K)

Ions Score: 72 Expect: 0.00018

Matches : 22/102 Fragment ions using 30 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(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	1459.7783	0.1251	<a href="#">LIFAGKQLEDGR</a>
30.9	1459.7718	0.1316	<a href="#">HGGGMPYVGAFGRR</a>
26.8	1460.7987	-0.8953	<a href="#">AGVFKKVDEIK</a>
26.8	1460.7987	-0.8953	<a href="#">AGVFKKVDELK</a>
23.8	1459.6725	0.2309	<a href="#">EAAALQCQLEDGR</a>
22.9	1459.8293	0.0742	<a href="#">LTRMIRTAGALK</a>
22.8	1459.7704	0.1330	<a href="#">EMKLLFQSGALK</a>
20.8	1459.8432	0.0602	<a href="#">SGMVTLKLEKIK</a>
20.3	1459.7453	0.1582	<a href="#">KMAQFEKLIK</a>
20.0	1459.7817	0.1218	<a href="#">LLATGMERAGIAK</a>

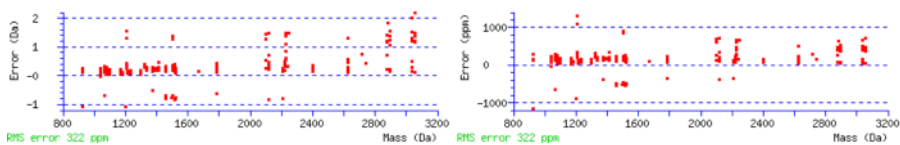
Mascot: <http://www.matrixscience.com/>







495 - 506	487.3380	1458.9922	1459.7783	-0.7861	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 22)
495 - 506	487.3660	1459.0762	1459.7783	-0.7021	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 31)
495 - 506	487.6450	1459.9132	1459.7783	0.1349	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 32)
495 - 506	730.9740	1459.9334	1459.7783	0.1551	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 72)
495 - 506	730.9960	1459.9774	1459.7783	0.1991	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 71)
495 - 506	731.0060	1459.9974	1459.7783	0.2191	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 71)
495 - 506	731.0370	1460.0594	1459.7783	0.2811	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 71)
495 - 506	487.7080	1460.1022	1459.7783	0.3239	1	R.LIFAGKQLEDGR.T	GlyGly (K)	(Ions score 31)
507 - 515	541.3020	1080.5894	1080.5451	0.0443	0	R.TLSDYNIQK.E		(Ions score 54)
507 - 515	541.3300	1080.6454	1080.5451	0.1003	0	R.TLSDYNIQK.E		(Ions score 52)
507 - 515	541.3520	1080.6894	1080.5451	0.1443	0	R.TLSDYNIQK.E		(Ions score 57)
507 - 515	541.3780	1080.7414	1080.5451	0.1963	0	R.TLSDYNIQK.E		(Ions score 51)
507 - 515	541.3960	1080.7774	1080.5451	0.2323	0	R.TLSDYNIQK.E		(Ions score 60)
507 - 515	541.3970	1080.7794	1080.5451	0.2343	0	R.TLSDYNIQK.E		(Ions score 41)
507 - 515	541.3980	1080.7814	1080.5451	0.2363	0	R.TLSDYNIQK.E		(Ions score 48)
507 - 515	541.4050	1080.7954	1080.5451	0.2503	0	R.TLSDYNIQK.E		(Ions score 37)
507 - 515	541.4110	1080.8074	1080.5451	0.2623	0	R.TLSDYNIQK.E		(Ions score 38)
507 - 515	541.4170	1080.8194	1080.5451	0.2743	0	R.TLSDYNIQK.E		(Ions score 15)
507 - 524	748.8460	2243.5162	2243.1910	0.3252	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K)	(Ions score 72)
507 - 524	749.2290	2244.6652	2243.1910	1.4742	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K)	(Ions score 65)
516 - 524	533.9630	1065.9114	1066.6135	-0.7020	0	K.ESTLHLVLR.L		(Ions score 61)
516 - 524	534.3790	1066.7434	1066.6135	0.1300	0	K.ESTLHLVLR.L		(Ions score 55)
516 - 524	534.3890	1066.7634	1066.6135	0.1500	0	K.ESTLHLVLR.L		(Ions score 22)
516 - 524	534.4020	1066.7894	1066.6135	0.1760	0	K.ESTLHLVLR.L		(Ions score 61)
516 - 524	534.4070	1066.7994	1066.6135	0.1860	0	K.ESTLHLVLR.L		(Ions score 53)
516 - 524	534.4100	1066.8054	1066.6135	0.1920	0	K.ESTLHLVLR.L		(Ions score 57)
516 - 524	534.4230	1066.8314	1066.6135	0.2180	0	K.ESTLHLVLR.L		(Ions score 65)
516 - 524	534.4440	1066.8734	1066.6135	0.2600	0	K.ESTLHLVLR.L		(Ions score 37)
516 - 524	534.4600	1066.9054	1066.6135	0.2920	0	K.ESTLHLVLR.L		(Ions score 40)
516 - 524	534.4650	1066.9154	1066.6135	0.3020	0	K.ESTLHLVLR.L		(Ions score 44)
516 - 524	534.4670	1066.9194	1066.6135	0.3060	0	K.ESTLHLVLR.L		(Ions score 55)
516 - 524	534.4680	1066.9214	1066.6135	0.3080	0	K.ESTLHLVLR.L		(Ions score 37)



Mascot: <http://www.matrixscience.com/>

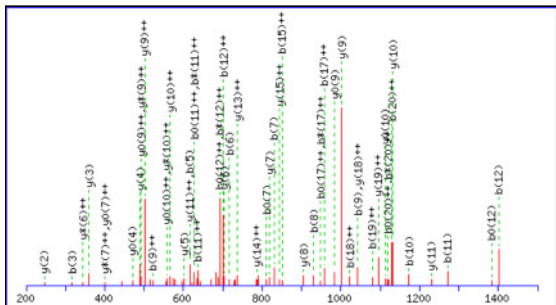
**(MATRIX SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **TLTGKTITLEVEPSDTIENVK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

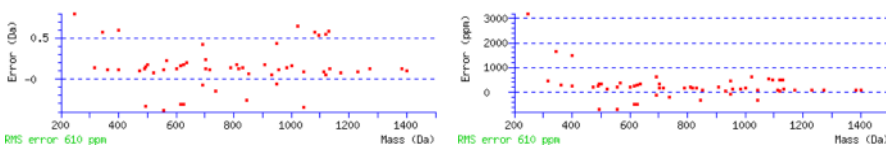
Match to Query 826: 2401.460172 from(801.494000,3+) intensity(1539442.0000)  
 Title: Cmpd 105, +MSn(802.06), 27.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 200 to 1500 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2401.2588  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K5 : GlyGly (K)  
 Ions Score: 101 Expect: 4.5e-07  
 Matches : 55/226 fragment ions using 57 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							21
2	215.1390	108.0731			197.1285	99.0679	L	2301.2184	1151.1128	2284.1918	1142.5996	2283.2078	1142.1076	20
3	<b>316.1867</b>	158.5970			298.1761	149.5917	T	2188.1343	<b>1094.5708</b>	2171.1078	1086.0575	2170.1238	1085.5655	19
4	373.2082	187.1077			355.1976	178.1024	G	2087.0867	<b>1044.0470</b>	2070.0601	1035.5337	2069.0761	1035.0417	18
5	<b>615.3461</b>	308.1767	598.3195	299.6634	597.3355	299.1714	K	2030.0652	1015.5362	2013.0386	1007.0230	2012.0546	1006.5310	17
6	<b>716.3937</b>	358.7005	699.3672	350.1872	698.3832	349.6952	T	1787.9273	894.4673	1770.9008	885.9540	1769.9167	885.4620	16
7	<b>829.4778</b>	415.2425	812.4512	406.7293	<b>811.4672</b>	406.2373	I	1686.8796	<b>843.9434</b>	1669.8531	835.4302	1668.8691	834.9382	15
8	<b>930.5255</b>	465.7664	913.4989	457.2531	912.5149	456.7611	T	1573.7956	<b>787.4014</b>	1556.7690	778.8881	1555.7850	778.3961	14
9	<b>1043.6095</b>	<b>522.3084</b>	1026.5830	513.7951	1025.5990	513.3031	L	1472.7479	<b>736.8776</b>	1455.7213	728.3643	1454.7373	727.8723	13
10	<b>1172.6521</b>	586.8297	1155.6256	578.3164	1154.6416	577.8244	E	1359.6638	680.3355	1342.6373	671.8223	1341.6533	671.3303	12
11	<b>1271.7205</b>	<b>636.3639</b>	1254.6940	<b>627.8506</b>	1253.7100	<b>627.3586</b>	V	<b>1230.6212</b>	<b>615.8142</b>	1213.5947	607.3010	1212.6107	606.8090	11
12	<b>1400.7631</b>	<b>700.8852</b>	1383.7366	<b>692.3719</b>	<b>1382.7526</b>	<b>691.8799</b>	E	<b>1131.5528</b>	<b>566.2800</b>	1114.5263	<b>557.7668</b>	<b>1113.5422</b>	<b>557.2748</b>	10
13	1497.8159	749.4116	1480.7894	740.8983	1479.8053	740.4063	P	<b>1002.5102</b>	<b>501.7587</b>	985.4837	<b>493.2455</b>	<b>984.4997</b>	<b>492.7535</b>	9
14	1584.8479	792.9276	1567.8214	784.4143	1566.8374	783.9223	S	<b>905.4575</b>	453.2324	888.4309	444.7191	887.4469	444.2271	8
15	1699.8749	<b>850.4411</b>	1682.8483	841.9278	1681.8643	841.4358	D	<b>818.4254</b>	409.7163	801.3989	<b>401.2031</b>	800.4149	<b>400.7111</b>	7
16	1800.9226	900.9649	1783.8960	892.4516	1782.9120	891.9596	T	<b>703.3985</b>	352.2029	686.3719	<b>343.6896</b>	685.3879	343.1976	6
17	1914.0066	<b>957.5069</b>	1896.9801	<b>948.9937</b>	1895.9961	<b>948.5017</b>	I	<b>602.3508</b>	301.6790	585.3243	293.1658	584.3402	292.6738	5
18	2043.0492	<b>1022.0282</b>	2026.0227	1013.5150	2025.0386	1013.0230	E	<b>489.2667</b>	245.1370	472.2402	236.6237	<b>471.2562</b>	236.1317	4
19	2157.0921	<b>1079.0497</b>	2140.0656	1070.5364	2139.0816	1070.0444	N	<b>360.2241</b>	180.6157	343.1976	172.1024			3
20	2256.1605	<b>1128.5839</b>	2239.1340	<b>1120.0706</b>	2238.1500	<b>1119.5786</b>	V	<b>246.1812</b>	123.5942	229.1547	115.0810			2
21							K	147.1128	74.0600	130.0863	65.5468			1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
101.3	2401.2588	0.2014	<a href="#">TLTGKTITLEVEPSDTIENVK</a>
33.9	2402.2199	-0.7597	<a href="#">NVPRYGMGQTAPMVIKSPGEVK</a>
32.9	2401.2410	0.2191	<a href="#">DDMVPIDSKVKIVGDTEALVK</a>
31.9	2400.3273	1.1329	<a href="#">LMMLLTSPSIRDVILFPALR</a>
28.4	2401.2965	0.1637	<a href="#">RAVEEVFNKVESVNTINGLGK</a>
28.1	2401.1543	0.3058	<a href="#">SGGNEVSIEERLGAMDDITHKK</a>
27.8	2401.1981	0.2620	<a href="#">GMTMPGHLGSEKTTVONLEIVK</a>
25.5	2401.3953	0.0649	<a href="#">MNAIKFLVLLVIGVLCIAVTAR</a>
24.8	2401.3039	0.1563	<a href="#">MKKIGSIEVPOEAFNLK</a>
24.6	2401.1253	0.3349	<a href="#">DMEIAELKKNIEQMDTDHK</a>

**(MATRIX SCIENCE) Mascot Search Results**

**Peptide View**

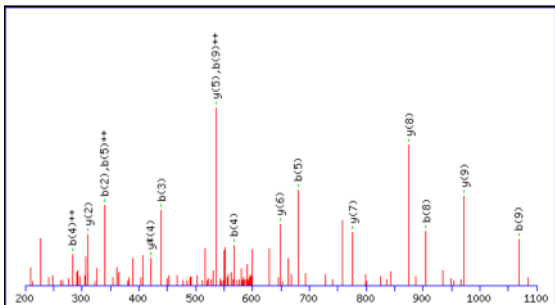
MS/MS Fragmentation of **KPVQLPGAYK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 336: 1213.745448 from(607.880000,2+) intensity(337498.0000)  
 Title: Cmpd 30\_+MSn(608.16), 20.5 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

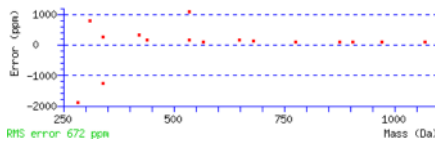
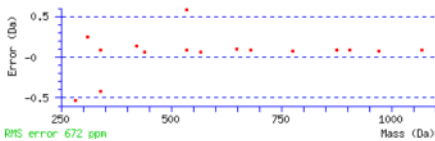
Or, Plot from 200 to 1100 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1213.6819  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K1 : GlyGly (K)  
 Ions Score: 53 Expect: 0.031  
 Matches : 16/72 fragment ions using 18 most intense peaks (help)

#	b	b <sup>++</sup>	b*	b <sup>*++</sup>	Seq.	y	y <sup>++</sup>	y*	y <sup>*++</sup>	#
1	243.1452	122.0762	226.1186	113.5629	K					10
2	340.1979	170.6026	323.1714	162.0893	P	972.5513	486.7793	955.5247	478.2660	9
3	439.2663	220.1368	422.2398	211.6235	V	875.4985	438.2529	858.4720	429.7396	8
4	567.3249	284.1661	550.2984	275.6528	Q	776.4301	388.7187	759.4036	380.2054	7
5	680.4090	340.7081	663.3824	332.1949	L	648.3715	324.6894	631.3450	316.1761	6
6	777.4618	389.2345	760.4352	380.7212	P	535.2875	268.1474	518.2609	259.6341	5
7	834.4832	417.7452	817.4567	409.2320	G	438.2347	219.6210	421.2082	211.1077	4
8	905.5203	453.2638	888.4938	444.7505	A	381.2132	191.1103	364.1867	182.5970	3
9	1068.5837	534.7955	1051.5571	526.2822	Y	310.1761	155.5917	293.1496	147.0784	2
10					K	147.1128	74.0600	130.0863	65.5468	1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
53.3	1213.6819	0.0636	<a href="#">KPVQLPGAYK</a>
35.7	1213.5615	0.1839	<a href="#">NFDTGLQEYK</a>
24.9	1212.7230	1.0224	<a href="#">QLPLNLFQIK</a>
22.9	1213.6203	0.1251	<a href="#">KNHPGKEYK</a>
21.4	1214.5489	-0.8035	<a href="#">DETSMTPPPPK</a>
20.5	1213.7434	0.0020	<a href="#">LILVPFLNGTK</a>
20.1	1213.6125	0.1329	<a href="#">VTTHQLQEMK</a>
19.6	1213.5649	0.1806	<a href="#">AYGMAGLETSK</a>
19.4	1214.5311	-0.7857	<a href="#">MDECIEKYK</a>
19.4	1213.7407	0.0047	<a href="#">KPIPKHPRK</a>

**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

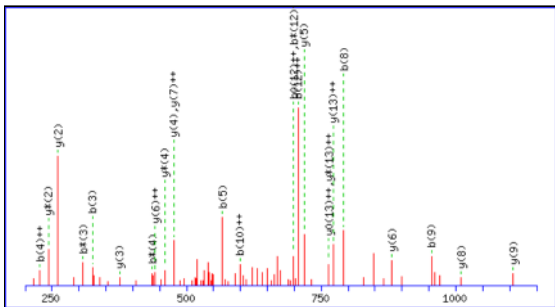
MS/MS Fragmentation of **KPVQLPGAYKTDIK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 581: 1671.083172 from(558.035000,3+) intensity(390351.0000)  
 Title: Cmpd 45\_+MSn(558.37), 21.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

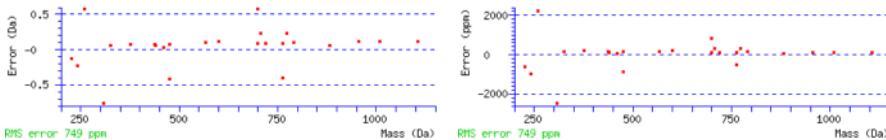
Or, Plot from 200 to 1150 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide **Mr(calc)**: 1670.9355  
**Fixed modifications**: Carbamidomethyl (C) (apply to specified residues or termini only)  
**Variable modifications**:  
 K10 : GlyGly (K)  
**Ions Score**: 42 **Expect**: 0.01  
**Matches** : 26/132 fragment ions using 33 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	129.1022	65.0548	112.0757	56.5415			K							14
2	226.1550	113.5811	209.1285	105.0679			P	1543.8479	772.4276	1526.8213	763.9143	1525.8373	763.4223	13
3	325.2234	163.1153	308.1969	154.6021			V	1446.7951	723.9012	1429.7686	715.3879	1428.7845	714.8959	12
4	453.2820	227.1446	436.2554	218.6314			Q	1347.7267	674.3670	1330.7001	665.8537	1329.7161	665.3617	11
5	566.3661	283.6867	549.3395	275.1734			L	1219.6681	610.3377	1202.6416	601.8244	1201.6576	601.3324	10
6	663.4188	332.2130	646.3923	323.6998			P	1106.5841	553.7957	1089.5575	545.2824	1088.5735	544.7904	9
7	720.4403	360.7238	703.4137	352.2105			G	1009.5313	505.2693	992.5047	496.7560	991.5207	496.2640	8
8	791.4774	396.2423	774.4509	387.7291			A	952.5098	476.7585	935.4833	468.2453	934.4993	467.7533	7
9	954.5407	477.7740	937.5142	469.2607			Y	881.4727	441.2400	864.4462	432.7267	863.4621	432.2347	6
10	1196.6786	598.8429	1179.6521	590.3297			K	718.4094	359.7083	701.3828	351.1951	700.3988	350.7030	5
11	1297.7263	649.3668	1280.6998	640.8535	1279.7157	640.3615	T	476.2715	238.6394	459.2449	230.1261	458.2609	229.6341	4
12	1412.7532	706.8803	1395.7267	698.3670	1394.7427	697.8750	D	375.2238	188.1155	358.1973	179.6023	357.2132	179.1103	3
13	1525.8373	763.4223	1508.8108	754.9090	1507.8267	754.4170	I	260.1969	130.6021	243.1703	122.0888			2
14							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
42.1	1670.9355	0.1476	<a href="#">KPVQLPGAYKTDIK</a>
26.9	1670.9355	0.1476	<a href="#">KPVQLPGAYKTDIK</a>
20.5	1669.7837	1.2994	<a href="#">SGITMTAGLMLGMNK</a>
19.4	1671.8679	-0.7847	<a href="#">QIQTLEIELESQK</a>
19.2	1671.8072	-0.7241	<a href="#">KLPHACESTQMLK</a>
18.8	1670.8951	0.1880	<a href="#">VQVNVGDLEKSKK</a>
18.1	1671.9229	-0.8398	<a href="#">GDLISGIVVAVQMIK</a>
17.9	1671.7787	-0.6955	<a href="#">EMSKATAYHNDHLR</a>
17.8	1670.9315	0.1517	<a href="#">KLIDQIETSLRK</a>
17.8	1671.8436	-0.7604	<a href="#">HNAMATAIAAKAMDIK</a>

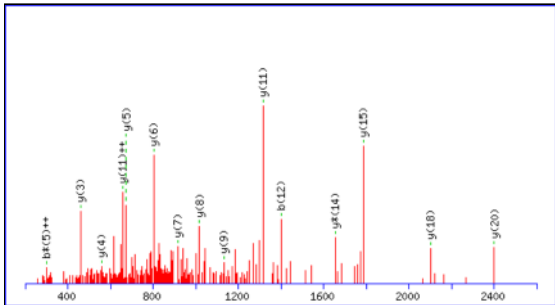
**(MATRIX) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **TLTGKTITLEVEPSDTIENVKAK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

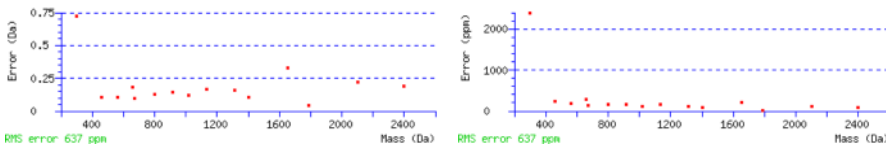
Match to Query 854: 2715.194172 from(906.072000,3+) intensity(386680.0000)  
 Title: Cmpd 92\_+MSn(906.44), 25.9 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 200 to 2600 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2714.4338  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K5 : GlyGly (K)  
 K23 : GlyGly (K)  
 Ions Score: 71 Expect: 2.1e-05  
 Matches : 15/246 Fragment ions using 20 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	102.0550	51.5311			84.0444	42.5258	T							23
2	215.1390	108.0731			197.1285	99.0679	L	2614.3934	1307.7003	2597.3669	1299.1871	2596.3828	1298.6951	22
3	316.1867	158.5970			298.1761	149.5917	T	2501.3093	1251.1583	2484.2828	1242.6450	2483.2988	1242.1530	21
4	373.2082	187.1077			355.1976	178.1024	G	<b>2400.2617</b>	1200.6345	2383.2351	1192.1212	2382.2511	1191.6292	20
5	615.3461	308.1767	598.3195	<b>299.6634</b>	597.3355	299.1714	K	2343.2402	1172.1237	2326.2136	1163.6105	2325.2296	1163.1185	19
6	716.3937	358.7005	699.3672	350.1872	698.3832	349.6952	T	<b>2101.1023</b>	1051.0548	2084.0758	1042.5415	2083.0917	1042.0495	18
7	829.4778	415.2425	812.4512	406.7293	811.4672	406.2373	I	2000.0546	1000.5310	1983.0281	992.0177	1982.0441	991.5257	17
8	930.5255	465.7664	913.4989	457.2531	912.5149	456.7611	T	1886.9706	943.9889	1869.9440	935.4756	1868.9600	934.9836	16
9	1043.6095	522.3084	1026.5830	513.7951	1025.5990	513.3031	L	<b>1785.9229</b>	893.4651	1768.8963	884.9518	1767.9123	884.4598	15
10	1172.6521	586.8297	1155.6256	578.3164	1154.6416	577.8244	E	1672.8388	836.9230	<b>1655.8123</b>	828.4098	1654.8283	827.9178	14
11	1271.7205	636.3639	1254.6940	627.8506	1253.7100	627.3586	V	1543.7962	772.4018	1526.7697	763.8885	1525.7857	763.3965	13
12	<b>1400.7631</b>	700.8852	1383.7366	692.3719	1382.7526	691.8799	E	1444.7278	722.8675	1427.7013	714.3543	1426.7172	713.8623	12
13	1497.8159	749.4116	1480.7894	740.8983	1479.8053	740.4063	P	<b>1315.6852</b>	<b>658.3462</b>	1298.6587	649.8330	1297.6747	649.3410	11
14	1584.8479	792.9276	1567.8214	784.4143	1566.8374	783.9223	S	1218.6325	609.8199	1201.6059	601.3066	1200.6219	600.8146	10
15	1699.8749	850.4411	1682.8483	841.9278	1681.8643	841.4358	D	<b>1131.6004</b>	566.3039	1114.5739	557.7906	1113.5899	557.2986	9
16	1800.9226	900.9649	1783.8960	892.4516	1782.9120	891.9596	T	<b>1016.5735</b>	508.7904	999.5469	500.2771	998.5629	499.7851	8
17	1914.0066	957.5069	1896.9801	948.9937	1895.9961	948.5017	I	<b>915.5258</b>	458.2665	898.4993	449.7533	897.5152	449.2613	7
18	2043.0492	1022.0282	2026.0227	1013.5150	2025.0386	1013.0230	E	<b>802.4417</b>	401.7245	785.4152	393.2112	784.4312	392.7192	6
19	2157.0921	1079.0497	2140.0656	1070.5364	2139.0816	1070.0444	N	<b>673.3991</b>	337.2032	656.3726	328.6899			5
20	2256.1605	1128.5839	2239.1340	1120.0706	2238.1500	1119.5786	V	<b>559.3562</b>	280.1817	542.3297	271.6685			4
21	2384.2555	1192.6314	2367.2290	1184.1181	2366.2449	1183.6261	K	<b>460.2878</b>	230.6475	443.2613	222.1343			3
22	2455.2926	1228.1500	2438.2661	1219.6367	2437.2821	1219.1447	A	332.1928	166.6001	315.1663	158.0868			2
23							K	261.1557	131.0815	244.1292	122.5682			1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
70.7	2714.4338	0.7604	<a href="#">TLTGKTITLEVEPSDTIENVKAK</a>
70.7	2714.4338	0.7604	<a href="#">TLTGKTITLEVEPSDTIENVKAK</a>
19.9	2714.2494	0.9448	<a href="#">AQSEITGEVKGHYLNATGGTVEEMYK</a>
15.9	2714.4175	0.7767	<a href="#">KVYNIPGISPDMMKLIIEYAYTR</a>
15.8	2715.1314	0.0628	<a href="#">MDEADPGEAEAAQAEAAQDGAAGDGAAR</a>
14.3	2713.3303	1.8639	<a href="#">EANMLNIPVYVAMIDTANPNPDVVDVK</a>
13.9	2716.3012	-1.1070	<a href="#">NSTEQSGVNVNGNVLAAASNVNSSVK</a>
12.8	2714.3302	0.8640	<a href="#">IKVCEMLLHECELOSQKLGR</a>
11.8	2715.2666	-0.0724	<a href="#">SMGPDGLKEVTENAVLNANYMMRK</a>
11.4	2713.2912	1.9030	<a href="#">AANGINSSGOQNSSTRFMQMLTK</a>

Mascot: <http://www.matrixscience.com/>



**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

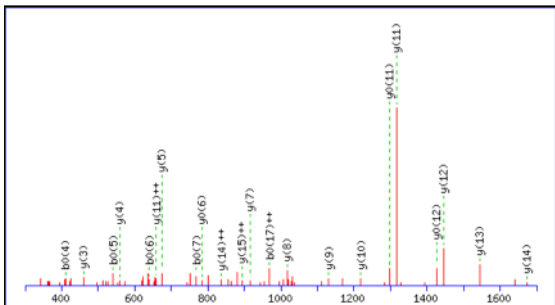
MS/MS Fragmentation of **TITLEVEPSDTIENVKAK**  
 Found in **YD\_RFP-p53-Ub**, YD\_RFP-p53-Ub

Match to Query 710: 2100.347448 from(1051.181000,2+) intensity(303915.0000)  
 Title: Cmpd 86, +MSn(1051.60), 26.4 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

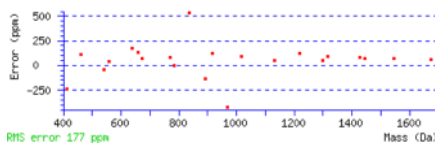
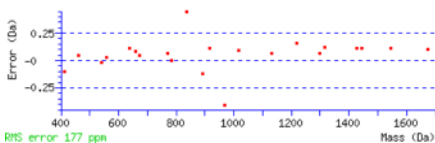
Or, Plot from 300 to 1700 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide **Mr(calc)**: 2100.0950  
**Fixed modifications**: Carbamidomethyl (C) (apply to specified residues or termini only)  
**Variable modifications**:  
 K16 : GlyGly (K)  
**Ions Score**: 48 **Expect**: 0.0056  
**Matches** : 22/168 fragment ions using 48 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	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	I	2000.0546	1000.5310	1983.0281	992.0177	1982.0441	991.5257	17
3	316.1867	158.5970			298.1761	149.5917	T	1886.9706	943.9889	1869.9440	935.4756	1868.9600	934.9836	16
4	429.2708	215.1390			411.2602	206.1337	L	1785.9229	893.4651	1768.8963	884.9518	1767.9123	884.4598	15
5	558.3134	279.6603			540.3028	270.6550	E	1672.8388	836.9230	1655.8123	828.4098	1654.8283	827.9178	14
6	657.3818	329.1945			639.3712	320.1892	V	1543.7962	772.4018	1526.7697	763.8885	1525.7857	763.3965	13
7	786.4244	393.7158			768.4138	384.7105	E	1444.7278	722.8675	1427.7013	714.3543	1426.7172	713.8623	12
8	883.4771	442.2422			865.4666	433.2369	P	1315.6852	658.3462	1298.6587	649.8330	1297.6747	649.3410	11
9	970.5092	485.7582			952.4986	476.7529	S	1218.6325	609.8199	1201.6059	601.3066	1200.6219	600.8146	10
10	1085.5361	543.2717			1067.5255	534.2664	D	1131.6004	566.3039	1114.5739	557.7906	1113.5899	557.2986	9
11	1186.5838	593.7955			1168.5732	584.7902	T	1016.5735	508.7904	999.5469	500.2771	998.5629	499.7851	8
12	1299.6678	650.3376			1281.6573	641.3323	I	915.5258	458.2665	898.4993	449.7533	897.5152	449.2613	7
13	1428.7104	714.8589			1410.6999	705.8536	E	802.4417	401.7245	785.4152	393.2112	784.4312	392.7192	6
14	1542.7534	771.8803	1525.7268	763.3670	1524.7428	762.8750	N	673.3991	337.2032	656.3726	328.6899			5
15	1641.8218	821.4145	1624.7952	812.9013	1623.8112	812.4092	V	559.3562	280.1817	542.3297	271.6685			4
16	1883.9597	942.4835	1866.9331	933.9702	1865.9491	933.4782	K	460.2878	230.6475	443.2613	222.1343			3
17	1954.9968	978.0020	1937.9702	969.4888	1936.9862	968.9967	A	218.1499	109.5786	201.1234	101.0653			2
18							K	147.1128	74.0600	130.0863	65.5468			1



NCBI BLAST search of **TITLEVEPSDTIENVKAK**  
 (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	2100.0950	0.2524	<a href="#">TITLEVEPSDTIENVKAK</a>
47.9	2100.0950	0.2524	<a href="#">TITLEVEPSDTIENVKAK</a>
22.7	2098.9993	1.3481	<a href="#">AQKVDEAIYAFNVMEK</a>
14.4	2100.9505	-0.6031	<a href="#">EVMDFKFAHHPFVCMSEK</a>
11.8	2099.0464	1.3010	<a href="#">SLMMLENAAKYLPNLMTEK</a>
10.7	2100.0811	0.2664	<a href="#">NVGSSLVEEDKLDLAKR</a>
10.7	2100.1547	0.1927	<a href="#">EVISILMQRQVMVDGKVR</a>
10.6	2099.0323	1.3151	<a href="#">KEDAIIFYTISLGSNHK</a>
10.3	2101.1241	-0.7767	<a href="#">OPTDSEMKALLAQQWKIVK</a>
9.7	2100.0851	0.2623	<a href="#">QNFSVNNVDITVIVEAPK</a>

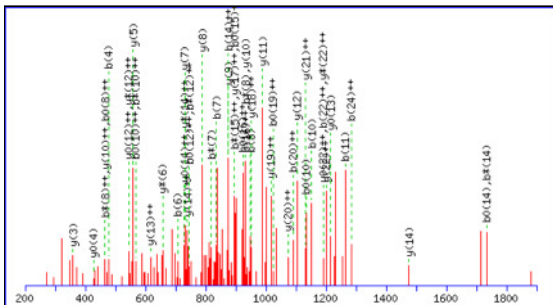
**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

MS/MS Fragmentation of **NLLHDNELSDLKEDGGSGGDL.SALR**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

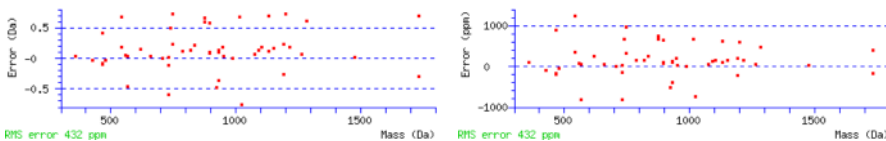
Match to Query 856: 2738.741172 from(913.921000,3+) intensity(3406834.0000)  
 Title: Cmpd 118, +MSn(914.46), 27.8 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 200 to 1900 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2738.3107  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K12 : GlyGly (K)  
 Ions Score: 50 Expect: 0.0024  
 Matches : 53/274 fragment ions using 86 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	115.0502	58.0287	98.0237	49.5155			N							25
2	228.1343	114.5708	211.1077	106.0575			L	2625.2751	1313.1412	2608.2485	1304.6279	2607.2645	1304.1359	24
3	341.2183	171.1128	324.1918	162.5995			L	2512.1910	1256.5991	2495.1645	1248.0859	2494.1804	1247.5939	23
4	<b>478.2772</b>	239.6423	461.2507	231.1290			H	2399.1069	<b>1200.0571</b>	2382.0804	<b>1191.5438</b>	2381.0964	<b>1191.0518</b>	22
5	593.3042	297.1557	576.2776	288.6425	575.2936	288.1504	D	2262.0480	<b>1131.5277</b>	2245.0215	1123.0144	2244.0375	1122.5224	21
6	<b>707.3471</b>	354.1772	690.3206	345.6639	689.3365	345.1719	N	2147.0211	<b>1074.0142</b>	2129.9945	1065.5009	2129.0105	1065.0089	20
7	<b>836.3897</b>	418.6985	<b>819.3632</b>	410.1852	818.3791	409.6932	E	2032.9782	<b>1016.9927</b>	2015.9516	1008.4794	2014.9676	1007.9874	19
8	<b>949.4738</b>	475.2405	<b>932.4472</b>	<b>466.7272</b>	931.4632	<b>466.2352</b>	L	1903.9356	<b>952.4714</b>	1886.9090	943.9582	1885.9250	943.4661	18
9	1036.5058	518.7565	1019.4792	510.2433	1018.4952	509.7513	S	1790.8515	<b>895.9294</b>	1773.8250	887.4161	1772.8409	886.9241	17
10	<b>1151.5327</b>	576.2700	1134.5062	<b>567.7567</b>	<b>1133.5222</b>	<b>567.2647</b>	D	1703.8195	852.4134	1686.7929	843.9001	1685.8089	843.4081	16
11	<b>1264.6168</b>	632.8120	1247.5903	624.2988	1246.6062	623.8068	L	1588.7925	794.8999	1571.7660	786.3866	1570.7820	785.8946	15
12	1506.7547	753.8810	1489.7281	<b>745.3677</b>	1488.7441	<b>744.8757</b>	K	<b>1475.7085</b>	<b>738.3579</b>	1458.6819	<b>729.8446</b>	1457.6979	<b>729.3526</b>	14
13	1635.7973	818.4023	1618.7707	809.8890	1617.7867	809.3970	E	1233.5706	<b>617.2889</b>	1216.5440	608.7757	<b>1215.5600</b>	608.2836	13
14	1750.8242	<b>875.9158</b>	<b>1733.7977</b>	867.4025	<b>1732.8137</b>	866.9105	D	<b>1104.5280</b>	552.7676	1087.5014	<b>544.2544</b>	1086.5174	<b>543.7624</b>	12
15	1807.8457	904.4265	1790.8191	<b>895.9132</b>	1789.8351	<b>895.4212</b>	G	<b>989.5010</b>	495.2542	972.4745	486.7409	971.4905	486.2489	11
16	1864.8672	<b>932.9372</b>	1847.8406	924.4239	1846.8566	<b>923.9319</b>	G	<b>932.4796</b>	<b>466.7434</b>	915.4530	458.2302	914.4690	457.7381	10
17	1951.8992	976.4532	1934.8726	967.9400	1933.8886	967.4479	S	<b>875.4581</b>	438.2327	858.4316	429.7194	857.4476	429.2274	9
18	2008.9207	1004.9640	1991.8941	996.4507	1990.9101	995.9587	G	<b>788.4261</b>	394.7167	771.3995	386.2034	770.4155	385.7114	8
19	2065.9421	1033.4747	2048.9156	1024.9614	2047.9315	<b>1024.4694</b>	G	<b>731.4046</b>	366.2060	714.3781	357.6927	713.3941	357.2007	7
20	2180.9691	<b>1090.9882</b>	2163.9425	1082.4749	2162.9585	1081.9829	D	674.3832	337.6952	<b>657.3566</b>	329.1819	656.3726	328.6899	6
21	2294.0531	1147.5302	2277.0266	1139.0169	2276.0426	1138.5249	L	<b>559.3562</b>	280.1817	542.3297	271.6685	541.3457	271.1765	5
22	2381.0851	<b>1191.0462</b>	2364.0586	1182.5329	2363.0746	1182.0409	S	446.2722	223.6397	429.2456	215.1264	<b>428.2616</b>	214.6344	4
23	2452.1223	1226.5648	2435.0957	1218.0515	2434.1117	1217.5595	A	<b>359.2401</b>	180.1237	342.2136	171.6104			3
24	2565.2063	<b>1283.1068</b>	2548.1798	1274.5935	2547.1958	1274.1015	L	288.2030	144.6051	271.1765	136.0919			2
25							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **NLLHDNELSDLKEDGGSGGDL.SALR**  
 (Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)  
 Other BLAST [web gateways](#)

All matches to this query

Score	Mr(calc):	Delta	Sequence
49.7	2738.3107	0.4305	<a href="#">NLLHDNELSDLKEDGGSGGDL.SALR</a>
20.9	2737.3996	1.3415	<a href="#">ERLESLVNFSTVMAFIKGTPEEPK</a>
17.4	2739.3109	-0.5697	<a href="#">WSAAKVVIVVGCGERGNEMTDELK</a>
16.3	2738.3116	0.4296	<a href="#">NVCIQTDRETFLKPCDAESKATR</a>
15.2	2739.4555	-0.7143	<a href="#">KPVELKKDSL EAGEVGVLSASIR</a>
15.2	2739.4555	-0.7143	<a href="#">KPVELKKDSL EAGEVGVLSASIR</a>
15.2	2738.4603	0.2809	<a href="#">IVEIYGPSSGKTTLALHAIQAQAK</a>
14.5	2739.3109	-0.5697	<a href="#">AKDTSMTWVVKMNQENL.PFR</a>
14.2	2738.4683	0.2728	<a href="#">IQLQERLGISLQQGDAIL.GMPMRR</a>

14.2	2739.3915	-0.6503	<a href="#">LVHPSNGNLIWFMDKQAGSKLDR</a>
------	-----------	---------	---

<b>Mascot:</b> <a href="http://www.matrixscience.com/">http://www.matrixscience.com/</a>
--

**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 467: 1459.933448 from (730.974000,2+) intensity(2962866.0000)

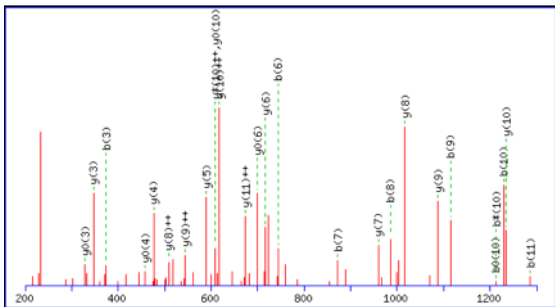
Title: Cmpd 64, +MSn(731.37), 24.4 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

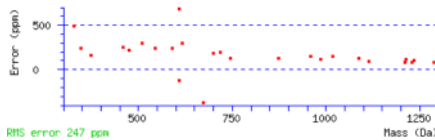
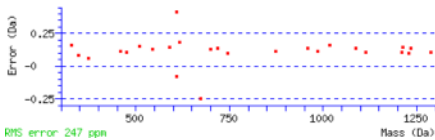
Variable modifications:

K6 : GlyGly (K)

Ions Score: 72 Expect: 8.6e-05

Matches : 26/102 Fragment ions using 32 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)

Other BLAST [web gateways](#)

All matches to this query

Score	Mr(calc):	Delta	Sequence
71.6	1459.7783	0.1551	<a href="#">LIFAGKQLEDGR</a>
27.3	1459.6725	0.2609	<a href="#">EAAALQCQLEDGR</a>
23.7	1459.8068	0.1267	<a href="#">ILQEKMEKAIK</a>
22.7	1460.7544	-0.8210	<a href="#">NIIEMQOLELSK</a>
21.6	1459.7307	0.2028	<a href="#">ALENALPYLEDGR</a>
21.3	1459.6903	0.2432	<a href="#">DEEKKEEVQGR</a>
20.2	1459.8293	0.1042	<a href="#">LIRMIRTAGALK</a>
19.9	1459.8610	0.0725	<a href="#">TKTKLSVIESIK</a>
19.9	1459.8610	0.0725	<a href="#">TKTKLSVLESIK</a>
19.9	1459.7718	0.1616	<a href="#">HGGGMPYVGAFFGRR</a>

Mascot: <http://www.matrixscience.com/>

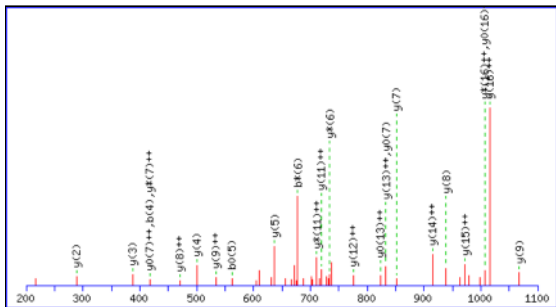
**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

MS/MS Fragmentation of **TLSDYNIQKESTLHLVLR**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

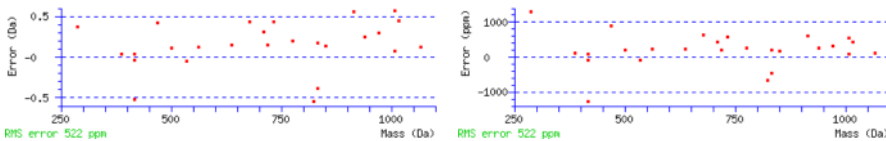
Match to Query 801: 2243.516172 from(748.846000,3+) intensity(584427.0000)  
 Title: Cmpd 100, +MSn(749.29), 27.4 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00812\_YD\_4\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
 Or, Plot from 200 to 1100 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2243.1910  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K9 : GlyGly (K)  
 Ions Score: 72 Expect: 7.5e-05  
 Matches : 26/182 fragment ions using 27 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	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	L	2143.1506	1072.0789	2126.1240	1063.5657	2125.1400	1063.0737	17
3	302.1710	151.5892			284.1605	142.5839	S	2030.0665	1015.5369	2013.0400	1007.0236	2012.0560	1006.5316	16
4	417.1980	209.1026			399.1874	200.0974	D	1943.0345	972.0209	1926.0080	963.5076	1925.0239	963.0156	15
5	580.2613	290.6343			562.2508	281.6290	Y	1828.0076	914.5074	1810.9810	905.9941	1809.9970	905.5021	14
6	694.3042	347.6558	677.2777	339.1425	676.2937	338.6505	N	1664.9442	832.9758	1647.9177	824.4625	1646.9337	823.9705	13
7	807.3883	404.1978	790.3618	395.6845	789.3777	395.1925	I	1550.9013	775.9543	1533.8748	767.4410	1532.8907	766.9490	12
8	935.4469	468.2271	918.4203	459.7138	917.4363	459.2218	Q	1437.8172	719.4123	1420.7907	710.8990	1419.8067	710.4070	11
9	1177.5848	589.2960	1160.5582	580.7828	1159.5742	580.2907	K	1309.7587	655.3830	1292.7321	646.8697	1291.7481	646.3777	10
10	1306.6274	653.8173	1289.6008	645.3040	1288.6168	644.8120	E	1067.6208	534.3140	1050.5942	525.8007	1049.6102	525.3087	9
11	1393.6594	697.3333	1376.6329	688.8201	1375.6488	688.3281	S	938.5782	469.7927	921.5516	461.2795	920.5676	460.7874	8
12	1494.7071	747.8572	1477.6805	739.3439	1476.6965	738.8519	T	851.5461	426.2767	834.5196	417.7634	833.5356	417.2714	7
13	1607.7911	804.3992	1590.7646	795.8859	1589.7806	795.3939	L	750.4985	375.7529	733.4719	367.2396			6
14	1744.8501	872.9287	1727.8235	864.4154	1726.8395	863.9234	H	637.4144	319.2108	620.3879	310.6976			5
15	1857.9341	929.4707	1840.9076	920.9574	1839.9236	920.4654	L	500.3555	250.6814	483.3289	242.1681			4
16	1957.0025	979.0049	1939.9760	970.4916	1938.9920	969.9996	V	387.2714	194.1394	370.2449	185.6261			3
17	2070.0866	1035.5469	2053.0600	1027.0337	2052.0760	1026.5417	L	288.2030	144.6051	271.1765	136.0919			2
18							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **TLSDYNIQKESTLHLVLR**  
 (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	2243.1910	0.3252	<a href="#">TLSDYNIQKESTLHLVLR</a>
27.1	2243.0713	0.4449	<a href="#">ESMQARGGPDGGNGGKGGDVIR</a>
21.4	2244.1718	-0.6557	<a href="#">TNQMPNAVQKLLLVMDKR</a>
21.4	2244.1718	-0.6557	<a href="#">TNQMPNAVQKLLLVMDKR</a>
20.1	2243.2056	0.3106	<a href="#">QSSNAVAKPSKMAATKVAVK</a>
18.8	2243.2381	0.2781	<a href="#">ELLSVRELKPIKMDGMVIR</a>
18.3	2243.1506	0.3656	<a href="#">TKTNNSSGLQGGISNGEELVIR</a>
17.6	2241.3395	2.1767	<a href="#">LAAKGVKVKPGMVGIVLR</a>
17.6	2241.3395	2.1767	<a href="#">LAAKGVKVKPGMVGIVLR</a>
17.6	2241.3395	2.1767	<a href="#">LAAKGVKVKPGMVGIVLR</a>

MASCOT SCIENCE Mascot Search Results

Protein View

Match to: YD\_RFP-BARD-BRCA-Ub Score: 5566

YD\_RFP-BARD-BRCA-Ub

Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

Nominal mass (M<sub>r</sub>): 60628; Calculated pI value: 6.10

NCBI BLAST search of YD\_RFP-BARD-BRCA-Ub against nr

Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)

Variable modifications: GlyGly (K), Oxidation (M)

Cleavage by Trypsin: cuts C-term side of KR unless next residue is P

Sequence Coverage: 57%

Matched peptides shown in Bold Red

1 MHHHHHHASS EDVIKEFMRF KVRMEGVSNG HEFEIEGEGR GRPYEGTQTA
51 KLRKVTGGGPEL PFAMWLLSPPQ FQYGSKAYVK HPADIPDYLRK LSFPEGFKWE
101 RVNMFEDGGV VTTQDSSLQ DGEFLYKVKL RGTNFPDGGP VMQKRTMGWE
151 ASTERMYFED GALKGEIEMR LKLDGGHYD AENVITPMK KPVQLPGAYK
201 TDIKLDTFSH NEDTIVTEYR EREAEGRHSYG AENLIPQGLE EFDGGAWAH
251 SRALLDRLEK LLRCSGWTI LRPEVCLGRI EHLFCSNVS DCIQTGCPVC
301 VTPAWIQDLK INRQLDSMIQ LCSKLRNLLH DNELSDIKED GSGGSDLSAL
351 RVEEYQNVIN AMQKILCEPI CLELLEKPVV TKDCHIFCKF CMLKLLNQKK
401 GFSQCEPLCKN DTKRSLQES TRFSQLAVEK LKILICARQLD TGLEANSYN
451 FAKQIFVKVTL TGRKTTLEVE PSTDIENVEK KIQQKEGIPP DQQRILFAGK
501 QLEDGRSLSD YNIQKRESLH LVLRRLRGG

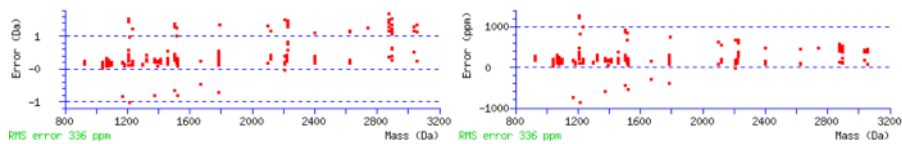
Show predicted peptides also

Sort Peptides By Residue Number Increasing Mass Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. Contains a list of peptides with their observed and calculated masses, delta values, and sequence details including modifications and ion scores.



507 - 515	541.3760	1080.7374	1080.5451	0.1923	0	R.TLSDYNIQK.E	(Ions score 52)
507 - 515	541.3800	1080.7454	1080.5451	0.2003	0	R.TLSDYNIQK.E	(Ions score 26)
507 - 515	541.3840	1080.7534	1080.5451	0.2083	0	R.TLSDYNIQK.E	(Ions score 51)
507 - 515	541.4000	1080.7854	1080.5451	0.2403	0	R.TLSDYNIQK.E	(Ions score 41)
507 - 515	541.4150	1080.8154	1080.5451	0.2703	0	R.TLSDYNIQK.E	(Ions score 29)
516 - 524	534.3630	1066.7114	1066.6135	0.0980	0	K.ESTLHLVLR.L	(Ions score 54)
516 - 524	534.3830	1066.7514	1066.6135	0.1380	0	K.ESTLHLVLR.L	(Ions score 39)
516 - 524	534.3960	1066.7774	1066.6135	0.1640	0	K.ESTLHLVLR.L	(Ions score 48)
516 - 524	534.4040	1066.7934	1066.6135	0.1800	0	K.ESTLHLVLR.L	(Ions score 61)
516 - 524	534.4180	1066.8214	1066.6135	0.2080	0	K.ESTLHLVLR.L	(Ions score 61)
516 - 524	534.4280	1066.8414	1066.6135	0.2280	0	K.ESTLHLVLR.L	(Ions score 65)
516 - 524	534.4580	1066.9014	1066.6135	0.2880	0	K.ESTLHLVLR.L	(Ions score 41)
516 - 524	534.4780	1066.9414	1066.6135	0.3280	0	K.ESTLHLVLR.L	(Ions score 41)



Mascot: <http://www.matrixscience.com/>



**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

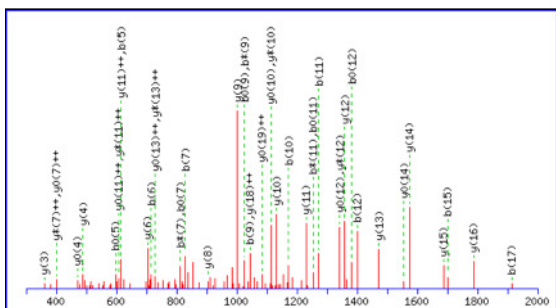
MS/MS Fragmentation of **TLTGKTITLEVEPSDTIENVK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 840: 2401.489448 from(1201.752000,2+) intensity(3469580.0000)  
 Title: Cmpd 130, +MSn(1202.36), 27.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

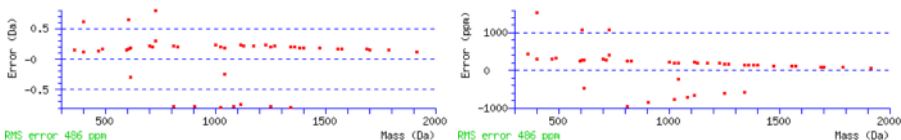
Or, Plot from 300 to 2000 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2401.2588  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K5 : GlyGly (K)  
 Ions Score: 100 Expect: 1.7e-07  
 Matches : 44/226 fragment ions using 40 most intense peaks (help)

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							21
2	215.1390	108.0731			197.1285	99.0679	L	2301.2184	1151.1128	2284.1918	1142.5996	2283.2078	1142.1076	20
3	316.1867	158.5970			298.1761	149.5917	T	2188.1343	1094.5708	2171.1078	1086.0575	2170.1238	1085.5655	19
4	373.2082	187.1077			355.1976	178.1024	G	2087.0867	1044.0470	2070.0601	1035.5337	2069.0761	1035.0417	18
5	615.3461	308.1767	598.3195	299.6634	597.3355	299.1714	K	2030.0652	1015.5362	2013.0386	1007.0230	2012.0546	1006.5310	17
6	716.3937	358.7005	699.3672	350.1872	698.3832	349.6952	T	1787.9273	894.4673	1770.9008	885.9540	1769.9167	885.4620	16
7	829.4778	415.2425	812.4512	406.7293	811.4672	406.2373	I	1686.8796	843.9434	1669.8531	835.4302	1668.8691	834.9382	15
8	930.5255	465.7664	913.4989	457.2531	912.5149	456.7611	T	1573.7956	787.4014	1556.7690	778.8881	1555.7850	778.3961	14
9	1043.6095	522.3084	1026.5830	513.7951	1025.5990	513.3031	L	1472.7479	736.8776	1455.7213	728.3643	1454.7373	727.8723	13
10	1172.6521	586.8297	1155.6256	578.3164	1154.6416	577.8244	E	1359.6638	680.3355	1342.6373	671.8223	1341.6533	671.3303	12
11	1271.7205	636.3639	1254.6940	627.8506	1253.7100	627.3586	V	1230.6212	615.8142	1213.5947	607.3010	1212.6107	606.8090	11
12	1400.7631	700.8852	1383.7366	692.3719	1382.7526	691.8799	E	1131.5528	566.2800	1114.5263	557.7668	1113.5422	557.2748	10
13	1497.8159	749.4116	1480.7894	740.8983	1479.8053	740.4063	P	1002.5102	501.7587	985.4837	493.2455	984.4997	492.7535	9
14	1584.8479	792.9276	1567.8214	784.4143	1566.8374	783.9223	S	905.4575	453.2324	888.4309	444.7191	887.4469	444.2271	8
15	1699.8749	850.4411	1682.8483	841.9278	1681.8643	841.4358	D	818.4254	409.7163	801.3989	401.2031	800.4149	400.7111	7
16	1800.9226	900.9649	1783.8960	892.4516	1782.9120	891.9596	T	703.3985	352.2029	686.3719	343.6896	685.3879	343.1976	6
17	1914.0066	957.5069	1896.9801	948.9937	1895.9961	948.5017	I	602.3508	301.6790	585.3243	293.1658	584.3402	292.6738	5
18	2043.0492	1022.0282	2026.0227	1013.5150	2025.0386	1013.0230	E	489.2667	245.1370	472.2402	236.6237	471.2562	236.1317	4
19	2157.0921	1079.0497	2140.0656	1070.5364	2139.0816	1070.0444	N	360.2241	180.6157	343.1976	172.1024			3
20	2256.1605	1128.5839	2239.1340	1120.0706	2238.1500	1119.5786	V	246.1812	123.5942	229.1547	115.0810			2
21							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
100.3	2401.2588	0.2307	<a href="#">TLTGKTITLEVEPSDTIENVK</a>
27.0	2401.2887	0.2008	<a href="#">LVSVASIGTPAMVDANGLVTKLK</a>
25.3	2401.1188	0.3706	<a href="#">RCEKEIHGVSNSAQICYSCK</a>
23.8	2401.1253	0.3641	<a href="#">DMEIAELKKNIEQMDTDHK</a>
22.3	2402.2289	-0.7394	<a href="#">TEEVSKLQSEVODTKQALQK</a>
22.3	2402.2289	-0.7394	<a href="#">TEEVSKLQSEVODTKQALQK</a>
21.7	2402.2839	-0.7944	<a href="#">LKTGLTVDOVMAARVLESEK</a>
21.4	2402.2442	-0.7547	<a href="#">TVIGTPFVEGATVEAIVEKQGR</a>
21.4	2399.3094	2.1801	<a href="#">KVM DVGGLISDDIHLVKER</a>
20.8	2399.2923	2.1972	<a href="#">SYAYKTTLLIIVPMSLLTQWR</a>

**(MATRIX SCIENCE) Mascot Search Results**

**Peptide View**

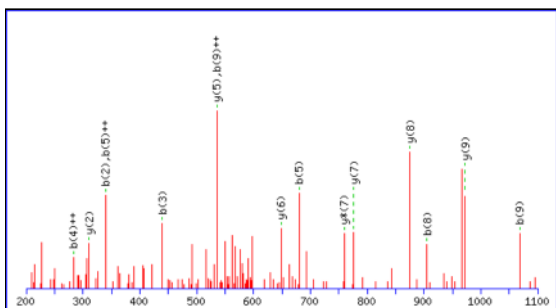
MS/MS Fragmentation of **KPVQLPGAYK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 306: 1213.803448 from (607.909000,2+) intensity(405146.0000)  
 Title: Cmpd 17, +MSn(608.47), 19.1 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

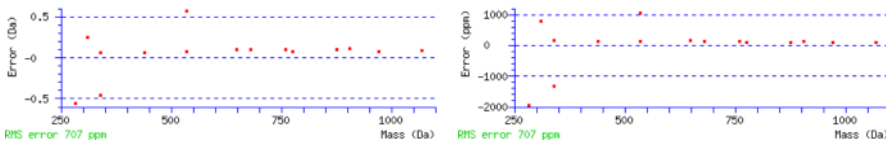
Or, Plot from 200 to 1100 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide **Mr(calc)**: 1213.6819  
**Fixed modifications**: Carbamidomethyl (C) (apply to specified residues or termini only)  
**Variable modifications**:  
 K1 : GlyGly (K)  
**Ions Score**: 46 **Expect**: 0.21  
**Matches** : 15/72 fragment ions using 18 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b*	b <sup>+++</sup>	Seq.	y	y <sup>++</sup>	y*	y <sup>+++</sup>	#
1	243.1452	122.0762	226.1186	113.5629	K					10
2	<b>340.1979</b>	170.6026	323.1714	162.0893	P	<b>972.5513</b>	486.7793	955.5247	478.2660	9
3	<b>439.2663</b>	220.1368	422.2398	211.6235	V	<b>875.4985</b>	438.2529	858.4720	429.7396	8
4	567.3249	<b>284.1661</b>	550.2984	275.6528	Q	<b>776.4301</b>	388.7187	<b>759.4036</b>	380.2054	7
5	<b>680.4090</b>	<b>340.7081</b>	663.3824	332.1949	L	<b>648.3715</b>	324.6894	631.3450	316.1761	6
6	777.4618	389.2345	760.4352	380.7212	P	<b>535.2875</b>	268.1474	518.2609	259.6341	5
7	834.4832	417.7452	817.4567	409.2320	G	438.2347	219.6210	421.2082	211.1077	4
8	<b>905.5203</b>	453.2638	888.4938	444.7505	A	381.2132	191.1103	364.1867	182.5970	3
9	<b>1068.5837</b>	<b>534.7955</b>	1051.5571	526.2822	Y	<b>310.1761</b>	155.5917	293.1496	147.0784	2
10					K	147.1128	74.0600	130.0863	65.5468	1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
46.3	1213.6819	0.1216	<a href="#">KPVQLPGAYK</a>
38.0	1213.7434	0.0600	<a href="#">LILVPFLNGTK</a>
28.5	1213.5615	0.2419	<a href="#">NFDIGLQEYK</a>
23.7	1213.7832	0.0203	<a href="#">ILLVAVSIKMK</a>
23.7	1213.7394	0.0641	<a href="#">LIIVNNSVKK</a>
23.7	1213.6805	0.1229	<a href="#">LLLVELEEEK</a>
21.0	1213.6091	0.1943	<a href="#">KEGIHPEYK</a>
19.5	1213.5649	0.2386	<a href="#">AYGMAGLETSAK</a>
18.8	1213.7394	0.0641	<a href="#">LLEKIKQNK</a>
18.2	1213.7645	0.0389	<a href="#">LLSSINLTK</a>

Mascot: <http://www.matrixscience.com/>

**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

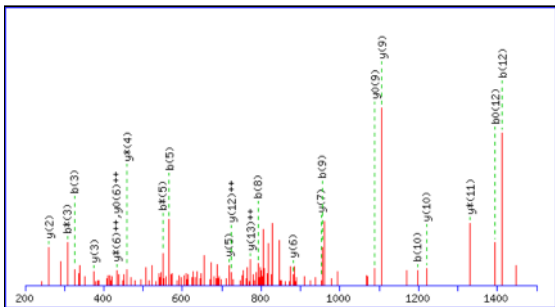
MS/MS Fragmentation of **KPVQLPGAYKTDIK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 571: 1671.177448 from(836.596000,2+) intensity(1047068.0000)  
 Title: Cmpd 56, +MSn(836.98), 21.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

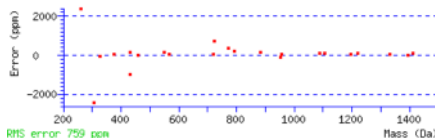
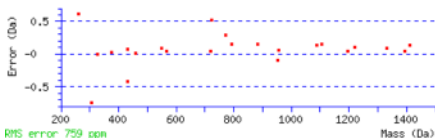
Or, Plot from 200 to 1500 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1670.9355  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K10 : GlyGly (K)  
 Ions Score: 29 Expect: 0.11  
 Matches : 23/132 fragment ions using 51 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	129.1022	65.0548	112.0757	56.5415			K							14
2	226.1550	113.5811	209.1285	105.0679			P	1543.8479	772.4276	1526.8213	763.9143	1525.8373	763.4223	13
3	325.2234	163.1153	308.1969	154.6021			V	1446.7951	723.9012	1429.7686	715.3879	1428.7845	714.8959	12
4	453.2820	227.1446	436.2554	218.6314			Q	1347.7267	674.3670	1330.7001	665.8537	1329.7161	665.3617	11
5	566.3667	283.6867	549.3395	275.1734			L	1219.6681	610.3377	1202.6416	601.8244	1201.6576	601.3324	10
6	663.4188	332.2130	646.3923	323.6998			P	1106.5841	553.7957	1089.5575	545.2824	1088.5735	544.7904	9
7	720.4403	360.7238	703.4137	352.2105			G	1009.5313	505.2693	992.5047	496.7560	991.5207	496.2640	8
8	791.4774	396.2423	774.4509	387.7291			A	952.5098	476.7585	935.4833	468.2453	934.4993	467.7533	7
9	954.5407	477.7740	937.5142	469.2607			Y	881.4727	441.2400	864.4462	432.7267	863.4621	432.2347	6
10	1196.6786	598.8429	1179.6521	590.3297			K	718.4094	359.7083	701.3828	351.1951	700.3988	350.7030	5
11	1297.7263	649.3668	1280.6998	640.8535	1279.7157	640.3615	T	476.2715	238.6394	459.2449	230.1261	458.2609	229.6341	4
12	1412.7532	706.8803	1395.7267	698.3670	1394.7427	697.8750	D	375.2238	188.1155	358.1973	179.6023	357.2132	179.1103	3
13	1525.8373	763.4223	1508.8108	754.9090	1507.8267	754.4170	I	260.1969	130.6021	243.1703	122.0888			2
14							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
29.0	1670.9355	0.2419	<a href="#">KPVQLPGAYKTDIK</a>
18.1	1671.8176	-0.6402	<a href="#">QGNSSVVKINGEDGNGK</a>
17.3	1670.8562	0.3212	<a href="#">GASFGRLASMKLDYR</a>
17.3	1670.8199	0.3576	<a href="#">GASFGRLASMKLDYR</a>
16.5	1671.9705	-0.7931	<a href="#">IKVLILMGATKNK</a>
15.1	1670.9355	0.2419	<a href="#">KPVQLPGAYKTDIK</a>
15.0	1671.8865	-0.7091	<a href="#">MLLKETHIPDGANK</a>
12.3	1670.8773	0.3001	<a href="#">AHKEGLTLKQSAMK</a>
12.1	1671.6691	-0.4916	<a href="#">EMFSHADGMTMSAK</a>
11.6	1670.9567	0.2207	<a href="#">TSTVLIIVGAGGIGQTLK</a>

Mascot: <http://www.matrixscience.com/>

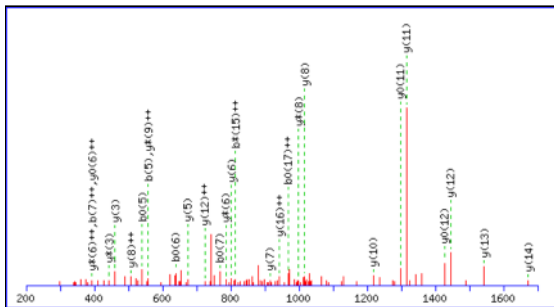
**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

MS/MS Fragmentation of **TITLEVEPSDTIENVKAK**  
 Found in **YD\_RFP-p53-Ub**, YD\_RFP-p53-Ub

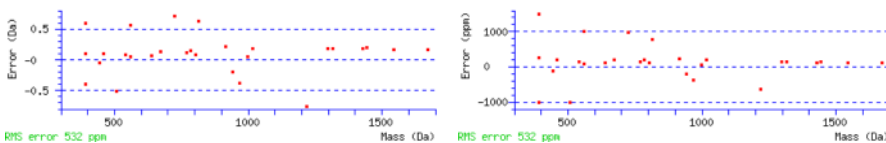
Match to Query 709: 2100.261448 from(1051.138000,2+) intensity(1215853.0000)  
 Title: Cmpd 115, +MSn(1051.56), 26.2 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

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): 2100.0950  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K16 : GlyGly (K)  
 Ions Score: 28 Expect: 0.68  
 Matches : 28/168 Fragment ions using 64 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	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	I	2000.0546	1000.5310	1983.0281	992.0177	1982.0441	991.5257	17
3	316.1867	158.5970			298.1761	149.5917	T	1886.9706	<b>943.9889</b>	1869.9440	935.4756	1868.9600	934.9836	16
4	429.2708	215.1390			411.2602	206.1337	L	1785.9229	893.4651	1768.8963	884.9518	1767.9123	884.4598	15
5	<b>558.3134</b>	279.6603			<b>540.3028</b>	270.6550	E	<b>1672.8388</b>	836.9230	1655.8123	828.4098	1654.8283	827.9178	14
6	657.3818	329.1945			<b>639.3712</b>	320.1892	V	<b>1543.7962</b>	772.4018	1526.7697	763.8885	1525.7857	763.3965	13
7	786.4244	<b>393.7158</b>			<b>768.4138</b>	384.7105	E	<b>1444.7278</b>	<b>722.8675</b>	1427.7013	714.3543	<b>1426.7172</b>	713.8623	12
8	883.4771	442.2422			865.4666	433.2369	P	<b>1315.6852</b>	658.3462	1298.6587	649.8330	<b>1297.6747</b>	649.3410	11
9	970.5092	485.7582			952.4986	476.7529	S	<b>1218.6325</b>	609.8199	1201.6059	601.3066	1200.6219	600.8146	10
10	1085.5361	543.2717			1067.5255	534.2664	D	1131.6004	566.3039	1114.5739	<b>557.7906</b>	1113.5899	557.2986	9
11	1186.5838	593.7955			1168.5732	584.7902	T	<b>1016.5735</b>	<b>508.7904</b>	<b>999.5469</b>	500.2771	998.5629	499.7851	8
12	1299.6678	650.3376			1281.6573	641.3323	I	<b>915.5258</b>	458.2665	898.4993	449.7533	897.5152	449.2613	7
13	1428.7104	714.8589			1410.6999	705.8536	E	<b>802.4417</b>	401.7245	<b>785.4152</b>	<b>393.2112</b>	784.4312	<b>392.7192</b>	6
14	1542.7534	771.8803	1525.7268	763.3670	1524.7428	762.8750	N	<b>673.3991</b>	337.2032	656.3726	328.6899			5
15	1641.8218	821.4145	1624.7952	<b>812.9013</b>	1623.8112	812.4092	V	559.3562	280.1817	542.3297	271.6685			4
16	1883.9597	942.4835	1866.9331	933.9702	1865.9491	933.4782	K	<b>460.2878</b>	230.6475	<b>443.2613</b>	222.1343			3
17	1954.9968	978.0020	1937.9702	969.4888	1936.9862	<b>968.9967</b>	A	218.1499	109.5786	201.1234	101.0653			2
18							K	147.1128	74.0600	130.0863	65.5468			1



NCBI BLAST search of **TITLEVEPSDTIENVKAK**  
 (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	2100.0950	0.1664	<a href="#">TITLEVEPSDTIENVKAK</a>
27.8	2100.0950	0.1664	<a href="#">TITLEVEPSDTIENVKAK</a>
18.9	2100.1435	0.1180	<a href="#">NMVVKIPMTVVEGLKAVK</a>
16.0	2100.1136	0.1478	<a href="#">LDILMAEVEDIELSAGRVK</a>
13.3	2098.0782	2.1832	<a href="#">OHGMNSEVVFVIEHLAKK</a>
13.3	2098.0782	2.1832	<a href="#">OHGMNSEVVFVIEHLAKK</a>
13.1	2099.0464	1.2150	<a href="#">SLMMLLENAAKYLPNLMTK</a>
13.1	2099.0464	1.2150	<a href="#">SLMMLLENAAKYLPNLMTK</a>
13.0	2099.0494	1.2120	<a href="#">EAQVKVAEVEGEKVDNK</a>
12.7	2101.1241	-0.8627	<a href="#">EIKMGEVANFTIPVVI EGR</a>

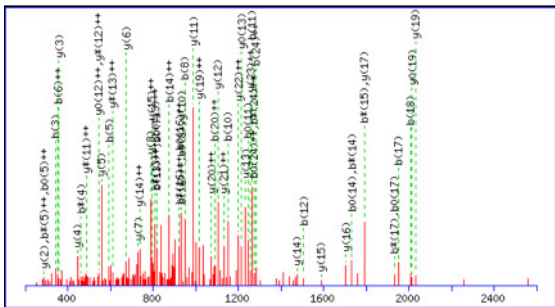
**(MATRIX) Mascot Search Results**  
**(SCIENCE)**

**Peptide View**

MS/MS Fragmentation of **NLLHDNELSDLKEDGGSGGDL SALR**  
Found in **YD\_RFP-BARD-BCRA-Ub**, YD\_RFP-BARD-BCRA-Ub

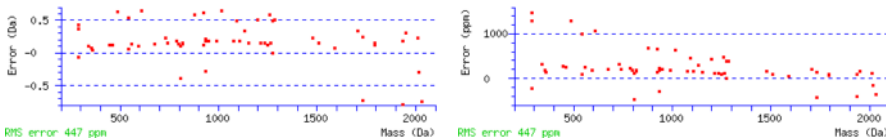
Match to Query 864: 2739.578172 from(914.200000,3+) intensity(3627246.0000)  
Title: Cmpd 144, +MSn(914.42), 28.6 min  
Data file C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point  
Or, Plot from 200 to 2600 Da Full range  
Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2738.3107  
Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
Variable modifications: K12 : GlyGly (K)  
Ions Score: 104 Expect: 7.4e-09  
Matches : 60/274 fragment ions using 75 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	115.0502	58.0287	98.0237	49.5155			N							25
2	228.1343	114.5708	211.1077	106.0575			L	2625.2751	1313.1412	2608.2485	1304.6279	2607.2645	1304.1359	24
3	<b>341.2183</b>	171.1128	324.1918	162.5995			L	2512.1910	<b>1256.5991</b>	2495.1645	1248.0859	2494.1804	1247.5939	23
4	478.2772	239.6423	<b>461.2507</b>	231.1290			H	2399.1069	<b>1200.0571</b>	2382.0804	1191.5438	2381.0964	1191.0518	22
5	<b>593.3042</b>	297.1557	576.2776	<b>288.6425</b>	575.2936	<b>288.1504</b>	D	2262.0480	<b>1131.5277</b>	2245.0215	1123.0144	2244.0375	1122.5224	21
6	707.3471	<b>354.1772</b>	690.3206	345.6639	689.3365	345.1719	N	2147.0211	<b>1074.0142</b>	2129.9945	1065.5009	2129.0105	1065.0089	20
7	836.3897	418.6985	819.3632	410.1852	<b>818.3791</b>	409.6932	E	<b>2032.9782</b>	<b>1016.9927</b>	2015.9516	1008.4794	<b>2014.9676</b>	1007.9874	19
8	<b>949.4738</b>	475.2405	<b>932.4472</b>	466.7272	931.4632	466.2352	L	1903.9356	952.4714	1886.9090	943.9582	1885.9250	943.4661	18
9	1036.5058	518.7565	1019.4792	510.2433	1018.4952	509.7513	S	<b>1790.8515</b>	895.9294	1773.8250	887.4161	1772.8409	886.9241	17
10	<b>1151.5327</b>	576.2700	1134.5062	567.7567	1133.5222	567.2647	D	<b>1703.8195</b>	852.4134	1686.7929	843.9001	1685.8089	843.4081	16
11	<b>1264.6168</b>	632.8120	1247.5903	624.2988	<b>1246.6062</b>	623.8068	L	<b>1588.7925</b>	<b>794.8999</b>	1571.7660	786.3866	1570.7820	785.8946	15
12	<b>1506.7547</b>	753.8810	1489.7281	745.3677	1488.7441	744.8757	K	<b>1475.7085</b>	<b>738.3579</b>	1458.6819	729.8446	1457.6979	729.3526	14
13	1635.7973	<b>818.4023</b>	1618.7707	<b>809.8890</b>	1617.7867	<b>809.3970</b>	E	<b>1233.5706</b>	617.2889	1216.5440	<b>608.7757</b>	<b>1215.5600</b>	608.2836	13
14	1750.8242	<b>875.9158</b>	<b>1733.7977</b>	867.4025	<b>1732.8137</b>	866.9105	D	<b>1104.5280</b>	552.7676	1087.5014	<b>544.2544</b>	1086.5174	<b>543.7624</b>	12
15	1807.8457	904.4265	<b>1790.8191</b>	895.9132	1789.8351	895.4212	G	<b>989.5010</b>	495.2542	972.4745	<b>486.7409</b>	971.4905	486.2489	11
16	1864.8672	<b>932.9372</b>	1847.8406	<b>924.4239</b>	1846.8566	<b>923.9319</b>	G	<b>932.4796</b>	466.7434	915.4530	458.2302	914.4690	457.7381	10
17	<b>1951.8992</b>	976.4532	<b>1934.8726</b>	967.9400	<b>1933.8886</b>	967.4479	S	875.4581	438.2327	858.4316	429.7194	857.4476	429.2274	9
18	<b>2008.9207</b>	1004.9640	1991.8941	996.4507	1990.9101	995.9587	G	<b>788.4261</b>	394.7167	771.3995	386.2034	770.4155	385.7114	8
19	2065.9421	1033.4747	2048.9156	1024.9614	2047.9315	1024.4694	G	<b>731.4046</b>	366.2060	714.3781	357.6927	713.3941	357.2007	7
20	2180.9691	<b>1090.9882</b>	2163.9425	1082.4749	2162.9585	1081.9829	D	<b>674.3832</b>	337.6952	657.3566	329.1819	656.3726	328.6899	6
21	2294.0531	1147.5302	2277.0266	1139.0169	2276.0426	1138.5249	L	<b>559.3562</b>	280.1817	542.3297	271.6685	541.3457	271.1765	5
22	2381.0851	1191.0462	2364.0586	1182.5329	2363.0746	1182.0409	S	<b>446.2722</b>	223.6397	429.2456	215.1264	428.2616	214.6344	4
23	2452.1223	1226.5648	2435.0957	1218.0515	2434.1117	1217.5595	A	<b>359.2401</b>	180.1237	342.2136	171.6104			3
24	2565.2063	<b>1283.1068</b>	2548.1798	<b>1274.5935</b>	2547.1958	<b>1274.1015</b>	L	<b>288.2030</b>	144.6051	271.1765	136.0919			2
25							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **NLLHDNELSDLKEDGGSGGDL SALR**  
(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)  
Other BLAST [web gateways](#)

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
104.1	2738.3107	1.2675	<a href="#">NLLHDNELSDLKEDGGSGGDL SALR</a>
16.8	2739.3571	0.2211	<a href="#">IAAVLDCKTSKAAEVMAAGEGYIK</a>
14.6	2739.3062	0.2720	<a href="#">EGGQVLDITMAIENFISVQETEPEPK</a>
14.6	2740.3124	-0.7343	<a href="#">SSLASHSSQDQKSHTPRSSISSPR</a>
14.4	2738.2599	1.3182	<a href="#">NKNTEGSMASNPILVMDVEGTDGRER</a>
14.3	2739.2156	0.3626	<a href="#">YKGLGEMDPEQLWETITMDPETR</a>
14.1	2739.3533	0.2249	<a href="#">LGFSEVEQVMVVDGKLMVEMEK</a>
13.9	2739.3459	0.2323	<a href="#">NNCIGLMYNALVIDSDESSLIAIK</a>
13.0	2738.3446	1.2336	<a href="#">YERGSNPMTIVKVPDSPPPSPGR</a>

12.9	2738.5113	1.0669	<a href="#">IKVTINTAKPGMVIGRQGAGVEELK</a>
------	-----------	--------	---

<b>Mascot:</b> <a href="http://www.matrixscience.com/">http://www.matrixscience.com/</a>
--

**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 462: 1460.095448 from(731.055000,2+) intensity(5995554.0000)

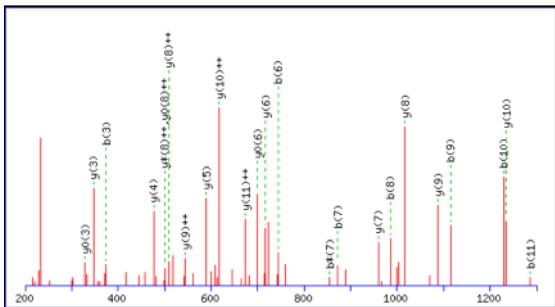
Title: Cmpd 91, +MSn(731.30), 24.8 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00814\_YD\_5\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

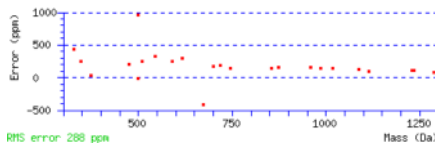
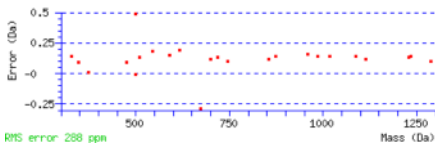
Variable modifications:

K6 : GlyGly (K)

Ions Score: 71 Expect: 8.9e-05

Matches : 24/102 Fragment ions using 30 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(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	1459.7783	0.3171	<a href="#">LIFAGKQLEDGR</a>
27.1	1460.7544	-0.6590	<a href="#">NIEMQOLELSK</a>
25.2	1460.7471	-0.6516	<a href="#">TNTNNTINIESIK</a>
25.2	1459.6725	0.4229	<a href="#">EAAALQCQLEDGR</a>
21.9	1459.8610	0.2345	<a href="#">TKTKLSVIESIK</a>
21.9	1459.8610	0.2345	<a href="#">TKTKLSVLESIK</a>
21.3	1459.8293	0.2662	<a href="#">LIRMIRTAGALK</a>
21.2	1459.7307	0.3648	<a href="#">ALENALPYLEDGR</a>
18.9	1459.8432	0.2522	<a href="#">SGMVTLKLEKIK</a>
18.7	1460.7908	-0.6954	<a href="#">TVEMLKAEGIK</a>

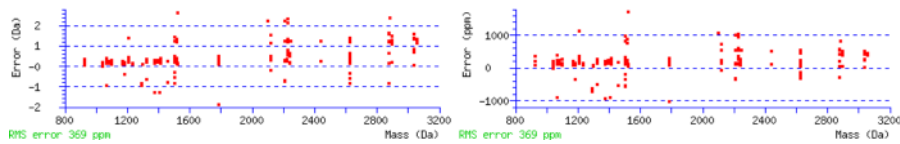
Mascot: <http://www.matrixscience.com/>







464 - 479	894.6940	1787.3734	1786.9200	0.4534	0	K.TITLEVEPSDTIENVK.A	(Ions score 82)
464 - 479	894.7260	1787.4374	1786.9200	0.5174	0	K.TITLEVEPSDTIENVK.A	(Ions score 76)
464 - 481	701.7810	2102.3212	2100.0950	2.2262	1	K.TITLEVEPSDTIENVKAK.I	GlyGly (K) (Ions score 44)
482 - 494	762.4400	1522.8654	1522.7740	0.0915	1	K.IQDKREGIPPDQQR.L	(Ions score 55)
482 - 494	762.4440	1522.8734	1522.7740	0.0995	1	K.IQDKREGIPPDQQR.L	(Ions score 62)
482 - 494	762.4540	1522.8934	1522.7740	0.1195	1	K.IQDKREGIPPDQQR.L	(Ions score 58)
482 - 494	762.4650	1522.9154	1522.7740	0.1415	1	K.IQDKREGIPPDQQR.L	(Ions score 63)
482 - 494	762.4730	1522.9314	1522.7740	0.1575	1	K.IQDKREGIPPDQQR.L	(Ions score 55)
482 - 494	762.4750	1522.9354	1522.7740	0.1615	1	K.IQDKREGIPPDQQR.L	(Ions score 48)
486 - 494	520.2600	1038.5054	1038.5094	-0.0040	0	K.EGIPPDQQR.L	(Ions score 31)
486 - 494	520.2890	1038.5634	1038.5094	0.0540	0	K.EGIPPDQQR.L	(Ions score 28)
486 - 494	520.3020	1038.5894	1038.5094	0.0800	0	K.EGIPPDQQR.L	(Ions score 30)
486 - 494	520.3150	1038.6154	1038.5094	0.1060	0	K.EGIPPDQQR.L	(Ions score 31)
486 - 494	520.3200	1038.6254	1038.5094	0.1160	0	K.EGIPPDQQR.L	(Ions score 29)
486 - 494	520.3580	1038.7014	1038.5094	0.1920	0	K.EGIPPDQQR.L	(Ions score 32)
486 - 494	520.3600	1038.7054	1038.5094	0.1960	0	K.EGIPPDQQR.L	(Ions score 30)
486 - 494	520.3650	1038.7154	1038.5094	0.2060	0	K.EGIPPDQQR.L	(Ions score 28)
495 - 506	487.3360	1458.9862	1459.7783	-0.7921	1	R.LIFAGKQLEDGR.T	GlyGly (K) (Ions score 39)
495 - 506	487.6810	1460.0212	1459.7783	0.2429	1	R.LIFAGKQLEDGR.T	GlyGly (K) (Ions score 42)
507 - 515	541.3500	1080.6854	1080.5451	0.1403	0	R.TLSDYNIQK.E	(Ions score 58)
507 - 515	541.3510	1080.6874	1080.5451	0.1423	0	R.TLSDYNIQK.E	(Ions score 63)
507 - 515	541.3560	1080.6974	1080.5451	0.1523	0	R.TLSDYNIQK.E	(Ions score 63)
507 - 515	541.3890	1080.7634	1080.5451	0.2183	0	R.TLSDYNIQK.E	(Ions score 63)
507 - 515	541.4070	1080.7994	1080.5451	0.2543	0	R.TLSDYNIQK.E	(Ions score 33)
507 - 524	1122.6910	2243.3674	2243.1910	0.1765	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K) (Ions score 101)
507 - 524	1122.7160	2243.4174	2243.1910	0.2265	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K) (Ions score 84)
507 - 524	748.8980	2243.6722	2243.1910	0.4812	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K) (Ions score 75)
507 - 524	748.9500	2243.8282	2243.1910	0.6372	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K) (Ions score 78)
507 - 524	1123.2170	2244.4194	2243.1910	1.2285	1	R.TLSDYNIQKESTLHLVLR.L	GlyGly (K) (Ions score 101)
516 - 524	533.8360	1066.6574	1066.6135	-0.9560	0	K.ESTLHLVLR.L	(Ions score 64)
516 - 524	534.3830	1066.7514	1066.6135	0.1380	0	K.ESTLHLVLR.L	(Ions score 62)
516 - 524	534.3950	1066.7754	1066.6135	0.1620	0	K.ESTLHLVLR.L	(Ions score 77)
516 - 524	534.3960	1066.7774	1066.6135	0.1640	0	K.ESTLHLVLR.L	(Ions score 64)
516 - 524	534.4340	1066.8534	1066.6135	0.2400	0	K.ESTLHLVLR.L	(Ions score 63)
516 - 524	534.5160	1067.0174	1066.6135	0.4040	0	K.ESTLHLVLR.L	(Ions score 22)



Masscot: <http://www.matrixscience.com/>

**MASCOT** **SCIENCE** Mascot Search Results

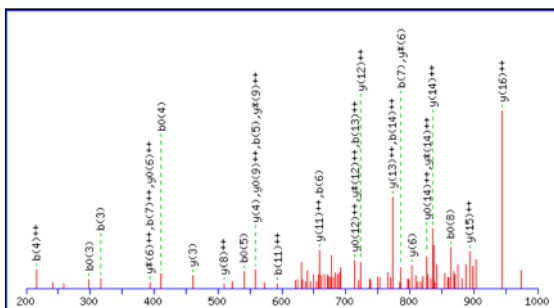
Peptide View

MS/MS Fragmentation of **TITLEVEPSDTIENVKAK**  
 Found in **YD\_RFP-p53-Ub**, **YD\_RFP-p53-Ub**

Match to Query 693: 2102.321172 from(701.781000,3+) intensity(392304.0000)  
 Title: Cmpd 93, +MSn(702.69), 26.4 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00816\_YD\_6\_merge.mgf

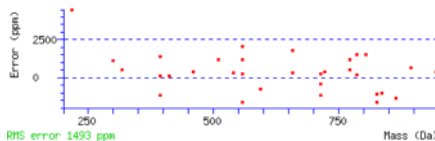
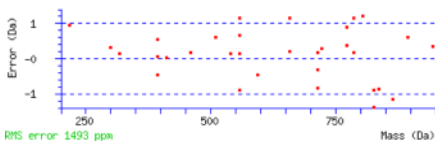
Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1000 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide **Mr(calc)**: 2100.0950  
**Fixed modifications**: Carbamidomethyl (C) (apply to specified residues or termini only)  
**Variable modifications**:  
 K16 : GlyGly (K)  
**Ions Score**: 44 **Expect**: 0.37  
**Matches** : 33/168 fragment ions using 31 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							18
2	<b>215.1390</b>	108.0731			197.1285	99.0679	I	2000.0546	1000.5310	1983.0281	992.0177	1982.0441	991.5257	17
3	<b>316.1867</b>	158.5970			<b>298.1761</b>	149.5917	T	1886.9706	<b>943.9889</b>	1869.9440	935.4756	1868.9600	934.9836	16
4	429.2708	<b>215.1390</b>			<b>411.2602</b>	206.1337	L	1785.9229	<b>893.4651</b>	1768.8963	884.9518	1767.9123	884.4598	15
5	<b>558.3134</b>	279.6603			<b>540.3028</b>	270.6550	E	1672.8388	<b>836.9230</b>	1655.8123	<b>828.4098</b>	1654.8283	<b>827.9178</b>	14
6	<b>657.3818</b>	329.1945			639.3712	320.1892	V	1543.7962	<b>772.4018</b>	1526.7697	763.8885	1525.7857	763.3965	13
7	<b>786.4244</b>	<b>393.7158</b>			768.4138	384.7105	E	1444.7278	<b>722.8675</b>	1427.7013	<b>714.3543</b>	1426.7172	<b>713.8623</b>	12
8	883.4771	442.2422			<b>865.4666</b>	433.2369	P	1315.6852	<b>658.3462</b>	1298.6587	649.8330	1297.6747	649.3410	11
9	970.5092	485.7582			952.4986	476.7529	S	1218.6325	609.8199	1201.6059	601.3066	1200.6219	600.8146	10
10	1085.5361	543.2717			1067.5255	534.2664	D	1131.6004	566.3039	1114.5739	<b>557.7906</b>	1113.5899	<b>557.2986</b>	9
11	1186.5838	<b>593.7955</b>			1168.5732	584.7902	T	1016.5735	<b>508.7904</b>	999.5469	500.2771	998.5629	499.7851	8
12	1299.6678	650.3376			1281.6573	641.3323	I	915.5258	458.2665	898.4993	449.7533	897.5152	449.2613	7
13	1428.7104	<b>714.8589</b>			1410.6999	705.8536	E	<b>802.4417</b>	401.7245	<b>785.4152</b>	<b>393.2112</b>	784.4312	<b>392.7192</b>	6
14	1542.7534	<b>771.8803</b>	1525.7268	763.3670	1524.7428	762.8750	N	673.3991	337.2032	656.3726	328.6899			5
15	1641.8218	821.4145	1624.7952	812.9013	1623.8112	812.4092	V	<b>559.3562</b>	280.1817	542.3297	271.6685			4
16	1883.9597	942.4835	1866.9331	933.9702	1865.9491	933.4782	K	<b>460.2878</b>	230.6475	443.2613	222.1343			3
17	1954.9968	978.0020	1937.9702	969.4888	1936.9862	968.9967	A	218.1499	109.5786	201.1234	101.0653			2
18							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
48.7	2104.0874	-1.7662	<a href="#">RYLIDKGLVPMEGDEELK</a>
47.0	2101.0772	1.2440	<a href="#">NVSMQNAVNEPVQKLMRK</a>
44.4	2100.0950	2.2262	<a href="#">TITLEVEPSDTIENVKAK</a>
44.4	2100.0950	2.2262	<a href="#">TITLEVEPSDTIENVKAK</a>
44.3	2100.1361	2.1851	<a href="#">DVITELIAKLGENMNLRR</a>
43.5	2101.2081	1.1131	<a href="#">RGRPEALYKLMVEIGIK</a>
42.2	2101.1280	1.1932	<a href="#">TLTLEAGRFAEQANGAVVVR</a>
42.0	2102.0831	0.2381	<a href="#">ITCGQVITGLAPXIPFLRTG</a>
40.7	2102.0491	0.2721	<a href="#">RASEKSGLELDIESSOPLK</a>
40.4	2101.0804	1.2408	<a href="#">GPVSRITFVLGASADSPELGK</a>

**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 426: 1460.021172 from(487.681000,3+) intensity(2549566.0000)

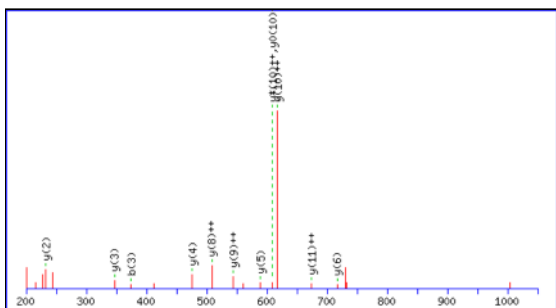
Title: Cmpd 73, +MSn(487.77), 24.3 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00816\_YD\_6\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1050 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

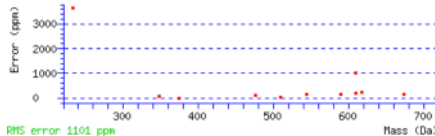
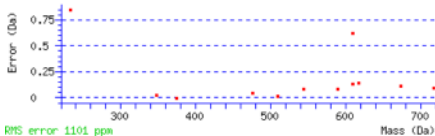
Variable modifications:

K6 : GlyGly (K)

Ions Score: 42 Expect: 0.72

Matches : 12/102 Fragment ions using 17 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	332.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(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	1460.7116	-0.6904	<a href="#">LNGGLGTTMGCVGPK</a>
42.2	1461.7034	-1.6823	<a href="#">IGGNDKQGFPMK</a>
42.1	1459.7783	0.2429	<a href="#">LIFAGKQLEDGR</a>
38.8	1460.6743	-0.6532	<a href="#">NGGDVTVAGSDDLK</a>
36.7	1460.7147	-0.6935	<a href="#">DIGSAVFPDADLK</a>
34.8	1458.8558	1.1654	<a href="#">NLDLKKGFQIK</a>
34.8	1459.8398	0.1813	<a href="#">LIIGDKEIFGISR</a>
34.5	1460.6201	-0.5990	<a href="#">AEMDRESEHVK</a>
34.4	1460.7374	-0.7162	<a href="#">LLFTYQMTYPGK</a>
33.1	1458.8082	1.2129	<a href="#">FPETSGIGIKPVSK</a>

Mascot: <http://www.matrixscience.com/>

**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

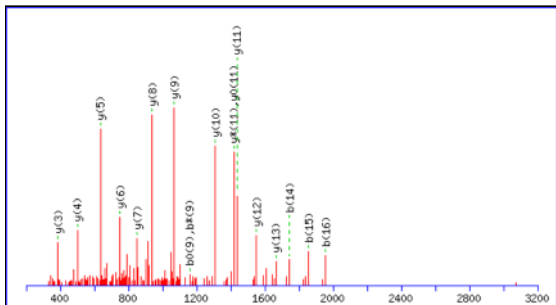
MS/MS Fragmentation of **TLSDYNIQKESTLHLVLR**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 786: 2243.367448 from(1122.691000,2+) intensity(21048710.0000)  
 Title: Cmpd 103, +MSn(1123.27), 27.3 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00816\_YD\_6\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

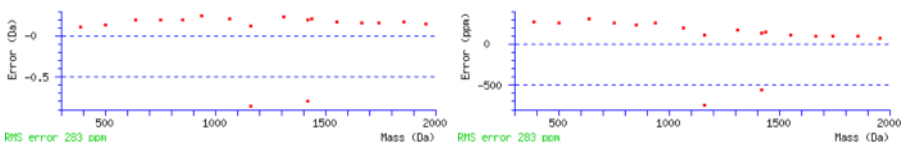
Or, Plot from 200 to 3200 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2243.1910  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K9 : GlyGly (K)  
 Ions Score: 101 Expect: 7.2e-07  
 Matches : 18/182 fragment ions using 17 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	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	L	2143.1506	1072.0789	2126.1240	1063.5657	2125.1400	1063.0737	17
3	302.1710	151.5892			284.1605	142.5839	S	2030.0665	1015.5369	2013.0400	1007.0236	2012.0560	1006.5316	16
4	417.1980	209.1026			399.1874	200.0974	D	1943.0345	972.0209	1926.0080	963.5076	1925.0239	963.0156	15
5	580.2613	290.6343			562.2508	281.6290	Y	1828.0076	914.5074	1810.9810	905.9941	1809.9970	905.5021	14
6	694.3042	347.6558	677.2777	339.1425	676.2937	338.6505	N	<b>1664.9442</b>	832.9758	1647.9177	824.4625	1646.9337	823.9705	13
7	807.3883	404.1978	790.3618	395.6845	789.3777	395.1925	I	<b>1550.9013</b>	775.9543	1533.8748	767.4410	1532.8907	766.9490	12
8	935.4469	468.2271	918.4203	459.7138	917.4363	459.2218	Q	<b>1437.8172</b>	719.4123	<b>1420.7907</b>	710.8990	<b>1419.8067</b>	710.4070	11
9	1177.5848	589.2960	<b>1160.5582</b>	580.7828	<b>1159.5742</b>	580.2907	K	<b>1309.7587</b>	655.3830	1292.7321	646.8697	1291.7481	646.3777	10
10	1306.6274	653.8173	1289.6008	645.3040	1288.6168	644.8120	E	<b>1067.6208</b>	534.3140	1050.5942	525.8007	1049.6102	525.3087	9
11	1393.6594	697.3333	1376.6329	688.8201	1375.6488	688.3281	S	<b>938.5762</b>	469.7927	921.5516	461.2795	920.5676	460.7874	8
12	1494.7071	747.8572	1477.6805	739.3439	1476.6965	738.8519	T	<b>851.5461</b>	426.2767	834.5196	417.7634	833.5356	417.2714	7
13	1607.7911	804.3992	1590.7646	795.8859	1589.7806	795.3939	L	<b>750.4985</b>	375.7529	733.4719	367.2396			6
14	<b>1744.8501</b>	872.9287	1727.8235	864.4154	1726.8395	863.9234	H	<b>637.4144</b>	319.2108	620.3879	310.6976			5
15	<b>1857.9341</b>	929.4707	1840.9076	920.9574	1839.9236	920.4654	L	<b>500.3555</b>	250.6814	483.3289	242.1681			4
16	<b>1957.0025</b>	979.0049	1939.9760	970.4916	1938.9920	969.9996	V	<b>387.2714</b>	194.1394	370.2449	185.6261			3
17	2070.0866	1035.5469	2053.0600	1027.0337	2052.0760	1026.5417	L	288.2030	144.6051	271.1765	136.0919			2
18							R	175.1190	88.0631	158.0924	79.5498			1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
101.3	2243.1910	0.1765	<a href="#">TLSDYNIQKESTLHLVLR</a>
42.0	2242.1416	1.2259	<a href="#">YGENVPIMAIASLRPPDVER</a>
36.6	2242.2507	1.1167	<a href="#">LNAAIIGPGNIGTDLMYKILR</a>
36.6	2243.2247	0.1428	<a href="#">GGVREVLASEALHHLGVRTSR</a>
32.1	2241.1535	2.2139	<a href="#">GLDTHLSLAAAKEIEMSR LQR</a>
31.0	2242.2321	1.1353	<a href="#">LTAGGKSLPIGVTEVQGEFAR</a>
30.8	2243.0416	0.3259	<a href="#">LEELMRQFDEIEDEYLR</a>
30.7	2243.1514	0.2160	<a href="#">IKELQINVQKELNLCMNR</a>
30.7	2243.0917	0.2757	<a href="#">GSADYKDTLTKGSSLSLTPSK</a>
29.3	2241.0340	2.3334	<a href="#">AGCPMADMISGAELREFKSR</a>





(MATRIX) Mascot Search Results (SCIENCE)

Protein View

Match to: YD\_RFP-BARD-BCRA-Ub Score: 4958

YD\_RFP-BARD-BCRA-Ub

Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00822\_YD\_9\_merge.mgf

Nominal mass (M<sub>r</sub>): 60628; Calculated pI value: 6.10

NCBI BLAST search of YD\_RFP-BARD-BCRA-Ub against nr

Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)

Variable modifications: GlyGly (K), Oxidation (M)

Cleavage by Trypsin: cuts C-term side of KR unless next residue is P

Sequence Coverage: 54%

Matched peptides shown in Bold Red

1 MHHHHHHASS EDVKEFMRF KVRMEGVSNG HEFEIEGEGE GRPYEGTQTA
51 KLKVTKGGPL PFAMWLLSPQ FQYGSKAYVK HPADIPDYLK LSFPEGFKWE
101 RVMNFEDGGV VVTQDSSLQ DGEFIIYKVKL RGTNFPDGGP VMKRKTGMWE
151 ASERMYPSD GALKGEIKMR LKLDGGHYD AENVKTYMAK KPVQLPGAYK
201 TDIKLDITSH NEDYTVIVEQY ERAEGRHSYG ABNLLYFQGLE EPGDGRGAWAH
251 SRANRLREK LTRCSAGWI LRPEVCLGCI EHFYFSCNVS DCIHTGCPVC
301 VTPAWIQDLK INRQDLSMIQ LCSKLRNLLH DNELSDIKED GSGGSDLSAL
351 RVEEVQNVIN AMQKILECPI CLEELKEPVS TKCDHPFCKP CMLKLLNQKK
401 GFSQCPCLKN DITKRSIQES TRFSQIAVERL LKLCARQLD TGLEVANSYN
451 FAKQIFVKTL TGRKTIIEVE PSTDIENVKA KIQDKREGIPP DQQRILFAGK
501 QLEDGRITLD YNIQKRESLH LVLRLRGG

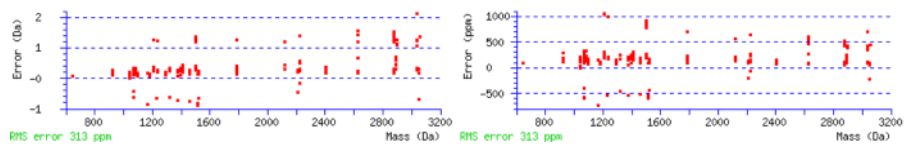
Show predicted peptides also

Sort Peptides By \* Residue Number Increasing Mass Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. Contains peptide search results with ion scores and modifications.







Mascot: <http://www.matrixscience.com/>

**MASCOT** Mascot Search Results

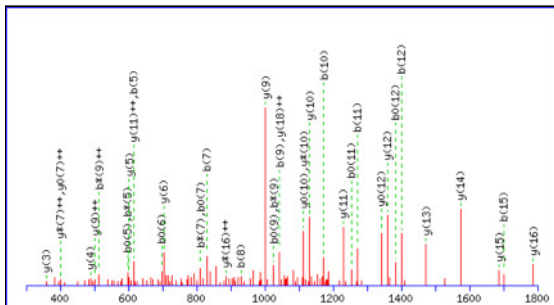
Peptide View

MS/MS Fragmentation of **TLTGKTITLEVEPSDTIENVK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 837: 2401.435448 from(1201.725000,2+) intensity(1129620,3000)  
 Title: Cmpd 117, +MSn(1202.39), 27.1 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00822\_YD\_9\_merge.mgf

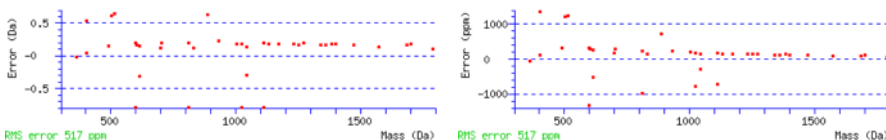
Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 300 to 1800 Da Full range  
 Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2401.2588  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K5 : GlyGly (K)  
 Ions Score: 97 Expect: 9.2e-08  
 Matches : 39/226 fragment ions using 39 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	102.0550	51.5311			84.0444	42.5258	T							21
2	215.1390	108.0731			197.1285	99.0679	L	2301.2184	1151.1128	2284.1918	1142.5996	2283.2078	1142.1076	20
3	316.1867	158.5970			298.1761	149.5917	T	2188.1343	1094.5708	2171.1078	1086.0575	2170.1238	1085.5655	19
4	373.2082	187.1077			355.1976	178.1024	G	2087.0867	1044.0470	2070.0601	1035.5337	2069.0761	1035.0417	18
5	<b>615.3461</b>	308.1767	<b>598.3195</b>	299.6634	<b>597.3355</b>	299.1714	K	2030.0652	1015.5362	2013.0386	1007.0230	2012.0546	1006.5310	17
6	716.3937	358.7005	699.3672	350.1872	<b>698.3832</b>	349.6952	T	<b>1787.9273</b>	894.4673	1770.9008	<b>885.9540</b>	1769.9167	885.4620	16
7	<b>829.4778</b>	415.2425	<b>812.4512</b>	406.7293	<b>811.4672</b>	406.2373	I	<b>1686.8796</b>	843.9434	1669.8531	835.4302	1668.8691	834.9382	15
8	<b>930.5255</b>	465.7664	913.4989	457.2531	912.5149	456.7611	T	<b>1573.7956</b>	787.4014	1556.7690	778.8881	1555.7850	778.3961	14
9	<b>1043.6095</b>	522.3084	<b>1026.5830</b>	<b>513.7951</b>	<b>1025.5990</b>	513.3031	L	<b>1472.7479</b>	736.8776	1455.7213	728.3643	1454.7373	727.8723	13
10	<b>1172.6521</b>	586.8297	1155.6256	578.3164	1154.6416	577.8244	E	<b>1359.6638</b>	680.3355	1342.6373	671.8223	<b>1341.6533</b>	671.3303	12
11	<b>1271.7205</b>	636.3639	1254.6940	627.8506	<b>1253.7100</b>	627.3586	V	<b>1230.6212</b>	<b>615.8142</b>	1213.5947	607.3010	1212.6107	606.8090	11
12	<b>1400.7631</b>	700.8852	1383.7366	692.3719	<b>1382.7526</b>	691.8799	E	<b>1131.5528</b>	566.2800	<b>1114.5263</b>	557.7668	<b>1113.5422</b>	557.2748	10
13	1497.8159	749.4116	1480.7894	740.8983	1479.8053	740.4063	P	<b>1002.5102</b>	<b>501.7587</b>	985.4837	493.2455	984.4997	492.7535	9
14	1584.8479	792.9276	1567.8214	784.4143	1566.8374	783.9223	S	905.4575	453.2324	888.4309	444.7191	887.4469	444.2271	8
15	<b>1699.8749</b>	850.4411	1682.8483	841.9278	1681.8643	841.4358	D	818.4254	409.7163	801.3989	<b>401.2031</b>	800.4149	<b>400.7111</b>	7
16	1800.9226	900.9649	1783.8960	892.4516	1782.9120	891.9596	T	<b>703.3985</b>	352.2029	686.3719	343.6896	685.3879	343.1976	6
17	1914.0066	957.5069	1896.9801	948.9937	1895.9961	948.5017	I	<b>602.3508</b>	301.6790	585.3243	293.1658	584.3402	292.6738	5
18	2043.0492	1022.0282	2026.0227	1013.5150	2025.0386	1013.0230	E	<b>489.2667</b>	245.1370	472.2402	236.6237	471.2562	236.1317	4
19	2157.0921	1079.0497	2140.0656	1070.5364	2139.0816	1070.0444	N	<b>360.2241</b>	180.6157	343.1976	172.1024			3
20	2256.1605	1128.5839	2239.1340	1120.0706	2238.1500	1119.5786	V	246.1812	123.5942	229.1547	115.0810			2
21							K	147.1128	74.0600	130.0863	65.5468			1



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

All matches to this query

Score	Mr(calc):	Delta	Sequence
96.9	2401.2588	0.1767	<a href="#">TLTGKTITLEVEPSDTIENVK</a>
21.2	2402.1886	-0.7532	<a href="#">MGAEGIKDLLLEGLDLDEVIDK</a>
21.1	2402.2839	-0.8484	<a href="#">LKTITGLTVDOVMAARVLESEK</a>
19.9	2401.2675	0.1680	<a href="#">MKIKITVDLEYIOPEKPK</a>
19.9	2401.2675	0.1680	<a href="#">MKIKITVDLEYIOPEKPK</a>
19.6	2401.1730	0.2625	<a href="#">MVNSGTEATMSAVKLRAGYTGK</a>
19.0	2402.2693	-0.8339	<a href="#">FPVEFEVTVLESTVNVGRITGK</a>
18.4	2401.1972	0.2382	<a href="#">QEDIDSLSDDEIITLAKNLR</a>
18.2	2402.2442	-0.8087	<a href="#">TVIGTFVVEGATVEATVEKQGR</a>
18.1	2401.2060	0.2295	<a href="#">CDISNWNLINKTIDQVLK</a>

**Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 500: 1459.979448 from(730.997000,2+) intensity(17306768.0000)

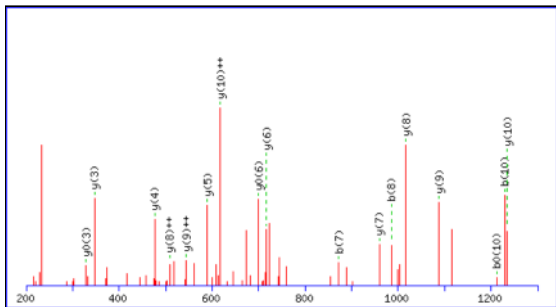
Title: Cmpd 81, +MSn(731.33), 24.2 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00822\_YD\_9\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

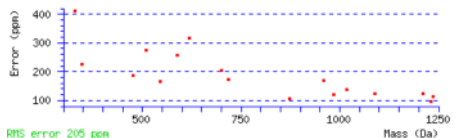
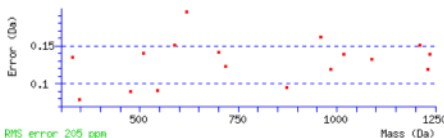
Variable modifications:

K6 : GlyGly (K)

Ions Score: 71 Expect: 6.9e-05

Matches : 17/102 Fragment ions using 21 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	<b>1234.6175</b>	<b>617.8124</b>	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	<b>1087.5491</b>	<b>544.2782</b>	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	<b>1016.5119</b>	<b>508.7596</b>	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	<b>959.4905</b>	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	<b>872.4989</b>	436.7531	855.4723	428.2398			Q	<b>717.3526</b>	359.1799	700.3260	350.6667	<b>699.3420</b>	350.1747	6
8	<b>985.5829</b>	493.2951	968.5564	484.7818			L	<b>589.2940</b>	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	<b>476.2100</b>	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	<b>1229.6525</b>	615.3299	1212.6259	606.8166	<b>1211.6419</b>	606.3246	D	<b>347.1674</b>	174.0873	330.1408	165.5740	<b>329.1568</b>	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)

Other BLAST [web gateways](#)

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
70.8	1459.7783	0.2011	<a href="#">LIFAGKQLEDGR</a>
25.5	1459.8293	0.1502	<a href="#">LTRMIRTAGALK</a>
24.2	1460.7544	-0.7750	<a href="#">NIEMQQLELSK</a>
21.6	1459.7817	0.1978	<a href="#">LLATGMERAGIAK</a>
20.7	1459.8068	0.1726	<a href="#">DMIVNGITVKIK</a>
20.4	1459.7453	0.2342	<a href="#">KMAQEQEKLK</a>
19.9	1459.7307	0.2488	<a href="#">ALENALPYLEDGR</a>
19.5	1459.8068	0.1727	<a href="#">ILQEKMEKAIK</a>
19.2	1457.7950	2.1844	<a href="#">EIEAGKVSVRTR</a>
18.8	1460.7908	-0.8114	<a href="#">TVEMLKAEGLK</a>

Mascot: <http://www.matrixscience.com/>

(MATRIX) Mascot Search Results

Protein View

Match to: YD\_RFP-BARD-BRCA-Ub Score: 1711
YD\_RFP-BARD-BRCA-Ub
Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00869\_YD\_14\_merge.mgf

Nominal mass (Mr): 60628; Calculated pI value: 6.10
NCBI BLAST search of YD\_RFP-BARD-BRCA-Ub against nr
Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)
Variable modifications: GlyGly (K), Oxidation (M)
Cleavage by Trypsin: cuts C-term side of KR unless next residue is P
Sequence Coverage: 48%

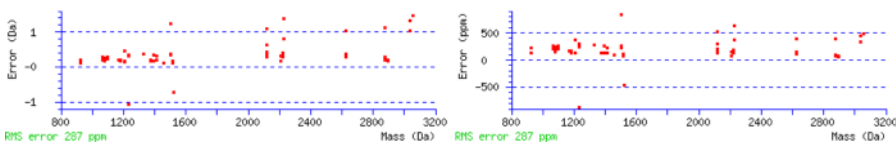
Matched peptides shown in Bold Red

1 MHHHHHHASS EDVIKEFMRP KVRMEGSVNG HEFEIEGEGE GRPYEGTQTA
51 KLRVTKGGPL PFAWDILSPQ FQYGSKAYVK HPADIPDYLK LSFPEGFKWE
101 RVMNFDGGV VTVQDSSLQ DGEFLYKVKL RGTNFPDGP VMQKTMGWG
151 ASYERMPED GALKGEIKMR LKLDGGHYD AEVLTYYMAK KPVQLPGAYK
201 TDIKLDTSH NEDYTVIEQY ERAEGRHSYG AENLTFQGLE EFDGRGAWAH
251 SRALDLREK LLRCSRCWII LRFVCLGGC EHFYCSNVVS DCIQTGCPVC
301 VTPAWIQDLK INRQLDSMIQ LCSKLRNLLH DNELSLDKED GSGGDLALS
351 RVEEVQNVIN AMQKILECFPI CLELLKEFVS TKCDHIFCKP CMLKLLNQKK
401 GFSQCPLECN DITKRSLQES TRFSQIAVEK LKILICAFQLD TGLEYSANSYN
451 FAKQIVFKTL TCKTITLVEE PSDTIENVEK KIQDKREGIPP DQQRILFAGK
501 QLEDGRITSD YNIQKESTLH LVLRRLRGG

Show predicted peptides also

Sort Peptides By \* Residue Number o Increasing Mass o Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. Contains search results for various peptides with their scores and modifications.



**Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 151: 1459.903448 from(730.959000,2+) intensity(1157459.0000)

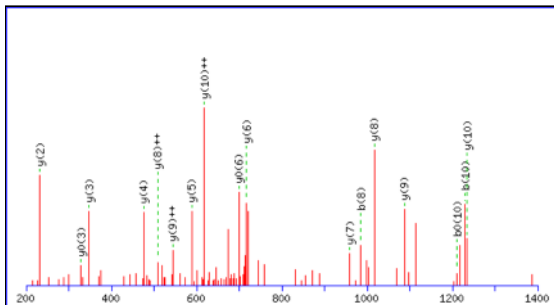
Title: Cmpd 61, +MSn(731.07), 22.6 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00869\_YD\_14\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1400 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

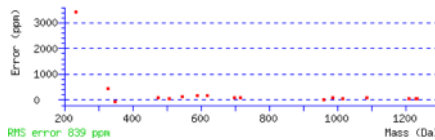
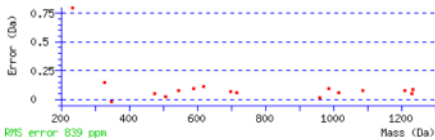
Variable modifications:

K6 : GlyGly (K)

Ions Score: 77 Expect: 5.7e-05

Matches : 17/102 Fragment ions using 23 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	<b>1234.6175</b>	<b>617.8124</b>	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	<b>1087.5491</b>	<b>544.2782</b>	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	<b>1016.5119</b>	<b>508.7596</b>	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	<b>959.4905</b>	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	<b>717.3526</b>	359.1799	700.3260	350.6667	<b>699.3420</b>	350.1747	6
8	<b>985.5829</b>	493.2951	968.5564	484.7818			L	<b>589.2940</b>	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	<b>476.2100</b>	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	<b>1229.6525</b>	615.3299	1212.6259	606.8166	<b>1211.6419</b>	606.3246	D	<b>347.1674</b>	174.0873	330.1408	165.5740	<b>329.1568</b>	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	<b>232.1404</b>	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)

Other BLAST [web gateways](#)

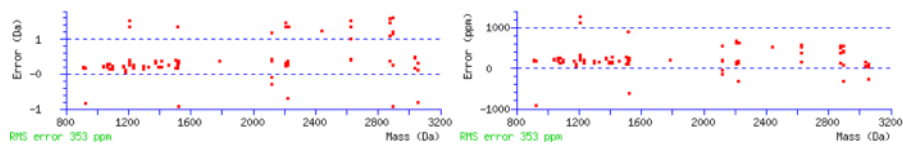
**All matches to this query**

Score	Mr(calc):	Delta	Sequence
77.1	1459.7783	0.1251	<a href="#">LIFAGKQLEDGR</a>
30.7	1458.7929	1.1105	<a href="#">AASDAVLDKLES LK</a>
30.1	1458.7467	1.1568	<a href="#">AAPFIAGTAALEDGR</a>
29.3	1459.6725	0.2309	<a href="#">EAAALQCQLEDGR</a>
23.0	1459.7307	0.1728	<a href="#">ALENALPYLEDGR</a>
21.6	1457.7474	2.1561	<a href="#">KEAQVKA EAK</a>
20.8	1457.7263	2.1771	<a href="#">AVLTHGYVVDG DGR</a>
20.6	1459.7718	0.1316	<a href="#">VKGSRGTG WIPMGR</a>
20.4	1459.8398	0.0636	<a href="#">LLEFAIAEKGNKEK</a>
20.0	1460.7471	-0.8436	<a href="#">STQEAI DKITNK</a>

Mascot: <http://www.matrixscience.com/>



507 - 515	541.3520	1080.6894	1080.5451	0.1443	0	R.TLSDYNIQK.E	(Ions score 54)
507 - 515	541.4180	1080.8214	1080.5451	0.2763	0	R.TLSDYNIQK.E	(Ions score 51)
516 - 524	534.4120	1066.8094	1066.6135	0.1960	0	K.ESTLHLVLR.L	(Ions score 43)
516 - 524	534.4520	1066.8894	1066.6135	0.2760	0	K.ESTLHLVLR.L	(Ions score 43)



Mascot: <http://www.matrixscience.com/>



**MATRIX SCIENCE Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BCRA-Ub**, YD\_RFP-BARD-BCRA-Ub

Match to Query 151: 1460.021448 from (731.018000,2+) intensity(1426711.0000)

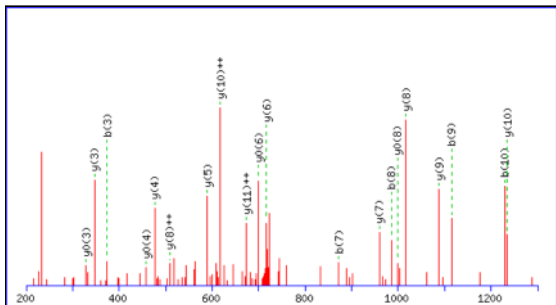
Title: Cmpd 78, +MSn(731.11), 22.7 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00871\_YD\_15\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

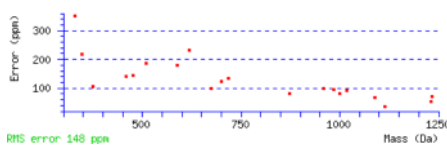
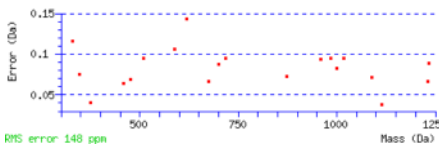
Variable modifications:

K6 : GlyGly (K)

Ions Score: 58 Expect: 0.00027

Matches : 20/102 Fragment ions using 31 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(Parameters: blastp, nr protein database, expect=20000, no filter, PAM30)

Other BLAST [web gateways](#)

All matches to this query

Score	Mr(calc):	Delta	Sequence
57.6	1459.7783	0.2431	<a href="#">LIFAGKQLEDGR</a>
19.1	1460.7116	-0.6901	<a href="#">LNGGLGTTMGCVGPQK</a>
18.4	1459.8398	0.1816	<a href="#">LLEFAIAEKGNKEK</a>
18.0	1460.7987	-0.7773	<a href="#">AGVFKKVDEIK</a>
18.0	1460.7987	-0.7773	<a href="#">AGVFKKVDELK</a>
15.9	1459.8293	0.1922	<a href="#">LTRMIRTAGALK</a>
15.7	1459.8610	0.1605	<a href="#">TKTKLSVLESIK</a>
15.7	1459.8610	0.1605	<a href="#">TKTKLSVLESIK</a>
15.7	1459.7718	0.2496	<a href="#">VKGSRITGWIPMGR</a>
15.1	1459.8181	0.2034	<a href="#">IMIKGGGAALTRK</a>

Mascot: <http://www.matrixscience.com/>



**MASCOT** **SCIENCE** Mascot Search Results

**Peptide View**

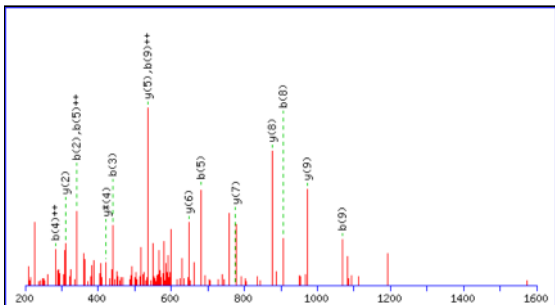
MS/MS Fragmentation of **KPVQLPGAYK**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 81: 1214.025448 from(608.020000,2+) intensity(408861.0000)  
 Title: Cmpd 20\_+MSn(608.31), 18.8 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00873\_YD\_16\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

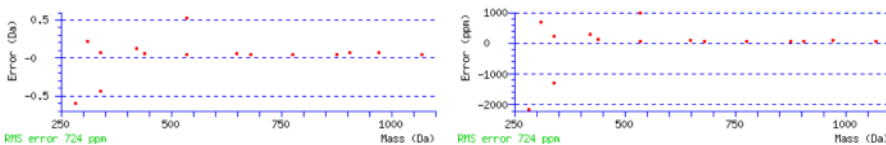
Or, Plot from 200 to 1600 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1213.6819  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K1 : GlyGly (K)  
 Ions Score: 44 Expect: 0.085  
 Matches : 15/72 fragment ions using 20 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	#
1	243.1452	122.0762	226.1186	113.5629	<b>K</b>					<b>10</b>
2	<b>340.1979</b>	170.6026	323.1714	162.0893	<b>P</b>	<b>972.5513</b>	486.7793	955.5247	478.2660	<b>9</b>
3	<b>439.2663</b>	220.1368	422.2398	211.6235	<b>V</b>	<b>875.4985</b>	438.2529	858.4720	429.7396	<b>8</b>
4	567.3249	<b>284.1661</b>	550.2984	275.6528	<b>Q</b>	<b>776.4301</b>	388.7187	759.4036	380.2054	<b>7</b>
5	<b>680.4090</b>	<b>340.7081</b>	663.3824	332.1949	<b>L</b>	<b>648.3715</b>	324.6894	631.3450	316.1761	<b>6</b>
6	777.4618	389.2345	760.4352	380.7212	<b>P</b>	<b>535.2875</b>	268.1474	518.2609	259.6341	<b>5</b>
7	834.4832	417.7452	817.4567	409.2320	<b>G</b>	438.2347	219.6210	<b>421.2082</b>	211.1077	<b>4</b>
8	<b>905.5203</b>	453.2638	888.4938	444.7505	<b>A</b>	381.2132	191.1103	364.1867	182.5970	<b>3</b>
9	<b>1068.5837</b>	<b>534.7955</b>	1051.5571	526.2822	<b>Y</b>	<b>310.1761</b>	155.5917	293.1496	147.0784	<b>2</b>
10					<b>K</b>	147.1128	74.0600	130.0863	65.5468	<b>1</b>



NCBI BLAST search of **KPVQLPGAYK**  
 (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	1213.6819	0.3436	<a href="#">KPVQLPGAYK</a>
31.6	1213.5615	0.4639	<a href="#">NFDITGLQEYK</a>
22.4	1213.7434	0.2820	<a href="#">LILVPFLNGTK</a>
21.5	1213.7394	0.2861	<a href="#">TLEKIKQNK</a>
17.5	1213.6203	0.4051	<a href="#">KNHPGKEYK</a>
17.1	1213.7407	0.2847	<a href="#">KPIPKHPRK</a>
17.1	1213.6455	0.3799	<a href="#">KPLQPFQDK</a>
16.8	1213.7832	0.2423	<a href="#">ILLVAVSIKMK</a>
16.8	1213.7394	0.2861	<a href="#">LIIVNNSVKK</a>
16.8	1213.6805	0.3449	<a href="#">LLLVEEEEK</a>

Mascot: <http://www.matrixscience.com/>

**MASCOT** **SCIENCE** Mascot Search Results

Peptide View

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 141: 1459.953448 from (730.984000,2+) intensity(5187925.0000)

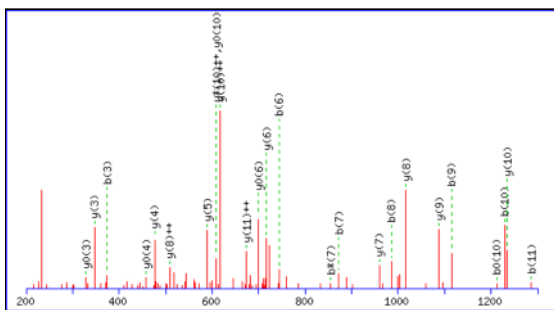
Title: Cmpd 70, +MSn(731.30), 22.9 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00873\_YD\_16\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

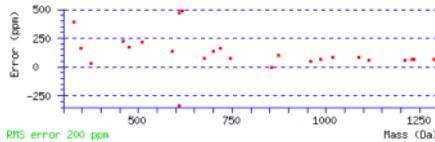
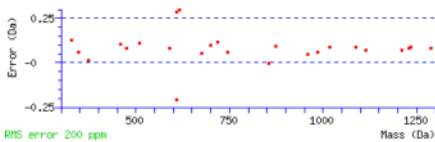
Variable modifications:

K6 : GlyGly (K)

Ions Score: 71 Expect: 0.00012

Matches : 25/102 Fragment ions using 31 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(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	1459.7783	0.1751	<a href="#">LIFAGKQLEDGR</a>
28.4	1460.7987	-0.8453	<a href="#">AGVFKKVDEIK</a>
28.4	1460.7987	-0.8453	<a href="#">AGVFKKVDELK</a>
26.7	1459.6725	0.2809	<a href="#">EAAALQCQLEDGR</a>
20.6	1460.7987	-0.8453	<a href="#">AGVFKKVDEIK</a>
20.6	1460.7987	-0.8453	<a href="#">AGVFKKVDELK</a>
20.2	1459.7089	0.2445	<a href="#">ATAITMPKADDGR</a>
19.5	1459.8432	0.1102	<a href="#">SGMVTLKLEKIK</a>
18.4	1459.7307	0.2228	<a href="#">ALENALPYLEDGR</a>
18.4	1459.7817	0.1718	<a href="#">LLATGMERAGIAK</a>

Mascot: <http://www.matrixscience.com/>



**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 123: 1460.075448 from(731.045000,2+) intensity(1467660.0000)

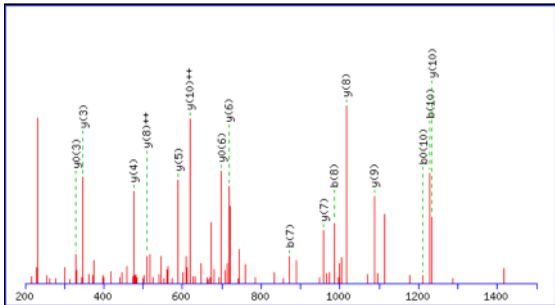
Title: Cmpd 66, +MSn(731.47), 22.8 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00875\_YD\_17\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1500 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

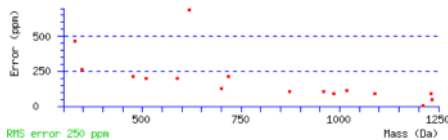
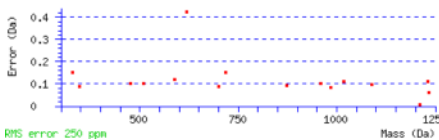
Variable modifications:

K6 : GlyGly (K)

Ions Score: 62 Expect: 0.00012

Matches : 16/102 Fragment ions using 23 most intense peaks [\(help\)](#)

#	b	b <sup>++</sup>	b <sup>*</sup>	b <sup>*++</sup>	b <sup>0</sup>	b <sup>0++</sup>	Seq.	y	y <sup>++</sup>	y <sup>*</sup>	y <sup>*++</sup>	y <sup>0</sup>	y <sup>0++</sup>	#
1	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	<b>1234.6175</b>	<b>617.8124</b>	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	<b>1087.5491</b>	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	<b>1016.5119</b>	<b>508.7596</b>	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	<b>959.4905</b>	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	<b>872.4989</b>	436.7531	855.4723	428.2398			Q	<b>717.3526</b>	359.1799	700.3260	350.6667	<b>699.3420</b>	350.1747	6
8	<b>985.5829</b>	493.2951	968.5564	484.7818			L	<b>589.2940</b>	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	<b>476.2100</b>	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	<b>1229.6525</b>	615.3299	1212.6259	606.8166	<b>1211.6419</b>	606.3246	D	<b>347.1674</b>	174.0873	330.1408	165.5740	<b>329.1568</b>	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(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	1459.7783	0.2971	<a href="#">LIFAGKQLEDGR</a>
19.6	1459.6725	0.4029	<a href="#">EAAALQCQLEDGR</a>
18.6	1460.7987	-0.7232	<a href="#">LAFNSLLEKAEAR</a>
18.1	1459.8293	0.2462	<a href="#">LTRMIRTAGALK</a>
17.9	1459.7453	0.3302	<a href="#">KMAQEQEKLK</a>
16.9	1459.7671	0.3084	<a href="#">GINYPTALEGALK</a>
16.5	1460.7987	-0.7233	<a href="#">AGVFKKVDEIK</a>
16.5	1460.7987	-0.7233	<a href="#">AGVFKKVDELK</a>
16.4	1459.8610	0.2145	<a href="#">TKTKLSVLESIK</a>
16.4	1459.8610	0.2145	<a href="#">TKTKLSVLESIK</a>

Mascot: <http://www.matrixscience.com/>

MASCOT SCIENCE Mascot Search Results

Protein View

Match to: YD\_RFP-BARD-BRCA-Ub Score: 1956
YD\_RFP-BARD-BRCA-Ub
Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00877\_YD\_18\_merge.mgf

Nominal mass (M\_r): 60628; Calculated pI value: 6.10
NCBI BLAST search of YD\_RFP-BARD-BRCA-Ub against nr
Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)
Variable modifications: GlyGly (K), Oxidation (M)
Cleavage by Trypsin: cuts C-term side of KR unless next residue is P
Sequence Coverage: 53%

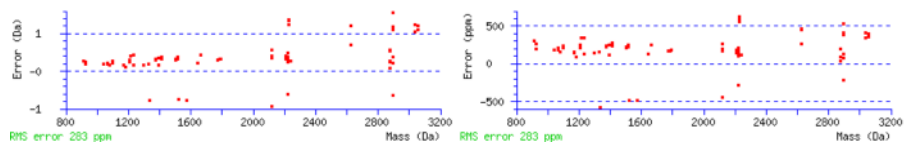
Matched peptides shown in Bold Red

1 MHHHHHHASS EDVIKEFMRF KVRMEGVSNG HEFEIEGEGR PRPYEGTQTA
51 KLKVTKGGPL PFAMWLLSQ FQYGSKAYVK HPADIPDYLK LSFPEGFQWE
101 RVMNFDGGV VTVQDSSLQ DGEFLYKVKL RGTNFPDGP VMQKRTMGWE
151 ASYERMYTSD GALKGEIKMR LKLDGGHVD AEVNTYMAK KPVQLPGAYK
201 TDIKLDTISH NEDTYIVQY ERAGEGRHSYG AENLTFQGLE EFDGGAWAH
251 SRALLDRLEK LLRCSGCTII LRFVCLGGG EHLFCNSVVS DCIOTGCPVC
301 VYPAWIQDLK INRQDLSMIQ LCSKLRNLLH DNEISDLKED GSGGSDLSAL
351 RVEEVQNVIN AMQKRLKCPH CLELLKPEVS TKCDHFCKF CMLKLLNQKK
401 GFSQCLPCKN DITKRSLQES TRFSQLVEEL LKLCARQLD TGLEANSYN
451 FAQKLFVKTL TGGKTTILEVE PSTDIENVKA KIQDKREGIP DQRLIFAGK
501 QLEDGRRLSD YNIQKESTLH LVLRRLGG

Show predicted peptides also

Sort Peptides By \* Residue Number o Increasing Mass o Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. Contains detailed peptide search results including scores and modifications.



Mascot: <http://www.matrixscience.com/>



**(MATRIX SCIENCE) Mascot Search Results**

**Peptide View**

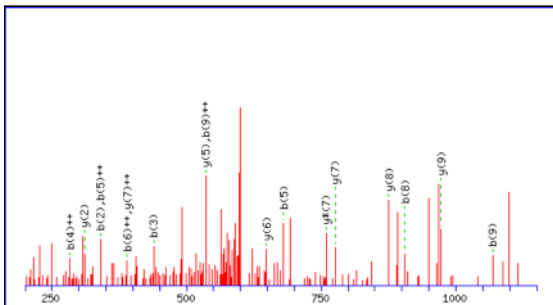
MS/MS Fragmentation of **KPVQLPGAYK**  
 Found in **YD\_RFP-BARD-BCRA-Ub**, YD\_RFP-BARD-BCRA-Ub

Match to Query 76: 1214.093448 from(608.054000,2+) intensity(124534.0000)  
 Title: Cmpd 19, +MSn(608.59), 18.7 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00877\_YD\_18\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

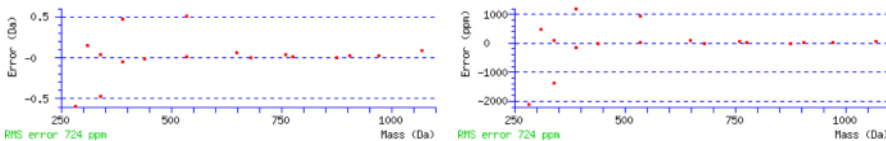
Or, Plot from 200 to 1150 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide **Mr(calc)**: 1213.6819  
**Fixed modifications**: Carbamidomethyl (C) (apply to specified residues or termini only)  
**Variable modifications**:  
 K1 : GlyGly (K)  
**Ions Score**: 24 **Expect**: 0.77  
**Matches** : 17/72 fragment ions using 37 most intense peaks ([help](#))

#	b	b <sup>++</sup>	b*	b <sup>*++</sup>	Seq.	y	y <sup>++</sup>	y*	y <sup>*++</sup>	#
1	243.1452	122.0762	226.1186	113.5629	<b>K</b>					<b>10</b>
2	<b>340.1979</b>	170.6026	323.1714	162.0893	<b>P</b>	<b>972.5513</b>	486.7793	955.5247	478.2660	<b>9</b>
3	<b>439.2663</b>	220.1368	422.2398	211.6235	<b>V</b>	<b>875.4985</b>	438.2529	858.4720	429.7396	<b>8</b>
4	567.3249	<b>284.1661</b>	550.2984	275.6528	<b>Q</b>	<b>776.4301</b>	<b>388.7187</b>	<b>759.4036</b>	380.2054	<b>7</b>
5	<b>680.4090</b>	<b>340.7081</b>	663.3824	332.1949	<b>L</b>	<b>648.3715</b>	324.6894	631.3450	316.1761	<b>6</b>
6	777.4618	<b>389.2345</b>	760.4352	380.7212	<b>P</b>	<b>535.2875</b>	268.1474	518.2609	259.6341	<b>5</b>
7	834.4832	417.7452	817.4567	409.2320	<b>G</b>	438.2347	219.6210	421.2082	211.1077	<b>4</b>
8	<b>905.5203</b>	453.2638	888.4938	444.7505	<b>A</b>	381.2132	191.1103	364.1867	182.5970	<b>3</b>
9	<b>1068.5837</b>	<b>534.7955</b>	1051.5571	526.2822	<b>Y</b>	<b>310.1761</b>	155.5917	293.1496	147.0784	<b>2</b>
10					<b>K</b>	147.1128	74.0600	130.0863	65.5468	<b>1</b>



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
23.7	1213.6819	0.4116	<a href="#">KPVQLPGAYK</a>
21.6	1213.7434	0.3500	<a href="#">LILVPFLNGTK</a>
18.8	1213.6190	0.4744	<a href="#">VLDQLLNLGDD</a>
15.1	1213.6091	0.4843	<a href="#">KEGIHPEYK</a>
13.0	1213.6125	0.4809	<a href="#">VTTHQLQEMK</a>
12.5	1213.7142	0.3792	<a href="#">KPKAKSTKK</a>
11.8	1213.6918	0.4016	<a href="#">DKIVVPSDLTK</a>
11.6	1214.5092	-0.4157	<a href="#">VESFNEGFGTE</a>
11.6	1213.7832	0.3103	<a href="#">ILLVAVSIKMK</a>
11.6	1213.7394	0.3541	<a href="#">LIIVNNSVKK</a>

Mascot: <http://www.matrixscience.com/>

**Mascot Search Results**

**Peptide View**

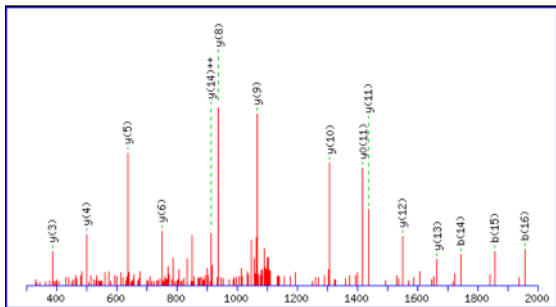
MS/MS Fragmentation of **TLSDYNIQKESTLHLVLR**  
 Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 313: 2243.463448 from(1122.739000,2+) intensity(2095379.0000)  
 Title: Cmpd 91, +MSn(1123.19), 25.5 min  
 Data file C:\YaelDavid\100203\_YaelDavid\BIT00877\_YD\_18\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

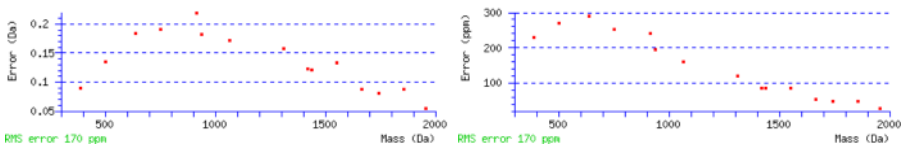
Or, Plot from 300 to 2000 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 2243.1910  
 Fixed modifications: Carbamidomethyl (C) (apply to specified residues or termini only)  
 Variable modifications:  
 K9 : GlyGly (K)  
 Ions Score: 83 Expect: 1.7e-06  
 Matches : 15/182 Fragment ions using 17 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	102.0550	51.5311			84.0444	42.5258	T							18
2	215.1390	108.0731			197.1285	99.0679	L	2143.1506	1072.0789	2126.1240	1063.5657	2125.1400	1063.0737	17
3	302.1710	151.5892			284.1605	142.5839	S	2030.0665	1015.5369	2013.0400	1007.0236	2012.0560	1006.5316	16
4	417.1980	209.1026			399.1874	200.0974	D	1943.0345	972.0209	1926.0080	963.5076	1925.0239	963.0156	15
5	580.2613	290.6343			562.2508	281.6290	Y	1828.0076	914.5074	1810.9810	905.9941	1809.9970	905.5021	14
6	694.3042	347.6558	677.2777	339.1425	676.2937	338.6505	N	1664.9442	832.9758	1647.9177	824.4625	1646.9337	823.9705	13
7	807.3883	404.1978	790.3618	395.6845	789.3777	395.1925	I	1550.9013	775.9543	1533.8748	767.4410	1532.8907	766.9490	12
8	935.4469	468.2271	918.4203	459.7138	917.4363	459.2218	Q	1437.8172	719.4123	1420.7907	710.8990	1419.8067	710.4070	11
9	1177.5848	589.2960	1160.5582	580.7828	1159.5742	580.2907	K	1309.7587	655.3830	1292.7321	646.8697	1291.7481	646.3777	10
10	1306.6274	653.8173	1289.6008	645.3040	1288.6168	644.8120	E	1067.6208	534.3140	1050.5942	525.8007	1049.6102	525.3087	9
11	1393.6594	697.3333	1376.6329	688.8201	1375.6488	688.3281	S	938.5782	469.7927	921.5516	461.2795	920.5676	460.7874	8
12	1494.7071	747.8572	1477.6805	739.3439	1476.6965	738.8519	T	851.5461	426.2767	834.5196	417.7634	833.5356	417.2714	7
13	1607.7911	804.3992	1590.7646	795.8859	1589.7806	795.3939	L	750.4985	375.7529	733.4719	367.2396			6
14	1744.8501	872.9287	1727.8235	864.4154	1726.8395	863.9234	H	637.4144	319.2108	620.3879	310.6976			5
15	1857.9341	929.4707	1840.9076	920.9574	1839.9236	920.4654	L	500.3555	250.6814	483.3289	242.1681			4
16	1957.0025	979.0049	1939.9760	970.4916	1938.9920	969.9996	V	387.2714	194.1394	370.2449	185.6261			3
17	2070.0866	1035.5469	2053.0600	1027.0337	2052.0760	1026.5417	L	288.2030	144.6051	271.1765	136.0919			2
18							R	175.1190	88.0631	158.0924	79.5498			1



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

**All matches to this query**

Score	Mr(calc):	Delta	Sequence
83.0	2243.1910	0.2725	<a href="#">TLSDYNIQKESTLHLVLR</a>
20.6	2244.1175	-0.6540	<a href="#">VSDYTAFINQGKLEIYNR</a>
17.3	2244.0555	-0.5920	<a href="#">CKPPPNLQILDPYMDGQK</a>
16.7	2244.0191	-0.5556	<a href="#">SMEDLVNEFEKLVNCFR</a>
16.3	2243.1011	0.3624	<a href="#">KEFFLWSEIEIRNFOK</a>
16.1	2242.9882	0.4753	<a href="#">RMGRYCGADMPPTGTTGSK</a>
15.4	2243.1580	0.3055	<a href="#">SIGNTISPOQVMNKLGGDILR</a>
15.1	2244.0811	-0.6176	<a href="#">YFAIAIQIQDOAESYADRK</a>
14.4	2243.2677	0.1957	<a href="#">NLKIGYENLFIQVPIVR</a>
14.3	2243.0865	0.3769	<a href="#">DPGAVRNPNQOYPSFLMRR</a>

# MASCOT Search Results

## Protein View

Match to: **YD\_RFP-BARD-BRCA-Ub** Score: **1819**  
YD\_RFP-BARD-BRCA-Ub  
Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00881\_YD\_20\_merge.mgf

Nominal mass (M<sub>r</sub>): **60628**; Calculated pI value: **6.10**  
NCBI BLAST search of **YD\_RFP-BARD-BRCA-Ub** against nr  
Unformatted [sequence string](#) for pasting into other applications

Fixed modifications: Carbamidomethyl (C)  
Variable modifications: GlyGly (K), Oxidation (M)  
Cleavage by Trypsin: cuts C-term side of KR unless next residue is P  
Sequence Coverage: **43%**

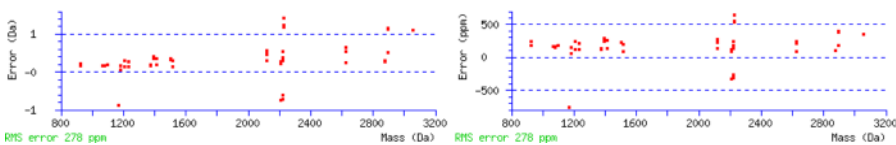
Matched peptides shown in **Bold Red**

1 MHHHHHHASS EDVIKEFMRP KVR**MEGSVNG HEFEIEGEGE GRPYEGTQTA**  
51 **KLKVTKGGPL PFAMWLLSPQ FQYGSKAYVK HPADIPDYLK LSPFEGFKWE**  
101 **RVNMFEDGGV VVTQDSSLQ DGEFIYKVKL RGTNFPDGGP VMQKRTMGWE**  
151 **ASTERMYPED GALKGEIKMR LKLEKGGHYD AEVKTYMAK KPVQLPGAYK**  
201 **TDIKLDITSH NEDYTIYEQR ERAEGRHSYG AENLIFQGLE EFDGGAWAH**  
251 **SRAALDRLEK LLRCSLRNII LRPEVCLGGC EHLTFCNSVVS DCIQTGCPVC**  
301 **YTPAWIQDLK INRQLDSMIQ LCSKLRLNLL DNELSDLEKED GSGGDLALS**  
351 **RVEEVQNVIN AMQKILECPH CLELLKEPVS TKCDHIFCKP CMLKLLNQKK**  
401 **GPSQCPLEKN DITKRSLQES TRFSQLAEEL LKILICAFQLD TGLEAYNSYN**  
451 **FAKQIFVKTLT TGGTITLVEV PSDTIENVKA KIQDKEGIPP DQQRILFAGK**  
501 **QLEGGRTLSD YNIQKESTLH LVLRRLRGG**

Show predicted peptides also

Sort Peptides By  Residue Number  Increasing Mass  Decreasing Mass

Start - End	Observed	Mr (expt)	Mr (calc)	Delta	Miss	Sequence
24 - 51	1528.2220	3054.4294	3053.3309	1.0986	0	R.MEGSVNGHEFEIEGEGEGRPYEGTQAK.L Oxidation (M) ( <a href="#">Ions score 26</a> )
57 - 76	1104.1910	2206.3674	2207.1051	-0.7377	0	K.GGPLPFAWDLSPQFQYGSK.A ( <a href="#">Ions score 67</a> )
57 - 76	1104.6640	2207.3134	2207.1051	0.2083	0	K.GGPLPFAWDLSPQFQYGSK.A ( <a href="#">Ions score 71</a> )
57 - 76	1104.6980	2207.3814	2207.1051	0.2763	0	K.GGPLPFAWDLSPQFQYGSK.A ( <a href="#">Ions score 68</a> )
81 - 90	584.3630	1166.7114	1167.5924	-0.8810	0	K.HPADIPDYLK.L ( <a href="#">Ions score 38</a> )
91 - 98	462.8260	923.6374	923.4753	0.1622	0	K.LSPFEGFK.W ( <a href="#">Ions score 36</a> )
91 - 98	462.8590	923.7034	923.4753	0.2282	0	K.LSPFEGFK.W ( <a href="#">Ions score 37</a> )
91 - 101	698.5600	1395.1054	1394.6983	0.4072	1	K.LSPFEGFKWER.V ( <a href="#">Ions score 45</a> )
102 - 127	1439.8170	2877.6194	2877.3379	0.2816	0	R.VNMFEDGGVVTVTQDSSLQDGEFIYK.V ( <a href="#">Ions score 70</a> )
102 - 127	1439.8220	2877.6294	2877.3379	0.2916	0	R.VNMFEDGGVVTVTQDSSLQDGEFIYK.V ( <a href="#">Ions score 74</a> )
102 - 127	965.6240	2893.8502	2893.3328	0.5174	0	R.VNMFEDGGVVTVTQDSSLQDGEFIYK.V Oxidation (M) ( <a href="#">Ions score 57</a> )
102 - 127	1448.2330	2894.4514	2893.3328	1.1186	0	R.VNMFEDGGVVTVTQDSSLQDGEFIYK.V Oxidation (M) ( <a href="#">Ions score 83</a> )
102 - 127	1448.2500	2894.4854	2893.3328	1.1526	0	R.VNMFEDGGVVTVTQDSSLQDGEFIYK.V Oxidation (M) ( <a href="#">Ions score 67</a> )
102 - 127	1448.2520	2894.4894	2893.3328	1.1566	0	R.VNMFEDGGVVTVTQDSSLQDGEFIYK.V Oxidation (M) ( <a href="#">Ions score 81</a> )
132 - 144	689.4060	1376.7974	1376.6395	0.1580	0	R.GTNFPDGGVPMQK.K ( <a href="#">Ions score 77</a> )
132 - 144	689.4190	1376.8234	1376.6395	0.1840	0	R.GTNFPDGGVPMQK.K ( <a href="#">Ions score 70</a> )
132 - 144	697.4970	1392.9794	1392.6344	0.3451	0	R.GTNFPDGGVPMQK.K Oxidation (M) ( <a href="#">Ions score 52</a> )
132 - 144	697.5000	1392.9854	1392.6344	0.3511	0	R.GTNFPDGGVPMQK.K Oxidation (M) ( <a href="#">Ions score 65</a> )
146 - 155	592.2860	1182.5574	1182.4975	0.0599	0	K.TMGWEASTER.M Oxidation (M) ( <a href="#">Ions score 53</a> )
146 - 155	592.3450	1182.6754	1182.4975	0.1779	0	K.TMGWEASTER.M Oxidation (M) ( <a href="#">Ions score 62</a> )
191 - 200	550.9270	1099.8394	1099.6390	0.2005	0	K.KPVQLPGAYK.T ( <a href="#">Ions score 48</a> )
205 - 222	1112.6660	2223.3174	2224.0284	-0.7109	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 30</a> )
205 - 222	1112.7170	2223.4194	2224.0284	-0.6089	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 18</a> )
205 - 222	742.4500	2224.3282	2224.0284	0.2998	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 44</a> )
205 - 222	1113.2170	2224.4194	2224.0284	0.3911	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 107</a> )
205 - 222	742.5340	2224.5802	2224.0284	0.5518	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 24</a> )
205 - 222	1113.6120	2225.2094	2224.0284	1.1811	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 52</a> )
205 - 222	1113.6170	2225.2194	2224.0284	1.1911	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 106</a> )
205 - 222	1113.6380	2225.2614	2224.0284	1.2331	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 110</a> )
205 - 222	1113.7330	2225.4514	2224.0284	1.4231	0	K.LDITSHNEDYTIYEYER.A ( <a href="#">Ions score 42</a> )
227 - 245	1060.6330	2119.2514	2118.9606	0.2908	0	R.HSTGAENLYFQGLEEPDGR.G ( <a href="#">Ions score 105</a> )
227 - 245	707.4840	2119.4302	2118.9606	0.4695	0	R.HSTGAENLYFQGLEEPDGR.G ( <a href="#">Ions score 68</a> )
227 - 245	1060.7430	2119.4714	2118.9606	0.5108	0	R.HSTGAENLYFQGLEEPDGR.G ( <a href="#">Ions score 117</a> )
227 - 245	1060.7480	2119.4814	2118.9606	0.5208	0	R.HSTGAENLYFQGLEEPDGR.G ( <a href="#">Ions score 102</a> )
227 - 245	707.5200	2119.5382	2118.9606	0.5775	0	R.HSTGAENLYFQGLEEPDGR.G ( <a href="#">Ions score 66</a> )
327 - 338	705.9630	1409.9114	1409.7150	0.1964	0	R.NLLHDNELSDLK.E ( <a href="#">Ions score 65</a> )
327 - 338	706.0440	1410.0734	1409.7150	0.3584	0	R.NLLHDNELSDLK.E ( <a href="#">Ions score 67</a> )
327 - 351	1313.2640	2624.5134	2624.2678	0.2457	1	R.NLLHDNELSDLKEDGGSGDLSALR.V ( <a href="#">Ions score 137</a> )
327 - 351	1313.4110	2624.8074	2624.2678	0.5397	1	R.NLLHDNELSDLKEDGGSGDLSALR.V ( <a href="#">Ions score 123</a> )
327 - 351	875.9760	2624.9062	2624.2678	0.6384	1	R.NLLHDNELSDLKEDGGSGDLSALR.V ( <a href="#">Ions score 101</a> )
339 - 351	617.3600	1232.7054	1232.5633	0.1421	0	K.EDGGSGDLSALR.V ( <a href="#">Ions score 94</a> )
339 - 351	617.3640	1232.7134	1232.5633	0.1501	0	K.EDGGSGDLSALR.V ( <a href="#">Ions score 84</a> )
339 - 351	617.4200	1232.8254	1232.5633	0.2621	0	K.EDGGSGDLSALR.V ( <a href="#">Ions score 84</a> )
352 - 364	751.5560	1501.0974	1500.7606	0.3368	0	R.VEEVQNVINAMQK.I ( <a href="#">Ions score 102</a> )
352 - 364	751.5590	1501.1034	1500.7606	0.3428	0	R.VEEVQNVINAMQK.I ( <a href="#">Ions score 102</a> )
352 - 364	759.4520	1516.8894	1516.7555	0.1339	0	R.VEEVQNVINAMQK.I Oxidation (M) ( <a href="#">Ions score 98</a> )
352 - 364	759.4580	1516.9014	1516.7555	0.1459	0	R.VEEVQNVINAMQK.I Oxidation (M) ( <a href="#">Ions score 99</a> )
352 - 364	759.5330	1517.0514	1516.7555	0.2959	0	R.VEEVQNVINAMQK.I Oxidation (M) ( <a href="#">Ions score 82</a> )
352 - 364	759.5340	1517.0534	1516.7555	0.2979	0	R.VEEVQNVINAMQK.I Oxidation (M) ( <a href="#">Ions score 98</a> )
423 - 432	603.4160	1204.8174	1204.6703	0.1471	0	R.FSQLVEELLK.I ( <a href="#">Ions score 85</a> )
423 - 432	603.4870	1204.9594	1204.6703	0.2891	0	R.FSQLVEELLK.I ( <a href="#">Ions score 71</a> )
507 - 515	541.3640	1080.7134	1080.5451	0.1683	0	R.TLSDYNIQK.E ( <a href="#">Ions score 57</a> )
507 - 515	541.3690	1080.7234	1080.5451	0.1783	0	R.TLSDYNIQK.E ( <a href="#">Ions score 30</a> )
516 - 524	534.4010	1066.7874	1066.6135	0.1740	0	K.ESTLHLVLR.L ( <a href="#">Ions score 34</a> )



MASCOT SEARCH RESULTS

Protein View

Match to: YD\_RFP-BARD-BRCA-Ub Score: 2003
YD\_RFP-BARD-BRCA-Ub
Found in search of C:\YaelDavid\100203\_YaelDavid\BIT00883\_YD\_21\_merge.mgf

Nominal mass (Mr): 60628; Calculated pI value: 6.10
NCBI BLAST search of YD\_RFP-BARD-BRCA-Ub against nr
Unformatted sequence string for pasting into other applications

Fixed modifications: Carbamidomethyl (C)
Variable modifications: GlyGly (K), Oxidation (M)
Cleavage by Trypsin: cuts C-term side of KR unless next residue is P
Sequence Coverage: 54%

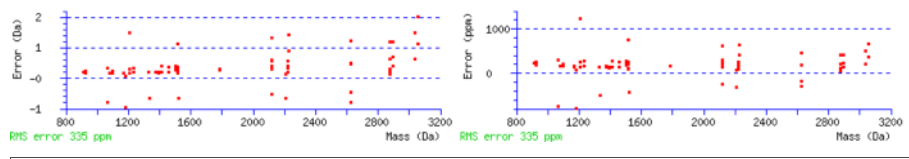
Matched peptides shown in Bold Red

1 MHHHHHHASS EDVKEFMRF KVRMEGVSNG HEFEIEGEGR PRPEYGTQTA
51 KLRKVTKGGPL PFAMWLLSPQ FQYGSKAYVK HPADIPDYLK LSFPEGFKWE
101 RVMNFDGGV VVTQDSSLQ DGEFFLYKVKL RGTNFPDGP VMQKRTMGWE
151 ASYERMPED GALKGEIKMR LKLDGGHVD AEWKTYMAK KPVQLPGAYK
201 TDIKLDTSH NEDYTVQYR ERAEGRHSYG AENLTFQGLE EFDGRGAWAH
251 SRALLDLRK LRLCSKRWII LREPVCLGCG EHTFGSCVVS DCIQTGCPVC
301 VTPAWIQDLK INRQDLSMIQ LCSKRLNLLH DNELSDLKED GSGGDDLSAL
351 RVEEVQNVIN AMQKILECPI CLELKEPVV TKCDHIFCKF CMLKLLNQQK
401 GFSQCLPCKN DITKRSLQES TRFSQVLEVK LKILICAFQLD TGLEANSYN
451 FAKQIFVKTL TQKTTILEVE PSDTIENVKA KIQDKREGIP DQRLIFAGK
501 QLEDGRITLD YNIQKESTLH LVLRRLRGG

Show predicted peptides also

Sort Peptides By Residue Number Increasing Mass Decreasing Mass

Table with columns: Start, End, Observed, Mr (expt), Mr (calc), Delta, Miss, Sequence. Contains search results for various peptides with their observed and calculated masses and scores.



Mascot: <http://www.matrixscience.com/>

**(MATRIX) (SCIENCE) Mascot Search Results**

**Peptide View**

MS/MS Fragmentation of **LIFAGKQLEDGR**

Found in **YD\_RFP-BARD-BRCA-Ub**, YD\_RFP-BARD-BRCA-Ub

Match to Query 128: 1460.141448 from (731.078000,2+) intensity(7836799.0000)

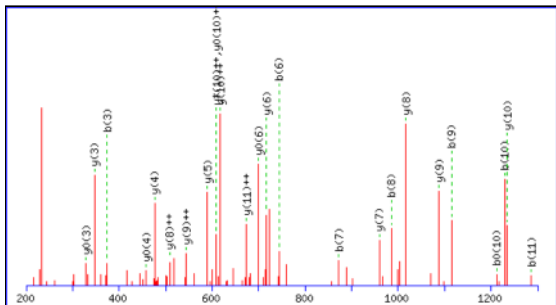
Title: Cmpd 58, +MSn(731.45), 22.6 min

Data file C:\YaelDavid\100203\_YaelDavid\BIT00883\_YD\_21\_merge.mgf

Click mouse within plot area to zoom in by factor of two about that point

Or, Plot from 200 to 1300 Da Full range

Label all possible matches  Label matches used for scoring



Monoisotopic mass of neutral peptide Mr(calc): 1459.7783

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

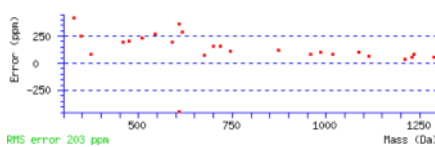
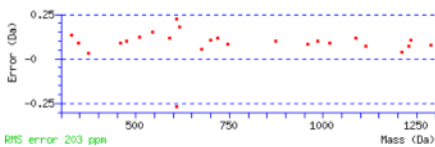
Variable modifications:

K6 : GlyGly (K)

Ions Score: 71 Expect: 0.0001

Matches : 25/102 Fragment ions using 31 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	114.0913	57.5493					L							12
2	227.1754	114.0913					I	1347.7015	674.3544	1330.6750	665.8411	1329.6910	665.3491	11
3	374.2438	187.6255					F	1234.6175	617.8124	1217.5909	609.2991	1216.6069	608.8071	10
4	445.2809	223.1441					A	1087.5491	544.2782	1070.5225	535.7649	1069.5385	535.2729	9
5	502.3024	251.6548					G	1016.5119	508.7596	999.4854	500.2463	998.5014	499.7543	8
6	744.4403	372.7238	727.4137	364.2105			K	959.4905	480.2489	942.4639	471.7356	941.4799	471.2436	7
7	872.4989	436.7531	855.4723	428.2398			Q	717.3526	359.1799	700.3260	350.6667	699.3420	350.1747	6
8	985.5829	493.2951	968.5564	484.7818			L	589.2940	295.1506	572.2675	286.6374	571.2835	286.1454	5
9	1114.6255	557.8164	1097.5990	549.3031	1096.6150	548.8111	E	476.2100	238.6086	459.1834	230.0953	458.1994	229.6033	4
10	1229.6525	615.3299	1212.6259	606.8166	1211.6419	606.3246	D	347.1674	174.0873	330.1408	165.5740	329.1568	165.0820	3
11	1286.6739	643.8406	1269.6474	635.3273	1268.6634	634.8353	G	232.1404	116.5738	215.1139	108.0606			2
12							R	175.1190	88.0631	158.0924	79.5498			1



NCBI BLAST search of **LIFAGKQLEDGR**

(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	1459.7783	0.3631	<a href="#">LIFAGKQLEDGR</a>
28.0	1460.7987	-0.6573	<a href="#">AGVFKKVDEIK</a>
28.0	1460.7987	-0.6573	<a href="#">AGVFKKVDELK</a>
25.8	1459.6725	0.4689	<a href="#">EAAALQCQLEDGR</a>
22.7	1459.8068	0.3347	<a href="#">ILQEKMEKAIK</a>
22.5	1459.8432	0.2982	<a href="#">MNITITVGGKIK</a>
22.5	1459.8432	0.2982	<a href="#">MNITLITVGGKIK</a>
22.4	1460.7544	-0.6130	<a href="#">NIIEMQOLELSK</a>
21.9	1459.7704	0.3710	<a href="#">EMKLLLEQSGALK</a>
21.4	1459.7307	0.4108	<a href="#">ALENALPYLEDGR</a>

Mascot: <http://www.matrixscience.com/>

Referenc #10		P (pro)					Sf	Score	Coverage	MW	Acsn.	Peptide (Hits)	
Scan(s)	Peptide	MH+	DeltaM	z	Type	P (pep)	Sf	XC	DeltaCn	Sp	RSp	Ions	Count
1	RFP-BARD-BRCA					7.77E-15	35.35	456.27	58.40	51667.6		46 (44 2 0 0 0)	
5890	K.AYVKHPADIPDYK.L	1629.86352	-0.57436	3	CID	6.83E-10	0.93	3.31	0.60	1092.2	1	25/52	1
1317	K.DGGHYDAEVK.T	1090.47998	1.54412	3	CID	3.57E-02	0.66	2.50	0.46	307.5	1	16/36	1
4271	K.EDGGSGDLSALR.V	1233.57058	0.41172	2	CID	4.91E-05	0.87	2.41	0.61	748.8	1	14/24	
7392	K.FCM*LK~LLNQK.K	1353.70196	1.16483	2	CID	2.64E-02	0.62	2.17	0.33	221.0	1	11/18	
10336	R.FSQLVEELLK.I	1205.67762	1.65647	2	CID	1.18E-06	0.97	2.85	0.77	1543.1	1	16/18	
12893	K.GGPLPFAWDILSPQFQ.Y	1772.90063	0.37217	2	CID	5.42E-08	0.85	2.50	0.58	587.4	1	16/30	1
12347	K.GGPLPFAWDILSPQFQYGSK.A	2208.11242	1.40825	2	CID	8.70E-11	0.86	2.72	0.30	1038.0	1	20/38	1
905	G.GHYDAEVK.T	918.43157	-1.53485	2	CID	4.48E-02	0.85	2.34	0.40	565.0	1	11/14	1
1047	H.HASSEDVIK.E	985.49490	1.50683	2	CID	3.40E-04	0.88	2.08	0.67	508.9	1	12/16	1
5847	K.HPADIPDYK.L	1168.59970	0.17217	2	CID	9.26E-07	0.90	2.11	0.80	259.5	1	14/18	1
10950	K.HPADIPDYK~LSFPEGFK.W	2117.07040	2.30828	3	CID	8.29E-05	0.59	2.63	0.38	407.5	1	18/68	2
8072	R.HSTGAENLYFQGLEE.E	1694.76566	-0.78226	2	CID	4.07E-04	0.72	2.08	0.61	485.3	1	12/28	1
7313	R.HSTGAENLYFQGLEEPDGR.G	2119.96794	0.52103	2	CID	7.77E-15	0.98	5.44	0.65	1388.3	1	22/36	
7289	R.HSTGAENLYFQGLEEPDGRG.A	2176.98940	0.29258	2	CID	4.09E-08	0.89	2.86	0.69	479.6	1	18/38	
11236	K.IICAFQLDTGLEANSYNFAK.E	2438.16971	1.70867	2	CID	8.88E-15	0.98	4.77	0.45	2172.8	1	25/40	
10896	K.IICAFQLDTGLEAN@SYNFAK.E	2439.15373	1.15451	2	CID	4.92E-10	0.85	2.71	0.03	1606.6	1	21/40	
1449	L.KDGGHYDAEVK.T	1218.57494	0.54768	2	CID	1.12E-05	0.53	2.10	0.39	336.9	1	10/20	1
1083	K.KGPSQCPLCK.N	1174.57080	-0.16445	2	CID	1.56E-05	0.90	2.85	0.55	670.4	1	12/18	
1424	K.KGPSQ@CPLCK.N	1175.55481	-2.03958	2	CID	3.02E-01	0.56	2.47	0.48	202.6	1	8/18	
8105	K.LDITSHN@EDYTIVEQYER.A	2226.01970	0.60437	2	CID	5.17E-11	0.75	2.53	0.14	891.0	1	18/34	1
1444	K.LK~D^GGHYDAEVK.T	1388.68066	0.47982	2	CID	3.10E-02	0.62	2.43	0.43	185.4	1	11/22	2
1385	K.LKDGGHYDAEVK.T	1331.65901	-1.30028	2	CID	7.07E-08	0.95	3.50	0.44	1360.1	1	17/22	1
1629	K.LK#DGGHYDAEVK.T	1445.70091	-0.37402	2	CID	1.59E-03	0.82	2.89	0.41	476.4	1	13/22	1
7272	N.LLHDNELSDLKEDGGSGDLSALR.V	2511.23215	-0.36435	3	CID	5.01E-09	0.79	3.48	0.55	245.2	1	21/92	
5905	R.MEGSVNGHEFEIEGEGGRPYEGTQAK.L	3038.34323	1.78824	3	CID	4.51E-12	0.61	2.52	0.36	448.6	1	24/108	1
6850	H.NEDYTIVEQYER.A	1558.70199	0.44372	2	CID	3.40E-10	0.96	2.85	0.77	1195.5	1	17/22	1
6524	R.NLLHDNELSDLK.E	1410.72233	3.89629	2	CID	3.33E-05	0.81	2.62	0.32	647.2	1	14/22	
6699	R.NLLHDNELSDLKED.G	1654.79187	1.50400	2	CID	4.99E-06	0.76	2.80	0.21	757.2	1	14/26	
9082	R.NLLHDNELSDLK~EDGGSGDLSALR.V	2668.28108	3.66863	3	CID	4.25E-07	0.73	3.73	0.06	908.3	1	27/96	
8235	R.NLLHDNELSDLKEDGGSGDLSALR.V	2625.27508	3.24757	3	CID	5.55E-11	0.75	3.60	0.20	666.6	1	25/96	
10980	R.NLLHDNELSDLKEDGGSGDLSALRVEEVQN	4108.02514	2.11618	4	CID	2.22E-09	0.66	3.54	0.25	347.5	1	28/222	
6752	H.PADIPDYK.L	1031.54079	1.80515	2	CID	3.90E-05	0.94	2.65	0.61	976.4	1	14/16	1
6695	T.QDSSLQDGEFIYK.V	1529.71183	1.76245	2	CID	4.00E-05	0.62	2.74	0.11	389.0	1	14/24	1
7491	R.QLDSM*IQLCSK~LR.N	1650.83041	3.52508	2	CID	8.09E-04	0.24	2.22	0.04	254.6	1	11/24	
8117	F.QLDTGLEANSYNFAK.E	1833.86537	1.74946	2	CID	1.49E-05	0.84	2.84	0.54	487.3	1	15/30	
6452	D.SSLQDGEFIYK.V	1286.62631	3.28937	2	CID	1.52E-06	0.91	2.08	0.60	975.0	1	15/20	1
8258	H.STGAENLYFQGLEEPDGR.G	1982.90903	3.91865	2	CID	8.66E-10	0.95	3.75	0.68	984.3	1	17/34	
8268	S.TGAENLYFQGLEEPDGR.G	1895.87700	3.67208	2	CID	1.37E-06	0.91	2.84	0.55	1028.4	1	17/32	
6797	D.TGLEAN@SYNFAK.E	1478.67980	0.12046	2	CID	2.83E-02	0.24	2.05	0.14	331.8	1	10/24	
4389	K.TM*GWEASTER.M	1167.50990	2.74981	2	CID	8.93E-03	0.88	2.25	0.55	693.0	1	13/18	1
2812	K.TM*GWEASTER.M	1183.50481	3.91492	2	CID	5.67E-04	0.93	2.43	0.67	868.2	1	14/18	2
10304	R.VMNFEDGGVVTQTQDSSLQDGEFIYK.V	2878.34513	2.14024	3	CID	2.03E-06	0.72	3.09	0.42	406.8	1	22/100	1
6914	T.VTQDSSLQDGEFIYK.V	1729.82792	2.33279	2	CID	2.45E-08	0.94	2.93	0.68	1100.2	1	17/28	1
5754	L.YFQGLEEPDGR.G	1310.60116	-1.14413	2	CID	2.34E-06	0.94	2.72	0.69	955.0	1	14/20	
6994	A.YVK#HPADIPDYK.L	1672.86831	1.91421	2	CID	5.03E-03	0.14	2.13	0.02	131.1	1	10/24	1
2	gij51703339 sp P62988.1 UBIQ_HUMAN Ubiquitin					1.10E-09	8.37	116.18	86.80	8559.6	51703339	12 (10 2 0 0 0)	
1765	K.AKIQDKEGIPPDQQR.L	1722.91332	3.36182	2	CID	1.10E-09	0.84	2.72	0.29	696.1	1	18/28	
6239	K.ESTLHLVLR.L	1067.62077	1.72016	2	CID	6.75E-07	0.93	2.74	0.81	225.9	1	13/16	
4159	K.IQDK~EGIPPDQQR.L	1566.78725	3.29331	2	CID	1.11E-03	0.38	2.25	0.17	193.3	1	12/24	
1810	K.IQDKEGIPPDQQR.L	1523.78125	2.91778	2	CID	5.68E-09	0.93	3.19	0.63	566.6	1	17/24	
1785	K.IQD*K~EGIPPDQQR.L	1580.80290	3.71162	2	CID	3.93E-02	0.19	2.26	0.00	174.4	1	9/24	
7398	R.LIFAGK\$Q@LEDGR.T	1389.74849	1.99789	2	CID	4.24E-06	0.87	3.11	0.60	1138.5	1	17/22	
7398	R.LIFAGK~QLEDGR.T	1389.74868	1.86549	2	CID	1.64E-06	0.88	3.19	0.02	1138.5	1	17/22	

7763	K.TITLEVEPSDTIEN@VK.A	1788.91132	3.33544	2	CID	3.72E-04	0.90	3.12	0.47	727.9	1	18/30
8139	K.TITLEVEPSDTIENVK.A	1787.92730	2.65856	2	CID	1.84E-07	0.90	2.57	0.56	688.4	1	19/30
8075	R.TLSDYNIQK#ESTLHLVLR.L	2244.19724	0.79237	2	CID	1.09E-08	0.72	2.75	0.12	814.6	1	16/34
8975	K.TLTGK~TITLEVEPSDTIENVK.A	2331.22915	1.73864	2	CID	1.27E-08	0.63	2.95	0.17	484.5	1	16/40