

Supplemental Figures legends:

Fig. S1. Silencing of the endogenous *Cloroplastos alterados* gene (*GbCLA1*) in cotton by tobacco rattle virus (TRV)-mediated virus-induced gene silencing (VIGS). (A) The cotyledons of 10-day-old seedlings of *G. barbadense* cv. '7124' were hand-infiltrated with *Agrobacterium* carrying either *TRV:GbCLA1* or VIGS-vector control (*TRV:00*). The photobleaching phenotype was photographed at 20 d post-infiltration. RT-PCR analysis indicated that the transcripts of *GbCLA1* were reduced 12 d after infiltration. (B) Albino phenotypes were firstly observed after 10 d after infiltration and the tender leaves displayed a more obvious photobleaching phenotype.

Fig. S2. The relative percentages of three groups of proteins with different expression patterns and GO functional classification analysis of identified proteins. (A) The relative percentages of three groups of proteins with different regulated patterns (up-regulated, down-regulated and other regulatory patterns). (B) GO functional classification analysis on differentially expressed proteins based on level 2 biological processes. Histograms represent the functional distribution, which is expressed as a percentage of the amount of proteins.

Fig. S3. qPCR analysis of gossypol metabolic-related genes transcripts in control and MeJA treatments. *GbFPS*, *GbCYP706B1*, *GbCAD1* and *WRKY1*, which were involved in gossypol metabolism, were detected at the transcriptional levels by qPCR. Error bars represent the standard deviation for three independent experiments, and three technical replicates were analyzed.

Supplemental Figures:

Fig. S1

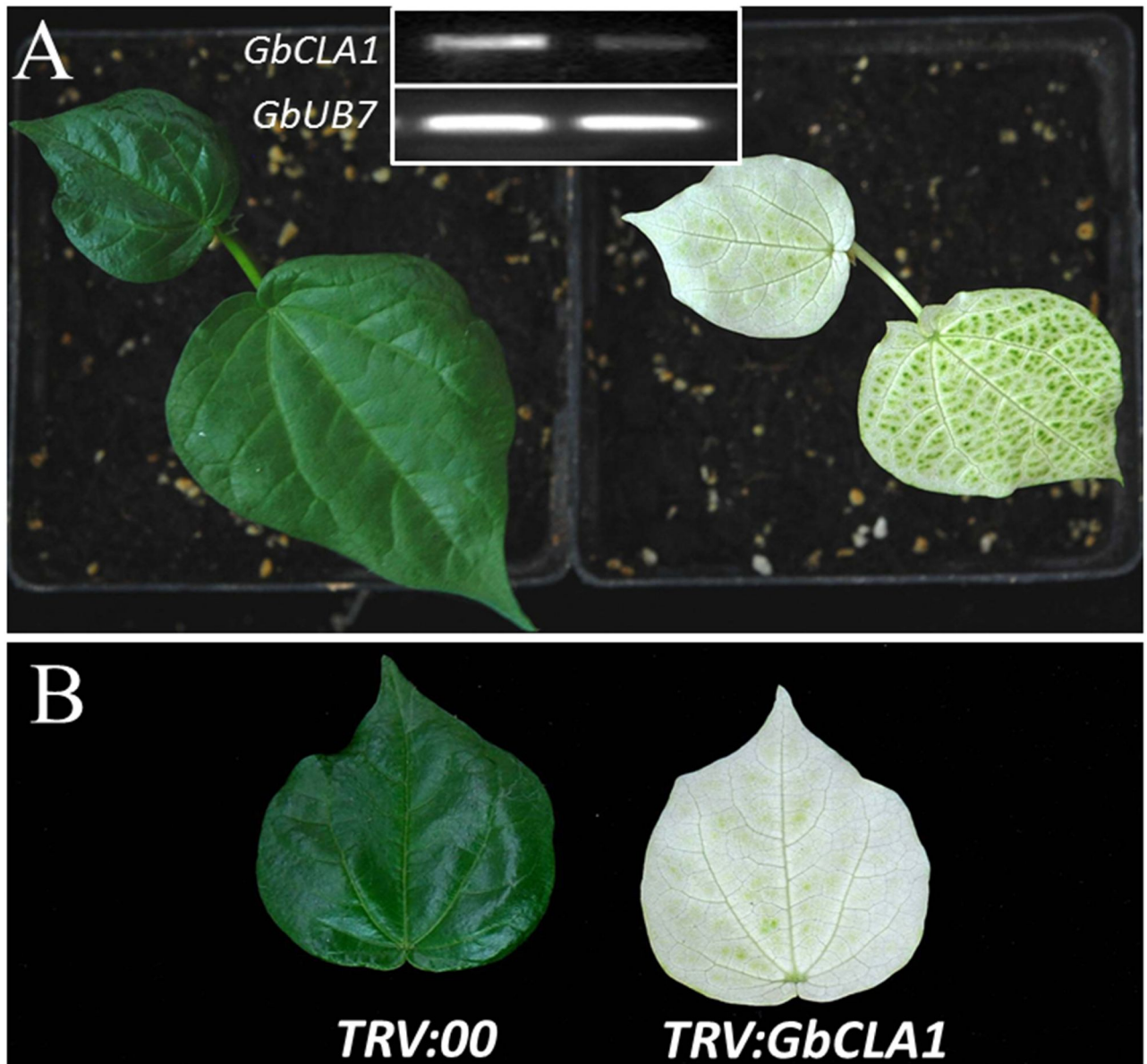


Fig. S2

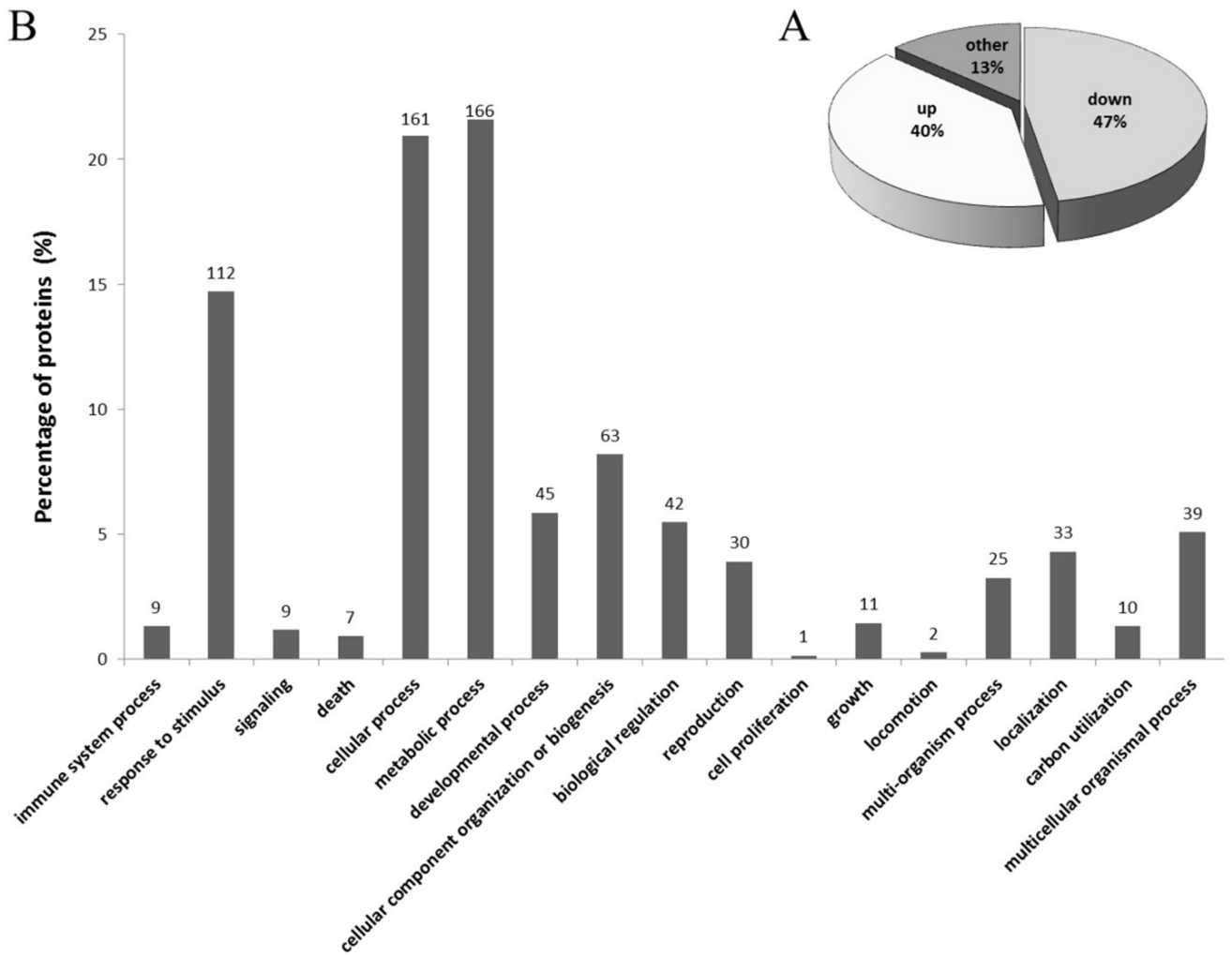
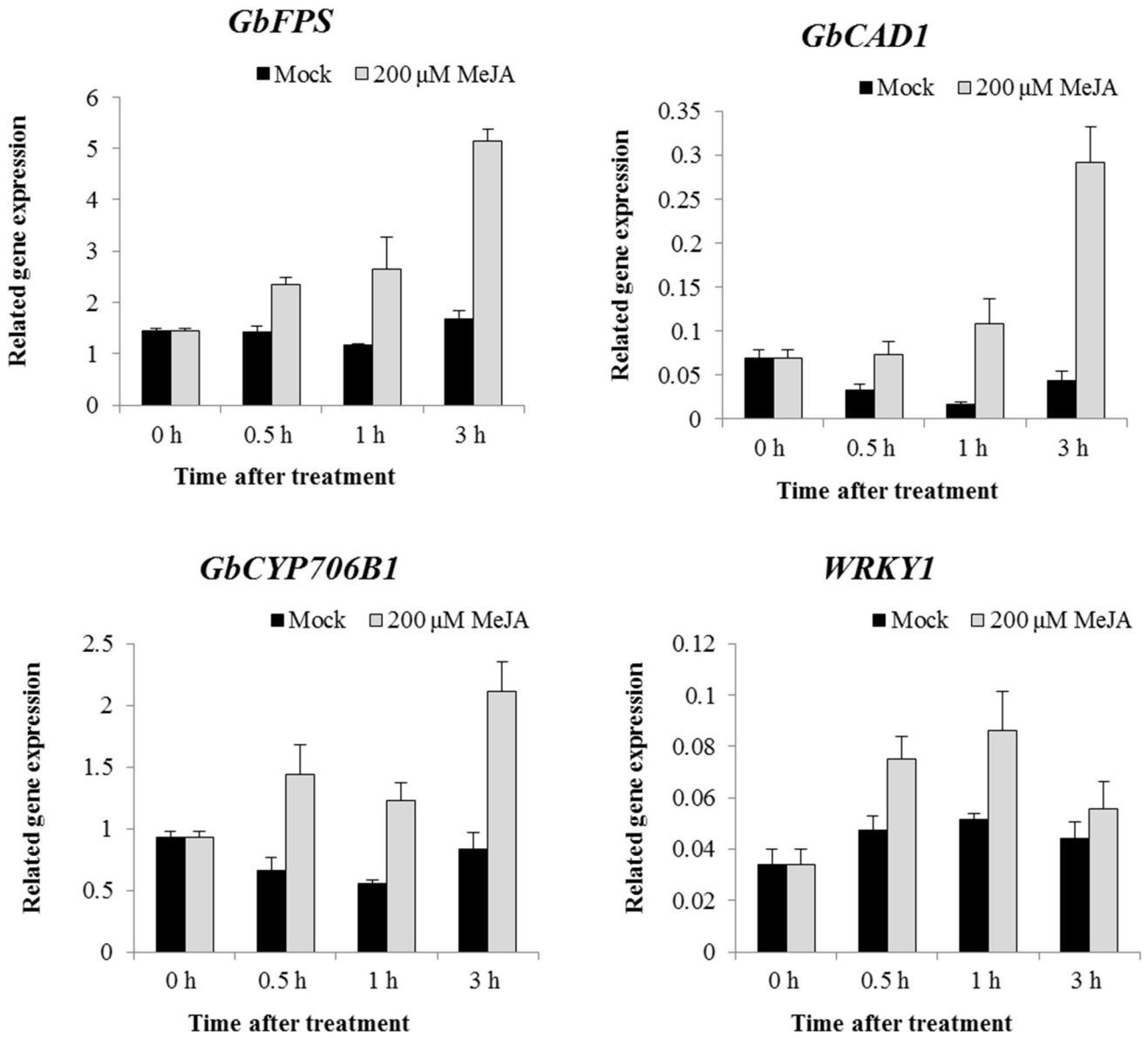


Fig. S3



Supplemental tables

Table S1. Primers used for RT

Genes	Sequences	Annealing Temp.(°C)	Length of amplified fragments (bp)
<i>GbCAD1</i>	5'-TACCATAACAACAATGATGCCGAG 5'-TCCACCACCTACAAATCTCGCTTA	58.9	472
<i>Gb14-3-3c</i>	5'-ATCGGTGCTCGCCGTGCTTC 5'-TCGGCGTTGGCAATGTCCTG	59.2	329
<i>Gb14-3-3d</i>	5'-GCCGTGCTTCCTGGAGGATTG 5'-GCGTATTCTCAGCAGCGGCTTTC	58.4	279
<i>GbSSI2</i>	5'-CGCCACGAGACAGCATACTAA 5'-CAGAAACCCAACCTGAATGGAACAC	57.6	382
<i>GbLOX1</i>	5'-ACACGATGAACATCAATGCCTT 5'-TCTCGGAGTTCTTTCCACCAG	59.2	361
<i>GbJaz1</i>	5'-AAAAGCCTCAAAAAGGAAGACC 5'-AAGGATAGGATCACCGCAAAA	59.1	203
<i>GbJar1</i>	5'-TTTGCTGGAACCGCTACGACC 5'-TGACATTAGGGAAAAGCTCCGG	63.2	415
<i>GbJaz3</i>	5'-TTCGCTTTGCCTTCGGTTATT 5'-TGCCTACTCGTTGCCTGTTGT	60.7	457
<i>GbJaz6</i>	5'-TGGTGGTCAAGTGGCAGTATTT 5'-ATCGGGTTTAGGTGGCAGAGT	59.6	391
<i>GbPR4</i>	5'-CAGGAGAAGGAGCGACTGTGA 5'-TCCCACATCCAAATCTAACCC	58.8	284
<i>GbBZR1</i>	5'-GGACTGTTGAACCCGATGGCACTA 5'-CAGGAGCACTGATGGAACCACTATG	64.9	285
<i>GbBR11</i>	5'-CACAGCGGAAATGGAAAC 5'-TAAACATCGCCCTTGGTG	59.6	438
<i>GbBIN2</i>	5'-TATGGCAGAGCGTGAGT 5'-GTGGCATTCTTTGATTAG	58.5	293
<i>GbUB7</i>	5'-GACTCTACTCAATCCCCACCAGCCT 5'-CCGCACCTTAGCCGACTACAACATC	58.5	321
<i>GbCYP706B1</i>	5'-TGACTGATCATGAGAAGCT 5'-GTGCTGGAGAT TTGATGGT	59.5	239
<i>GbFPS</i>	5'-GCGGATCTCAGGTCAGCATTT 5'-TCGGCAATCTAAACCAACAAGG	58.6	334
<i>GbdHG-6-OMT</i>	5'-AATCCCTTCTGCATAACGCCTA 5'-GTCCAATCCCTCAAATGCCC	61.2	255

Table S2. Primers used for qRT

Genes	Sequences	Annealing Temp.(°C)	Length of amplified fragments (bp)
<i>Gb14-3-3c</i>	5'-AGTCTCTGCCTCCGCCGACAACG 5'-TGCTCAATGGAGGAGATGATGCG	66.9	123
<i>Gb14-3-3d</i>	5'-ACTTCTTCGTGATAACCTTACTTTGTGGAC 5'-TCGAAGATTAGGGATTTTACTGTTGTT	61.8	119
<i>GbLOX1</i>	5'-GCTTATGTTGCTGTAAATGACTCTGG 5'-CACACTAAGTTGTCGGTTCGTTG	60.1	111
<i>GbAOS</i>	5'-TGCCACCTGGTCCTTTCATTTC 5'-GCGTGTTTGGGCTCGGAAGGGTTCG	63.7	193
<i>GbOPR3</i>	5'-AGAGGTCCACTCCTGGCGGCTT 5'-CCACCTGTTCTTCATTGTAGATTCC	61.3	105
<i>GbMYC2</i>	5'-GCTCCGCCACTACCGTGCTC 5'-CTCGAAGCACTTTTTTACGGTGTTT	63.9	129
<i>GbJaz1</i>	5'-AGCCTCAAAAAGGAAGACCTCAAAC 5'-TGGCTGCTCAATCACCATAGTAATC	62.6	109
<i>GbJaz3</i>	5'-TGATTTTGCTCAAGGAGATAACGCT 5'-TGATTGCCTACTCGTTGCCTGT	62.2	138
<i>GbJaz6</i>	5'-GGCATCAATATGGCGGTTTCAGGAC 5'-TTCATCGGGTTTAGGTGGCAGAGT	66.1	158
<i>GbPR4</i>	5'-GAGGGTAAGAACTCAAGGACTGG 5'-CTCCATCAGTGTCCAATCGGTT	60.8	115
<i>GbNPR1</i>	5'-CTAGCTTGCGGAGGGATTGATAACC 5'-GAGATGGCTGACCTGTCAAACCTGC	64.9	128
<i>GbPR1</i>	5'-AAGAATGTGGGTTAGTGAGAGGGT 5'-ACCACTTGAGTATAATGCCCGC	60.3	90
<i>GbPR5</i>	5'-AAGGAGTCCACCACAATCACCG 5'-CTGGCACTGCTATGGCTCGTAT	61.2	102
<i>GbCAD1</i>	5'-AACCAGAAAAAGGCTGCAACTTCAG 5'-TCCTTATTGGAAGAAAGAGGGTGATG	64.4	112
<i>GbFPS</i>	5'-GCTACCGCTGTTGAAAGATGG 5'-TCGGCAATCTAAACCAACAAGG	63.2	132
<i>GbCYP706B1</i>	5'-CAAAGGGCACCAGGGTCTTC 5'-ACCGAGAGATACTCCGGCACAC	64.0	107
<i>WRKY1</i>	5'-GCTGAATGTGAGGATTATGGTGCCA 5'-TCAGAAGGATTTGTGCGGACTTGAACC	60.9	121
<i>GbUB7</i>	5'-GAAGGCATTCCACCTGACCAAC 5'-CTTGACCTTCTTCTTGTGCTTG	58.5	198

Table S3. Primers used for VIGS

Genes	Sequences	Annealing Temp.(°C)	Length of amplified fragments (bp)
<i>GbCAD1</i>	5'-CGACGACAAGACCCTTACCATAACAACAATGATGCCGAG 5'-GAGGAGAAGAGCCCTTCCACCACCTACAAATCTCGCTTA	61.9	472
<i>Gb14-3-3c</i>	5'-CGACGACAAGACCCTATCGGTGCTCGCCGTGCTTC 5'-GAGGAGAAGAGCCCTTCGGCGTTGGCAATGTCCTG	67.2	329
<i>Gb14-3-3d</i>	5'-CGACGACAAGACCCTGCCGTGCTTCCTGGAGGATTG 5'-GAGGAGAAGAGCCCTGCGTATTCTCAGCAGCGGCTTTC	66.4	279
<i>GbSSI2</i>	5'-CGACGACAAGACCCTCGCCACGAGACAGCATACTAA 5'-GAGGAGAAGAGCCCTCAGAAACCCA ACTGAATGGAACAC	62.6	382

Table S4. MS/MS identification of differentially expressed protein spots on 2-DE gels from *G. barbadense* cv. '7124' inoculation with *V. dahliae*

ssp no. ^a	Gi no. ^b	protein name	protein score	Ion score ^c /sequence ^d	Sequence Coverage	Matched ^e /Searched ^f	Species	Experimental MM ^g (kD)/pI	Theoretical MM ^g (kD)/pI	Fold change ^h (ve/control)
11	gi 48741806	proteasome subunit alpha type 5	334	43/GVNTFSPEGR;73/LFQVEYAIEAIK;43/RITSPLLEPS SVEK;70/ITSPLLEPSSVEK;38/VETQNHK;41/VAPTYH LYTPSEVEAVITR;27/VAPTYHLYTPSEVEAVITRL	20%	7/117	<i>G. raimondii</i>	35.39/4.67	34.56/5.36	0.19
12	gi 5049781	14-3-3-like protein (14-3-3a)	115	115/AAQDIALDLDLAPTHPIR	8%	1/160	<i>G. hirsutum</i>	28.60/4.71	22.87/5.74	0.38
17	gi 13349772	latex-abundant protein	293	118/SAEPGDFLVHYSGHGTR;71/EQIGDSSKPDSES ESGSGGFR;104/SFLHHTVQDAFESR;	23%	3/210	<i>G. arboreum</i>	27.41/4.79	25.94/5.18	0.29
24	gi 109862253	elongation factor 1	384	54/ALNDFLSGK;83/AEAADDEDDLDFGDETEEDKK; 46/SSVLMVDPWDDDETDMK;33/KLEEAVR;76/SVE MPGLLWGASK;75/LVAVGYGIK	30%	7/158	<i>G. hirsutum</i>	28.83/4.83	27.83/4.89	0.47
25	gi 5050340	chalcone isomerase	465	69/TLFLGGAGER;64/GLEIQGKFIK;104/SAVELTESVE FFR;79/VTMILPLTGQQYSEK;69/VTMILPLTGQQYSE K;43/VSENCVAIWK;34/AIEKFIEVFK;71/LLANSVLES	36%	8/193	<i>G. hirsutum</i>	26.80/4.86	24.27/5.77	0.48
40	gi 48748039	cysteine proteinase rd21a	269	39/VVSINDYEDVPVNDK;78/AVANQPVSVAIEAGG R;70/SFQLYQSGIFDGK;41/GKDYWIVK;41/NSWGSS WGEAGYIR	22%	5/108	<i>G. raimondii</i>	26.91/4.51	32.90/4.69	0.05
112	gi 48797299	glycine-rich ma-binding	304	132/LFVGGISYQTDDQGLR;40/YGEVIEAR;19/IIVDRE TGR;92/GFGFVYTSSEDASSALQALDGQTLHGR;21/ VNYATER	31%	5/175	<i>G. raimondii</i>	32.50/4.49	21.43/5.63	0.24
123	gi 5049148	14-3-3-like protein (14-3-3b)	49	49/EQQVYLAR	4%	1/210	<i>G. hirsutum</i>	33.01/4.76	20.49/6.26	0.47
127	gi 5046822	14-3-3 protein (14-3-3c)	148	70/VSASADNEELTVEER;78/SAQDIANAELAPTHPIR	15%	2/126	<i>G. hirsutum</i>	34.71/4.78	23.76/5.04	0.35
133	gi 31073060	iron binding protein	162	51/ELNLVPTVPQMSLAR;66/LLNLHNVAER;45/ISEY VAQLR	10%	3/210	<i>G. hirsutum</i>	32.40/4.82	37.49/5.76	0.49
150	gi 48742511	thiol protease aleurain-like protein	214	112/YNGGLDTEEAYPYAK;102/NSWGAQWGDNGY FK	12%	2/158	<i>G. raimondii</i>	30.77/4.90	27.09/7.16	0.21
155	gi 48742486	ran binding protein	126	52/LEEVAVSTGEENEDPILDK;42/FDKEGNQWK;32/ FASVENCK	11%	3/147	<i>G. raimondii</i>	33.26/4.92	37.28/5.45	2.85
161	gi 13356530	elongation factor 1-beta	181	41/SSVLMVDPWDDDETDMK;46/SVEMPGLLWGASK ;65/LVAVGYGIK;29/NEYIQSCDIVAFNK	28%	4/210	<i>G. arboreum</i>	29.20/4.60	20.39/4.47	0.33
206	gi 78323677	proliferating cell nuclear antigen	382	52/SEGFEHYR;124/ADDGSDTVTFMFESPTQDK;44/L MDIDSEHLGIPEAEYHAIVR;83/LMDIDSEHLGIPEAE YHAIVR;25/MPSAEFAR;41/MPSAEFAR;57/GDIGTAN IVLR;26/IAEMGYIR	24%	8/180	<i>G. hirsutum</i>	38.07/4.75	34.11/4.87	0.29
212	gi 78323533	26s proteasome regulatory subunit	370	75/VHPLVIFNICDCYVR;95/VIGTLLGSVLPDGTVDIR; 21/EVIVGWYSTGLGVTGGSALIHDFYSR;109/EVSNPI HLTVDTGFR;70/AFVSVNLALGDR	29%	5/210	<i>G. hirsutum</i>	35.96/4.92	32.04/5.36	0.36
216	gi 78323733	20s proteasome subunit paf1	498	132/NQYDTDVTTWSPAGR;62/LFQVEYAMEAVK;129 /VDDHIGVAIAGLTADGR;121/NECINYSFTYESPLPV GR;55/RFENFTDSSR	25%	5/210	<i>G. hirsutum</i>	36.89/4.90	31.55/8.97	0.39

225	gi 5044774	ubiquitin thioesterase otubain-like protein	247	66/VLDQQYAAIR;32/TRGDGNCFFR;40/SFMFSYLEHI LESQDR;60/SFMFSYLEHILESQDR;20/SRDQSIDYV VMFFR;27/DQSISDYVVMFFR;42/FVTSGEIR	25%	7/210	<i>G. hirsutum</i>	40.27/4.77	26.94/5.82	--
231	gi 109860660	ubiquitin thioesterase otubain-like protein	200	58/VLDQQYAAIR;13/SFMFSYLEHILESQDR;91/EDSIS QDELILR;38/FVTSGEIR	16%	4/210	<i>G. hirsutum</i>	40.35/4.81	32.79/9.42	0.20
232	gi 78323677	proliferating cell nuclear antigen	312	52/SEGFEHYR;55/ADDGSDTVTFMFESPTQDK;42/MP SAEFAR;87/GDIGTANIVLR;36/QNTTVDKPEEATIE MNEPVSLTFALR;40/YMNSFTK	26%	6/147	<i>G. hirsutum</i>	38.18/4.72	34.11/4.87	0.25
233	gi 5046822	14-3-3 protein	59	59/SAQDIANAELAPTHPIR	8%	1/210	<i>G. hirsutum</i>	36.28/4.81	23.76/5.04	0.20
314	gi 84169310	WD-repeat protein	108	37/IWEADIIR;46/TIFSVHWSR;26/EGIIASGAADDAVR	18%	3/202	<i>G. hirsutum</i>	45.13/4.76	19.07/5.62	0.24
318	gi 164354844	peroxidase	296	72/FALANVNSAR;18/SAVESSCSGVVSCADILAIAR; 92/DSVVLSSGGPTWR;44/CATFDNR;71/GLLGSDQILY SSDLAVSTTK	21%	5/158	<i>G. hirsutum</i>	45.01/4.85	36.08/5.63	0.39
322	gi 11207995	40s ribosomal protein sa	137	17/RNDGIYIINLGK;16/FAQYTGCHAIAGR;93/HTPGT FTNQLQTSFSEPR;11/LLILTDP	29%	4/189	<i>G. arboreum</i>	46.11/4.90	19.42/8.74	0.25
328	gi 5048825	spermidine synthase	194	49/VLVLDGVIQLTER;62/VLVIGGGDGGVLR;82/QYF PDVAVGYDDPR	20%	3/210	<i>G. hirsutum</i>	44.88/4.88	21.34/4.70	0.31
338	gi 48740287	late embryogenesis abundant protein	405	50/LLSGLIPDAGTIHAHGEETVK;68/STYDDIKPGSIIP YR;72/TGEIPIYPKPDIDMEK;68/FSWEETIAVLHLK;60 /DFGSALWDMIR;87/GHINVDTPFGAMK	35%	6/158	<i>G. raimondii</i>	42.10/4.63	27.91/4.91	--
405	gi 164261933	ankyrin repeat domain protein	371	38/HILDEIETGGPAAMMK;114/AALASGADKDEEDSE GR;78/TALHFACGYGEVK;83/NTALHYAAGYGR;58/L NNQHEVLK	19%	5/148	<i>G. hirsutum</i>	47.93/4.31	38.70/5.10	0.28
407	gi 48748039	cysteine proteinase rd21a	236	25/LPDSVDWR;87/AVANQPVSVAIEAGGR;40/SFQLY QSGIFDGK;84/NSWGSSWGEAGYIR	17%	4/192	<i>G. raimondii</i>	49.31/4.40	32.90/4.69	N
411	gi 78330968	uv excision repair protein	135	11/AAYNNPER;48/AVEYLYSGIPEQAEAPPVAR;23/N SPQFQALR;52/LIQEHQGDFLR	16%	4/102	<i>G. hirsutum</i>	48.42/4.76	30.05/4.76	0.29
415	gi 78332047	uv excision repair protein	275	43/AAYNNPER;85/AVEYLYSGIPEQAEAPPVAR;52/N SPQFQALR;78/LIQEHQGDFLR;17/LEAMGFDR	18%	5/158	<i>G. hirsutum</i>	47.72/4.85	31.43/4.58	0.38
417	gi 164263296	transaldolase	623	70/AISSSNAYNDQFR;71/DIESAYWELVVK;64/LFEPI YDQTDGGDGYVSVEVSPR;76/VTSVASFFVSR;79/AA VAQAALAYR;109/TIDANVSEAEGIYSALEK;84/VGS QLEDEGVESFKK;71/SFDSLLDTLQEK	25%	8/136	<i>G. hirsutum</i>	47.94/4.88	50.24/9.66	0.44
418	gi 164263296	transaldolase	628	88/AISSSNAYNDQFR;24/DIESAYWELVVK;128/LFEPI YDQTDGGDGYVSVEVSPR;81/YLHEVVDRPNVYIK;1 12/YEAVIDAYLDGLEASGLSDLSR;70/VTSVASFFVS R;62/AAVAQAALAYR;63/SFDSLLDTLQEK	26%	8/210	<i>G. hirsutum</i>	48.41/4.91	50.24/9.66	0.49
424	gi 48817237	nucleotide exchange factor	53	53/AFYAVSALIR	3%	1/210	<i>G. raimondii</i>	51.06/4.86	30.42/5.35	--
502	gi 48878188	target of myb protein 1	297	65/ELFQGNPADK;25/AFSEVAAER;55/LIDDPQTVV NNR;30/ALMLIEAWGESTSELR;52/ALMLIEAWGEST SELR;99/DNESLAPIFTPPR	24%	6/198	<i>G. raimondii</i>	56.15/4.73	28.40/5.11	0.44
506	gi 48747592	phosphoethanolamine methyltransferase	102	49/TYPDNSFDVIYSR;53/DTILHIQDKPALFR	10%	2/154	<i>G. raimondii</i>	56.24/4.91	29.66/5.04	3.73
524	gi 45438674	peroxidase	170	170/SDQNLFSTEGADTIEIVNR	17%	1/132	<i>G. hirsutum</i>	54.39/4.77	11.71/4.05	N
616	gi 48742071	tubulin beta	416	102/IDVYYNEASGGR;21/SGPIGQIFRPNFVFGQSGA GNNWAK;152/GHYTEGAELIDAVLDVVR;46/FPGQL NSDLR;58/LAVNLIPFPR37/LHFFMVGFAPLTSR	30%	6/98	<i>G. raimondii</i>	58.21/4.87	32.92/5.28	N

706	gi 21091341	protein disulfide isomerase	293	39/GYPTVYFR;112/LAPILEEVAIHYEK;142/LDATAN DIVDPNFDVR	17%	3/138	<i>G. arboreum</i>	61.74/4.80	24.49/5.53	0.38
707	gi 78324178	rubisco subunit binding protein	405	66/EIAFDQSSR;87/LADAVGLTLGPR;67/NVVLDEFGS PK;80/AIELPNAMENAGAALIR;51/GYISPOFVTNPEK; 54/LICEFENAR	23%	6/210	<i>G. hirsutum</i>	62.85/4.82	32.30/8.31	0.48
709	gi 5047127	glutamine synthetase	214	7/SMREDGGFEVIK;28/AILNLSLR;82/HKEHISAYGEG NER;97/HETASINTFSWGVANR	26%	4/210	<i>G. hirsutum</i>	61.57/4.87	21.09/8.27	0.49
711	gi 32479441	probable nucleoredoxin 1-like	102	55/MPWLAIPFSDSEAR;47/VLTEEGVEIIR	6%	2/158	<i>G. hirsutum</i>	66.13/4.89	42.79/4.98	0.29
717	gi 13248313	tetratricopeptide repeat domain-containing protein	68	57/TEFFLNHEALQQVIR;11/LVYTIYAR	12%	2/111	<i>G. arboreum</i>	64.53/4.83	20.81/7.89	0.19
719	gi 13350678	protein disulfide isomerase	113	91/VDANEESNKDLANEYEV;22/SAEDASNFIDEK	13%	2/96	<i>G. arboreum</i>	63.35/4.80	25.58/5.30	N
720	gi 13350678	protein disulfide isomerase	156	137/VDANEESNKDLANEYEV;20/LRSDYEFGHTLD AK	14%	2/210	<i>G. arboreum</i>	63.11/4.88	25.58/5.30	N
804	gi 78341095	stromal 70 kda heat shock-related chloroplastic-like	393	114/LSFKDIDEVILVGGSTR;109/DIDEVILVGGSTR;64 /IPAVQELVR;105/SEVFSTAADGQTSVEINVLQGER	16%	4/158	<i>G. hirsutum</i>	70.45/4.84	32.97/4.64	0.33
1008	gi 193219783	triosephosphate isomerase	716	55/FFVGGNWK;46/IEVSAQNSWIGK;78/GGAFTGEIS VEQLK;64/WVILGHSE;68/HVIGEDDQFIGK;79/HVI GEDDQFIGKK;50/TFDVCFFQLK;100/VATPQQAQEV HVAVR;94/EEDIDGFLVGGASLK;83/GPEFATIVNSVT	32%	10/210	<i>G. hirsutum</i>	28.81/5.08	37.38/6.36	2.25
1028	gi 84144761	dienelactone hydrolase family	193	70/DHGPKDGYEDAK;61/VPIAILGAEQDHISPELLK; 39/QFDEILK;23/VGHGWSVR	18%	4/144	<i>G. hirsutum</i>	27.64/5.04	28.10/5.23	N
1104	gi 11209486	remorin family	62	36/STEVSVDRDAVLAR;26/ISLINAWEESEK	12%	2/210	<i>G. arboreum</i>	31.16/5.00	23.13/7.08	0.40
1106	gi 31407188	protein in2-1 homolog b-like protein	414	46/LYLAYPCPYAQR;36/LVPLNLQNRPAWYK;130/D ADAAFDHLETALAK;53/FQIYLSEVFNYDLTAGRPK; 107/VAAWIEAADKIDAYK	29%	6/158	<i>G. hirsutum</i>	30.41/5.03	29.25/6.84	0.42
1114	gi 11209486	remorin family protein	209	44/STEVSVDRDAVLAR;38/RISLINAWEESEK;61/ISLI NAWEESEK;42/KLSSIAAWENTK;24/AAIEAELKR	23%	5/201	<i>G. arboreum</i>	31.23/5.07	23.13/7.08	0.41
1115	gi 164316384	protein in2-1 homolog b-like protein	421	67/ATETVESLPPTLEANAEQPPLFDGTTR;58/LYTSYP CPFAQR;46/LVPLNLQNRPAWYK;65/KYDDGPFLG R;69/YDDGPFLGR;81/DFSLADIAYIPFVER;35/YDTI	28%	7/158	<i>G. hirsutum</i>	31.90/5.08	36.29/5.93	8.33
1124	gi 13352433	20s proteasome subunit paf1	95	56/NQYDTDVTTWSPAGR;39/NECINYNFTYESPLPVG R	15%	2/158	<i>G. arboreum</i>	34.94/4.97	24.60/9.51	N
1126	gi 5046691	ran binding protein	115	43/FDKEGNQWK;72/FQEVAESQKPK	11%	2/97	<i>G. hirsutum</i>	33.92/5.03	20.56/5.49	N
1132	gi 78328997	tubulin folding cofactor b	156	71/LQIEGDASVLLR;72/YSISEDEYNKR;13/EQMASQN PSEFR	11%	3/210	<i>G. hirsutum</i>	31.81/5.11	34.70/8.04	0.23
1145	gi 5044913	methylthioadenosine nucleosidase	81	27/FQLIENPHSSFPK;54/IPIPVFDLYGVGLR	12%	2/209	<i>G. hirsutum</i>	32.51/4.95	23.14/9.55	0.18
1150	gi 78341942	ribose-5-phosphate isomerase	43	43/LEGLFNELGCEAK	4%	1/194	<i>G. hirsutum</i>	29.12/4.96	29.74/7.14	0.11
1207	gi 48808146	glycosyl hydrolase family 38 protein	94	19/TFYTDSNGR;57/EFSVLVDR;17/SLGGSSIVDGQIE LMLHR	12%	3/140	<i>G. raimondii</i>	35.91/4.99	31.61/4.82	5.43
1217	gi 11209293	20s proteasome subunit paf1	241	70/NQYDTDVTTWSPAGR;120/VDDHIGVAIAGLTAD GR;51/NECINYSFTYESPLPVG	23%	3/133	<i>G. arboreum</i>	38.00/5.07	23.90/9.47	2.84

1231	gi 48748981	adenine nucleotide alpha hydrolases-like protein	194	79/FPFSTPIAGSQR;54/IAIAVDLSDESAYAVR;39/LQIT PNSTNNR;22/LCLEVER	16%	4/153	<i>G. raimondii</i>	37.88/5.03	31.03/5.40	N
1240	gi 54119904	probable carboxylesterase 2-	55	28/GWLYYDK;27/LASFFNQGK	6%	2/95	<i>G. raimondii</i>	41.80/5.02	32.40/5.37	2.91
1313	gi 48818461	transducin family protein	185	59/SHILVTAEDESGIHIWDLR;86/EPWIFASLSYDGR;4 1/VVVESVKPFLSR	19%	3/122	<i>G. raimondii</i>	46.18/5.10	26.49/5.57	0.34
1320	gi 345461935	desoxyhemigossypol- 6-O- methyltransferase	80	14/ILVHSDFFAR;45/QKLDNDAQEEGYVLTNSSR;21/ LFLAAGFSSFK	10%	3/158	<i>G. barbadense</i>	43.27/5.02	40.86/5.23	0.34
1335	gi 13350365	transaldolase-like protein	144	46/LAYDTHGIIR;37/LYDEIAVPPER;61/IPSTWQGIEA SR	14%	3/210	<i>G. arboreum</i>	43.52/4.99	24.86/5.09	N
1406	gi 78324960	3-isopropylmalate dehydrogenase	118	67/LLKPETGLLQLR;51/ELTGGIYFGKPR	8%	2/158	<i>G. hirsutum</i>	47.41/5.02	31.78/8.31	2.05
1434	gi 78354144	nucleoporin nup43	105	37/TPGGPVLQFK;68/TSGIVHSIDIHPSR	14%	2/158	<i>G. hirsutum</i>	48.85/5.04	18.41/8.48	3.66
1502	gi 5050625	alpha-tubulin	326	71/AVFVDLEPTVIDEVR;65/QLFHPEQLISGK;74/QLF HPEQLISGKEDAANNFAR;67/EIVDLCLDR;48/SLDIE RPTYTNLNR	31%	5/158	<i>G. hirsutum</i>	55.73/4.99	20.52/6.22	3.62
1507	gi 48752349	alpha-tubulin	549	60/EIVDLCLDR;90/QLFHPEQLISGK;112/LISQISSLTT SLR;39/SLDIERPTYTNLNR;113/AVFVDLEPTVIDEVR ;137/FDGAINVDVTEFQTNLVPYPR	30%	6/146	<i>G. raimondii</i>	55.38/5.03	31.65/6.07	N
1513	gi 48814087	aminoacylase-1	155	46/RIEEWAPASR;46/IGKPEILSGATDAR;64/GINVYE SIEAYTSYIPPGR	17%	3/158	<i>G. raimondii</i>	53.31/5.11	29.75/7.24	N
1516	gi 48780251	tubulin alpha-7 chain	437	71/AVFLDLEPTVIDEVR;93/QLFHPEQLISGK;83/LAD NCTGLQGFLVFHAVGGGTGSGLSLLER;54/LVSQ VISSLTASLR;136/FDGALNVDVNEFQTNLVPYPR	34%	5/160	<i>G. raimondii</i>	54.83/5.10	30.33/5.43	N
1517	gi 5050625	alpha-tubulin	70	28/AVFVDLEPTVIDEVR;23/EIVDLCLDR;19/SLDIERP TYTNLNR	20%	3/140	<i>G. hirsutum</i>	55.60/5.12	20.52/6.22	4.18
1524	gi 315069289	alpha tubulin 1	389	72/AVFVDLEPTVIDEVR;90/QLFHPEQLISGK;34/SLDI ERPTYTNLNR;47/LVSQVISSLTASLR;80/FDGALNVD VTEFQTNLVPYPR;67/TIQFVDWCPTGFK	29%	6/151	<i>G. barbadense</i>	54.67/5.07	34.24/6.27	N
1526	gi 48748259	alpha-tubulin	402	88/QLFHPEQLISGK;117/LISQISSLTTSLR;89/AVFVD LEPTVIDEVR;108/FDGAINVDITEFQTNLVPYPR	21%	4/160	<i>G. raimondii</i>	55.28/5.14	32.26/5.44	N
1604	gi 48777881	glucose-6-phosphate isomerase	377	120/QGVAITQENSLLDNTAR;28/IEGWVAR;28/FPMF DWVGGR;86/GSTDQHAYIQQLR;115/EGVHNFFVTFI	23%	5/203	<i>G. raimondii</i>	59.23/4.97	29.10/4.87	0.40
1615	gi 48777881	glucose-6-phosphate isomerase	86	48/QGVAITQENSLLDNTAR;38/GSTDQHAYIQQLR	11%	2/158	<i>G. raimondii</i>	59.41/5.03	29.10/4.87	2.92
1617	gi 13353515	phosphoesterase family protein	179	39/YVDNFHQYDLSFKR;52/LPNYVVIEPR;18/EIYEAL R;70/DAWAGSFDIVVNR	19%	4/158	<i>G. arboreum</i>	60.73/5.05	26.53/6.15	0.40
1623	gi 48803376	RNA recognition motif-containing	65	43/QVEFYFSDSNIPR;22/TIAASPFENVK	9%	2/158	<i>G. raimondii</i>	59.13/5.09	28.90/4.85	5.63
1628	gi 54123077	beta-tubulin	167	136/GHYTEGAELVDSVLDVVR;30/IREEYPDR	10%	2/210	<i>G. hirsutum</i>	58.19/5.10	27.64/5.85	0.34
1651	gi 21103494	fas-associated factor 2-b-like	57	34/VLEESAPVLAAR;23/LREEQDAAYR	10%	2/158	<i>G. arboreum</i>	60.40/4.97	24.37/7.78	2.23
1652	gi 13354972	vacuolar atpase b subunit	59	46/QIYPPINVLPSLSR;13/NIFQSLDLAWTLLR	10%	2/87	<i>G. arboreum</i>	57.95/5.04	28.38/9.91	++
1804	gi 78343945	ubiquitin carboxyl- terminal hydrolase	235	124/KLDVYIDVPDVIDISHIR;111/VDTLISFGFQEEIAR	11%	2/210	<i>G. hirsutum</i>	79.24/4.96	31.08/4.98	0.48

2005	gi 13356871	proteasome subunit beta type	634	56/NCFAIASDR;36/NCFAIASDRR;64/RLGVQLQTIATDFQR;126/LGVQLQTIATDFQR;161/LFLGLSGLATDAQTLYQR;79/DFVVAGTASESLYGACESMFK;111/DCLSGWGGHVYVVTPEVK	31%	7/210	<i>G. arboreum</i>	24.60/5.22	29.68/5.36	2.57
2016	gi 84144761	dienelactone hydrolase family	147	58/DHGPDKGYEDAK;28/QFDEILK;32/ASEVDSFVK;28/VGHGWSVR	14%	4/142	<i>G. hirsutum</i>	28.09/5.17	28.10/5.23	4.02
2102	gi 164310401	type 2 ribosome-inactivating protein precursor	161	44/DLYNALTER;39/SGDIPILPPR;78/LVYDAQELVLS TLR	11%	3/158	<i>G. hirsutum</i>	31.44/5.16	31.48/5.27	3.37
2105	gi 48743646	isopentenyl diphosphate isomerase	608	33/YELLQQR;99/ESELIENHLGVR;108/KLLDELGIP AEDVPVDQFVPLSR;93/LLDELGIPAEDVPVDQFVPLSR;107/WGEHELDYLLFIVR;106/DVNVHPNPDEVAEAK;36/LSPWFR;26/LVVDNFLFK	34%	8/210	<i>G. raimondii</i>	32.58/5.21	30.19/8.50	0.45
2123	gi 48811023	protein phosphatase 2c	177	18/SSMEDFYETR;30/QNLFSNLIR;47/DAGSTASTAIL VGDR;40/GGNAFAVSR;41/DHKPDQSDER	21%	5/158	<i>G. raimondii</i>	34.06/5.18	27.21/5.75	13.06
2124	gi 48812639	(+)-delta-cadinene synthase (GbCAD1)	310	49/LAFIDSVQR;5/EIEDELENIYHNNNDAENDLYTTSLR;87/GLLELYQASYLR;105/HYLSVYQDIESHNK;39/IDFNMLQFLHR;63/IDFNMLQFLHR	24%	6/210	<i>G. raimondii</i>	31.06/5.14	34.02/6.56	3.65
2205	gi 164253821	phenazine biosynthesis	647	98/YVVDVAFTNSAFK;108/GNPAAVCLLEEER;75/GNPAAVCLLEEERDEK;14/ITNSTSPNTR;35/TTTADDIFV VLPSGK;159/GLIVSGAAPSDFDFISR;63/LELVAHAASPR;94/GGIVNIHFDEQNQR	30%	8/210	<i>G. hirsutum</i>	36.85/5.17	35.14/5.13	2.46
2246	gi 109831589	2-keto-3-deoxy-l-rhamnonate aldolase-like	97	20/AVATTNTPAIR;33/LPESSAVWAK;26/GYHMOVSG AIDVGLFR;18/NAAVEDVRK	17%	4/117	<i>G. hirsutum</i>	36.91/5.20	28.92/5.48	10.77
2250	gi 13352653	dna-damage-repair toleration protein	66	66/SLNIEVEDLGITSYYNIGAEVGR	10%	1/158	<i>G. arboreum</i>	37.14/5.16	22.53/5.07	0.10
2320	gi 48739156	caffeic acid o-methyltransferase	289	44/ELASQLPTSNPDAPVMLDR;43/LLATYSILTCSLR;63/DAVLEGGIPFNK;42/AYGMTAFEYHGTDPR;30/AYGMTAFEYHGTDPR;96/ILETYDGFEGLK	27%	6/158	<i>G. raimondii</i>	45.47/5.26	28.80/5.77	0.48
2415	gi 5046349	s-adenosylmethionine	136	45/TIFHLNPSGR;60/FVIGGPHGDAGLTGR;31/TAAYG HFGR	17%	3/158	<i>G. hirsutum</i>	50.34/5.26	21.92/8.81	2.08
2511	gi 82756479	alpha-tubulin	198	86/AIFVDLEPTVIDAVR;28/QLFHPEQLISGK;54/QLFHPEQLISGKEDAANNFAR;31/SLDIERPTYTNLNR	21%	4/210	<i>G. hirsutum</i>	54.25/5.24	25.61/5.65	0.05
2518	gi 5049948	tubulin alpha	197	65/AIFVDLEPTVIDEVR;30/QLFHPEQLISGK;30/QLFHPEQLISGKEDAANNFAR;23/EDAANNFAR;16/EIVDLC LDR;34/SLDIERPTYTNLNR	30%	6/158	<i>G. hirsutum</i>	54.63/5.16	21.37/5.72	N
2525	gi 78345852	aha1 domain-containing protein	288	94/SLSDLTILDGQGNLR;58/VDGEAYVNIR;81/FGSWP DGIDSTVR;55/LVFNEPEPGVTIHK	16%	4/210	<i>G. hirsutum</i>	54.72/5.18	36.24/8.46	--
2611	gi 48801055	n-carbamoyl-l-amino acid	64	64/QIDELSTFSDTPAPSVTR	6%	1/158	<i>G. raimondii</i>	59.00/5.25	31.56/5.04	0.49
2633	gi 78328524	chaperonin cpn60-mitochondrial-like isoform 2	67	16/SIEFKDR;52/GYISPYFITNQK	2%	2/210	<i>G. hirsutum</i>	60.90/5.17	33.60/9.60	2.43
2733	gi 164281758	pentatricopeptide repeat-containing protein	323	70/LDLYVAAAGINPQR;71/NPLYLGLQQHR;24/AQGR PMIDFPK;158/IVVAGAGSAGIGVVNAAR	13%	4/210	<i>G. hirsutum</i>	64.86/5.27	45.55/9.52	2.27

2756	gi 109861556	kh domain-containing protein	47	25/ILDGPPGTQER;22/ALELIASHLR	6%	2/110	<i>G. hirsutum</i>	68.79/5.18	36.19/5.98	5.09
2764	gi 48792870	pyruvate kinase	127	20/EWHQMVIER;80/AEDGEIWTFSVR;27/ANLTFWR	9%	3/210	<i>G. raimondii</i>	65.01/5.10	30.70/4.84	0.41
3004	gi 31407396	glutathione s-transferase	289	60/VFGYWASPYSYR;100/GVSYEYINEDIFGNK;52/HNPYLPQDPYDK;40/CFPTLWLAAWSAENER;37/VTNEACEYLK	27%	5/158	<i>G. hirsutum</i>	26.41/5.33	27.55/7.78	0.29
3105	gi 48797422	aluminum-induced protein	506	104/TANEGHIVIEAYR;39/DRGPYPPDQVVR;45/GPYPPDQVVR;91/ATFIAADADGSPFFWGTDAEGHLVLADDR;62/GCFFTSSGGLR;89/SYEHPLNELKPVPR	41%	7/104	<i>G. raimondii</i>	31.27/5.34	23.99/7.07	5.11
3107	gi 62295807	cysteine-rich repeat secretory protein	234	25/GFGLGSIGQKPNQAYGLALCR;30/TCVVEAGSEIR;42/GAIIWYDNCLFK;79/TKELLSELANQAYSNP;30/LYGLTQCTR;26/VVGGSCNFR	35%	6/203	<i>G. hirsutum</i>	29.89/5.36	25.37/8.24	0.32
3108	gi 48776883	cathepsin b-like cysteine protease	262	42/LPTSFDAR;34/TAWPQCTSIGR;42/HYSVGAYR;112/NGPVEVSFTVYEDFAHYK;32/GWGDDGYFK	19%	5/210	<i>G. raimondii</i>	34.42/5.36	31.37/5.98	0.32
3110	gi 84172589	ubiquinone biosynthesis protein	253	107/KNPPAEYQGEQAR;36/NPPAEYQGEQAR;110/EVGISPSIVGSFPR	17%	3/210	<i>G. hirsutum</i>	32.08/5.35	16.71/9.77	0.21
3123	gi 11199964	adenine nucleotide alpha hydrolases-like protein	155	116/IGVAVDLSDESFAFAVR;39/QIEDEFDAFTASK	15%	2/106	<i>G. arboreum</i>	33.77/5.44	20.34/6.86	0.16
3124	gi 73862760	isopentenyl diphosphate isomerase	497	40/YELLQQR;68/VWTNTCCSHPLYR;87/ESELISENLGVR;94/WGEHELTYLLFIVR;115/DVNVHPNPDEVAEAK;50/LVVDNFLFK;44/WWDHVEK	31%	7/158	<i>G. hirsutum</i>	32.74/5.31	30.03/8.84	4.18
3211	gi 164322600	glutelin type-a	278	69/GFALPHYADCSK;46/FPFLEQVGLNVS;26/LVLETNATR;56/APWYASDPQVVYVVK;81/GSGEVQIVGL	15%	5/120	<i>G. hirsutum</i>	41.56/5.38	45.88/9.32	3.65
3303	gi 78334230	flavanone 3-hydroxylase	794	78/TLQASVVRDEDERPK;77/EFFALPAEEKLR;75/KGGFIVSSHLQGEAVQDWR;116/GGFIVSSHLQGEAVQDWR;78/EIVTYFSYPLR;48/WPDKPEGWVEVTK;51/CPQDPLTLGLKR;187/HTDPGTITLLQDQVGGGLQATR;84/LSIATFQNPAPDATVYPLK	38%	9/210	<i>G. hirsutum</i>	45.29/5.30	35.86/5.23	2.06
3326	gi 48741498	flavanone 3-hydroxylase	706	47/TLQASVVR;73/TLQASVVRDEDERPK;100/VAYNQFSNDIPVISLAGIDDVDGKR;42/KGGFIVSSHLQGEAVQDWR;124/GGFIVSSHLQGEAVQDWR;63/EIVTYFSYPLK;82/WPDKPEGWIEVTK;176/HTDPGTITLLQDQ	38%	8/210	<i>G. raimondii</i>	45.18/5.42	30.98/5.45	0.48
3339	gi 164295626	glutamine synthetase	226	11/IIAEYIWIGGSGMDLR;87/HKEHIAAYGEGNER;128/HETADINSFSWGVANR	11%	3/210	<i>G. hirsutum</i>	44.90/5.33	46.45/8.54	N
3725	gi 13243658	t-complex protein 1 subunit theta-like	52	52/NPANFDVDNVR	4%	1/158	<i>G. arboreum</i>	61.73/5.40	30.22/7.40	0.44
3824	gi 48778421	xaa-pro aminopeptidase	122	57/IGEDPSVDSWISDNLPR;67/NQPPAETNPVIVHPLFAGR	13%	2/171	<i>G. raimondii</i>	72.75/5.42	30.87/5.25	0.48
3827	gi 13244481	xaa-pro aminopeptidase 2	100	74/LTEVTASDKLEGFR;25/GHIALGNAR	8%	2/155	<i>G. arboreum</i>	72.01/5.32	28.49/9.25	0.45
4002	gi 48744626	14-3-3 protein (14-3-3d)	266	19/LAEQAER;62/FMETVVSSVVPDELTVVEER;87/FMETVVSSVVPDELTVVEER;98/SAQDIAVSELAPTHPIR;62/DSTLIMQLLR;45/DSTLIMQLLR	18%	6/210	<i>G. raimondii</i>	26.51/5.43	32.41/5.01	0.39
4017	gi 109829261	ascorbate peroxidase	624	71/LAWHSAGTFDVK;128/QPAELAHAANNGLDIAVR;81/EDKPHPPPEGR;84/LPNATEGADHLR;45/QVFSNQMGSLSDQDIVALSGGHTLGR;71/VLLSDPVFRPLVEK;144/YAADEDAFFADYTEAHLK	42%	7/210	<i>G. hirsutum</i>	28.59/5.61	28.61/5.07	0.23

4104	gi 48746857	glutamine synthetase	58	8/IIAEYIWIGGSGMDLR;51/HKEHIAAYGEGNER	9%	2/127	<i>G. raimondii</i>	34.41/5.48	34.04/5.81	N
4122	gi 48751326	ascorbate peroxidase	517	71/LAWHSAGTFDVK;153/QPAELAHAANNGLDIAVR ;74/EDKPHPPPEGR;83/VLLSDPVFRPLVDK;137/YAA DEDAFFADYAEHLK	25%	5/210	<i>G. raimondii</i>	29.34/5.60	31.77/6.82	0.49
4131	gi 48799208	alcohol dehydrogenase-like	241	52/SVASELCQTGVR;26/INCISPAPIPTPMVIR;59/QIAE IYQGIPK;104/YVTGHNLVVDGGFTSFK	22%	4/210	<i>G. raimondii</i>	30.98/5.51	27.63/6.42	0.14
4159	gi 48802272	type 2 ribosome- inactivating protein precursor	112	112/YANDYSGLVNVATCDGFVEER	9%	1/175	<i>G. raimondii</i>	32.89/5.63	24.25/8.76	0.27
4203	gi 48753495	thiosulfate sulfurtransferase	249	41/VLDASWYMPDEQR;9/VWWMFR;66/VWVLDGGL PR;49/VYQGQTAGPLTFQTK;49/THQHIDAR;36/FDGA	23%	6/210	<i>G. raimondii</i>	37.16/5.48	28.95/6.15	2.47
4208	gi 48879364	2-oxoglutarate- dependent	80	18/GVQAEIDFPVIEFR;29/SFAQLMWPDGHPR;33/YM APPPGEYER	14%	3/158	<i>G. raimondii</i>	41.60/5.50	30.85/5.34	2.62
4212	gi 48745618	nad-malate dehydrogenase	354	74/VAILGAAGGIGQPLALLIK;66/GVNVVVIPAGVPR; 49/DDLFNINANIVK;79/KLFGVTTLDVVR;60/LFGVTT LDVVR;13/AGAGSATLSMAYAAAR;13/FVESSLR	28%	7/210	<i>G. raimondii</i>	39.48/5.55	29.79/5.98	0.27
4252	gi 48797418	phenylcoumaran benzylic ether reductase -like	84	43/FLPSEFGTDPAR;41/TVYIRPPQNILSQR	10%	2/210	<i>G. raimondii</i>	39.07/5.62	28.63/5.73	2.83
4333	gi 48813830	stearoyl-acyl-carrier protein desaturase (GbSSI2)	349	19/YLYLCGR;74/ATFISHGNTAR;76/DYADIVEYLVD R;51/LKELIGLSPEGR;67/EAQEFVCGLAPR;62/ESPSV PFSWVSGR	24%	6/155	<i>G. raimondii</i>	43.62/5.46	31.86/5.59	2.26
4422	gi 13248670	mitochondrial elongation factor Tu	144	144/ILDQGGAGDNVGLLLR	6%	1/149	<i>G. arboreum</i>	48.02/5.59	26.81/9.17	N
4432	gi 164258867	protein disulfide isomerase	483	69/YLKPNEADHIAPWVK;69/VVVADTFDDMVFK;9 8/LAPILEEVAVHYENDAK;96/LDATANDIMDPNFDV R;43/GYPTVYFR;108/SADGNISAYEGER	19%	6/210	<i>G. hirsutum</i>	48.21/5.55	48.50/9.35	--
4760	gi 164339680	pyruvate decarboxylase	109	26/LKQNNTAYENYHR;22/IFVPEGQPLK;38/VNVLFQ HIQK;23/ELLEWGSR	10%	4/210	<i>G. hirsutum</i>	63.23/5.50	42.43/8.16	2.80
4803	gi 164313765	xaa-pro aminopeptidase 2	76	76/NQPPAETNPVIVHPLEFAGR	8%	1/210	<i>G. hirsutum</i>	72.41/5.44	27.27/4.94	++
5003	gi 315074094	proteasome subunit beta type-6	390	30/TSTGMYVANR;71/ASDKITQLTDNVNVCVCR;102/SG SAADSQIVSDYVR;56/YFLHQHTIQLGQPATVK;87/T VVINSDGVTR;43/NFYPGDK	28%	6/113	<i>G. barbadense</i>	25.25/5.66	29.32/8.46	0.38
5131	gi 48797422	aluminum-induced protein	358	93/TANEGIIVIEAYR;54/DRGPYPDQVVR;51/GPYPP DQVVR;60/FAFIIYDSSSK;37/GCFFTSGGGLR;63/SYE HPLNELKPVPR	27%	6/158	<i>G. raimondii</i>	30.61/5.73	23.99/7.07	0.23
5132	gi 164261388	snf7-like protein	146	14/TRHQIEK;38/SQLQGVSLR;94/VAQAEATGNDDGG IDSDLQAR	16%	3/158	<i>G. hirsutum</i>	35.40/5.72	25.60/5.10	N
5141	gi 13349950	phosphomannomas e al	145	133/KPGLIALFDVDGTLTAPR;12/GTFIEFR	10%	2/210	<i>G. arboreum</i>	34.70/5.71	26.04/9.12	0.17
5148	gi 78324615	protein phosphatase	228	70/ANHPMEDYVFAEFK;13/LVIANVGDSR;30/QLSVD HEPASER;72/GGFVSNFPGDVAR;24/VDGQLAVAR	18%	6/210	<i>G. hirsutum</i>	31.16/5.69	34.27/6.84	0.43
5159	gi 21090394	soluble inorganic pyrophosphatase	130	64/VLYSSVVYPHNYGFIPR;43/HYTDIKDLPPHR;23/F FEDYKK	16%	3/158	<i>G. arboreum</i>	30.56/5.80	25.72/7.10	N
5205	gi 48791016	2-oxoglutarate- dependent	156	47/VREETFGLMK;35/VREETFGLMK;55/ELVEVPVER ;54/YMAPPPGEYER	9%	4/158	<i>G. raimondii</i>	41.68/5.68	34.53/5.12	2.28
5242	gi 11206427	homoserine kinase	63	63/LGVDQLVLAGLESEAK	6%	1/210	<i>G. arboreum</i>	39.33/5.84	26.44/9.30	6.61

5422	gi 48749615	fumarylacetoacetase	274	83/LATAIGDYVVDLSEIAK;40/LLSSTEPTLR;10/NCG TIFR;25/GPQNAIPQNWFLPIAYHGR;72/ASSIVISGT NINRPR;46/GQGYPTGQSPPYFGPSLK	32%	6/158	<i>G. raimondii</i>	47.02/5.77	29.97/6.40	0.46
5721	gi 164262533	acid beta-fructofuranosidase	51	10/TFYDQNK;41/VLVDHSIVESFAQGGR	6%	2/210	<i>G. hirsutum</i>	67.91/5.84	39.06/8.94	0.18
6007	gi 78353154	proteasome subunit beta type	229	55/VQFTEYIQK;56/NVALYQFR;48/ETGPSLFYIDYIA TLHK;14/GAFGYGSYFSLAMMDR;56/LVVAPPNFVIK	26%	5/210	<i>G. hirsutum</i>	24.39/5.87	25.81/7.14	9.52
6009	gi 109891548	gdsl esterase lipase	388	33/GYSGYNTR;80/YAAFQHVPLDEYK;119/TLVLLITP PPIDEDGR;80/HPYVENPSGLPER;28/MQYTDWR;47/ADLPLIADIDHDDPLK	29%	6/210	<i>G. hirsutum</i>	28.06/5.89	28.66/6.38	2.91
6034	gi 109882527	proteasome subunit beta type-1	216	20/TVFASASER;141/DIYTGDKLEIVVINADGIR	11%	3/191	<i>G. hirsutum</i>	27.17/6.07	28.46/5.72	N
6105	gi 164296478	gdsl esterase lipase cprd49	341	39/GYFGWNSR;22/RAIQVLDHVFVK;81/LIFLTSPPVN EER;54/YASEHFSHLVR;69/VVNLFTAFQQR;77/TTLN PSEWTFHR	21%	6/210	<i>G. hirsutum</i>	29.14/5.86	35.65/6.28	3.58
6109	gi 48747985	6-phosphogluconolactonase	243	64/EKGSFTVVLSGGSLIK;32/GSFTVVLSGGSLIK;62/L AFDGFLSK;60/SNVLSVSTATGFVK;24/DSPKPPPER	18%	5/210	<i>G. raimondii</i>	30.41/5.92	28.77/8.61	3.04
6110	gi 78324276	ascorbate peroxidase	59	22/VDKPHPPPEGR;37/LPNATEGADHLR	8%	2/116	<i>G. hirsutum</i>	29.20/5.94	30.07/7.62	2.18
6314	gi 5045873	phosphoglycerate kinase	308	146/VDLNVPLDDNFNITDDTR;48/MVAALPDGGVLL LENVR;114/LASLADLYVNDAFGTAHR	26%	3/210	<i>G. hirsutum</i>	44.56/5.95	21.82/7.85	2.13
6348	gi 109838718	serine-threonine kinase receptor-associated	369	60/GAVWSVCLDTNALR;91/VWDALTGDLVLSFEHK; 45/IYDLNRPDAPPR;32/FWDANHYGLVK;17/FVAGGE DMWVR;124/FSPGGESYASGEDGTIR	28%	6/210	<i>G. hirsutum</i>	40.39/6.02	32.29/8.48	2.37
6422	gi 48743158	gdp-d-mannose 3-epimerase	186	65/SFTFIDECVEGVLR;59/KLPIHHPGPEGVR;62/VVG TQAPVQLGSLR	18%	3/210	<i>G. raimondii</i>	50.15/6.05	26.21/7.66	4.31
6425	gi 48752415	mitogen-activated protein kinase 4	152	38/YVHSANVLHR;114/LITELIGSPDDASLGFLR	9%	2/210	<i>G. raimondii</i>	47.42/6.09	35.57/7.24	2.51
6713	gi 48801140	malate oxidoreductase	254	64/GILYPSIDSIR;62/HITAEVGASVLR;72/AAVAEEVA EGHGDVGPVK;56/EETVEYVFR	24%	4/210	<i>G. raimondii</i>	61.28/6.01	23.01/5.10	2.14
6832	gi 13350369	transketolase	326	50/NGNTGYDEIR;33/NLGWPYEPFHVPEDVK;72/HVP QGAALAEWNAK;69/SITGELPAGWEK;102/ALPTY TPESPADATR	30%	5/158	<i>G. arboreum</i>	71.50/6.05	25.21/7.94	0.37
7003	gi 11202870	manganese superoxide dismutase	198	74/HHQTYITNYNK;65/ALEQLHDAIQK;35/NVRPDYL K;24/YASEVYEK	13%	4/210	<i>G. arboreum</i>	24.96/6.20	32.17/8.58	8.63
7061	gi 164257288	triosephosphate isomerase	402	45/KFFVGGNWK;50/FFVGGNWK;51/SDFHVAAQNC WVR;58/ALLNESNEFVGDK;51/VIACIGETLEQR;37/V ATPAQAQEVHCELK;110/WLNQNVGADIAASVR	22%	7/158	<i>G. hirsutum</i>	28.08/6.32	37.60/9.20	4.02
7204	gi 48750761	catechol o-methyltransferase	86	86/VIVVEAVVPVPEANAYLR	10%	1/210	<i>G. raimondii</i>	41.18/6.17	20.69/6.56	0.46
7205	gi 62295617	alkaloid o-methyltransferase related	135	37/IELDEAMLQGQAEIWR;55/IELDEAMLQGQAEIWR ;32/YLYSFADSMALK;48/AHGCEIWDLASR	19%	4/158	<i>G. hirsutum</i>	40.62/6.17	23.02/6.49	0.25
7209	gi 48749963	auxin-induced protein pcnt115-like	392	83/FGIDYTDGKR;84/LGVDCIDLYYQHR;119/YIGLSE ASASTIR;105/ELGIGIVAYSPLGR	19%	4/210	<i>G. raimondii</i>	41.34/6.25	28.52/6.20	N
7212	gi 18099886	auxin-induced protein pcnt115	244	78/YIGISEASPETIR;94/AKEDTSNSSLGVFPR;73/FQG ENLEQNR	13%	3/210	<i>G. arboreum</i>	40.87/6.29	30.87/6.50	0.33

7318	gi 164257564	beta galactosidase 9	235	26/TDNEPFKR;95/LPHRPVEDLAFAVAR;114/TSGGPF YITSYDYDAPIDEYGLR	10%	3/210	<i>G. hirsutum</i>	46.09/6.30	49.18/9.65	3.24
7408	gi 48821513	dihydrolipoyllysine- residue succinyltransferase	112	48/EGETVEPGTR;11/LGFMSGFVK;53/ATVSALQHQP IVNAVIDGDDIYR	16%	3/206	<i>G. raimondii</i>	49.28/6.21	29.16/8.82	3.07
7503	gi 78329865	leucine	124	124/GNTAAAIVSGTVLGLYEDNR	7%	1/210	<i>G. hirsutum</i>	55.04/6.12	26.87/8.27	3.27
7511	gi 164358784	succinate- semialdehyde	90	28/IGDALLASTQVR;63/AGLAAYIFTNNVQR	9%	2/210	<i>G. hirsutum</i>	55.93/6.20	30.40/8.66	2.85
7518	gi 73864584	6-phosphogluconate dehydrogenase	67	35/GWNLNFGELAR;33/DLFGAHTYER	8%	2/158	<i>G. hirsutum</i>	56.12/6.25	27.19/9.37	2.30
7613	gi 48780111	gmp synthase	225	44/LHCVFVDNGLLR;23/LLFKDEV R;44/HPFPGPGLA VR;114/VLGDVTEGNALDIVR	15%	4/210	<i>G. raimondii</i>	61.02/6.25	33.45/8.87	2.85
7715	gi 48739022	asparagine synthetase	204	24/ALHLYDCLR;48/ATSAWGLEAR;61/AFDDENHPY LPK;25/EAYYYR;46/FFPQNSAR	17%	5/158	<i>G. raimondii</i>	63.21/6.28	29.28/6.48	0.45
7717	gi 48812774	glucose-6-phosphate 1-dehydrogenase	58	58/NVQIIFSEDFGTEGR	5%	1/181	<i>G. raimondii</i>	61.25/6.29	33.06/7.94	N
7720	gi 164327830	tcp-1 cpn60 chaperonin family	366	40/HKFDVDTR;68/LVEGLVLDHGSR;107/SEINAGFFY SNAEQR;51/GPNDHTIAQIK;100/NTIEDEAVILGAGAF	21%	5/158	<i>G. hirsutum</i>	61.82/6.34	35.31/5.74	0.32
7801	gi 164312069	transketolase	305	47/GLGWHVIWVK;85/NGNTGYDEIR;91/ANSYSVHG SALGAK;83/ALPTYTPESPADATR	11%	4/158	<i>G. hirsutum</i>	71.38/6.10	46.70/8.52	0.41
7820	gi 48749600	sucrose synthase	209	72/IQNLNALQHVL R;36/FQEIGLER;37/LLPDAVGTTC GQR;64/VYGTEYS DILR	16%	4/210	<i>G. raimondii</i>	76.93/6.33	30.57/6.31	2.01
7822	gi 48743676	long chain acyl-CoA synthetase 4	381	85/DVYISYLPLAHIFDR;88/LLVEDIGELKPSIFCAVPR ;135/LILSGAAPLSTHVEEFLR;73/LESVPEMNYDALA	25%	4/210	<i>G. raimondii</i>	70.50/6.34	30.84/8.13	0.18
7934	gi 109863329	2-oxoglutarate e1 component	133	133/LTDSFLDGTSSVYLEELQR	7%	1/210	<i>G. hirsutum</i>	83.12/6.27	30.29/7.11	3.20
8001	gi 13246902	transmembrane emp24 domain- containing protein	392	83/ADSTWHNSHEGVDLVVK;43/GPTGDQIQDYRDK; 64/ISEKFEFVAHQK;48/FEFVAHQK;57/LEEALYNIQF EQHWLEAQTER;96/AFYESAALIGASVLQVYLLR	31%	6/158	<i>G. arboreum</i>	28.14/6.37	31.47/7.85	3.65
8003	gi 21094593	cysteine proteinase inhibitor	219	53/FAVDEHNKK;24/ENAMVEFVR;102/EIVHANA EVL EDFAK;40/FKVEVHHK	18%	4/158	<i>G. arboreum</i>	28.41/6.42	25.04/6.24	2.44
8118	gi 164249213	short chain alcohol dehydrogenase	242	53/VALITGGASGLGECSAR;69/LDIMFNNAGLIGDGE VR;19/VTDASTDNFKR;30/VFDINVLGGFLGAK;13/ISI GLPHAYK;58/SLAVELGEHGIR	19%	6/177	<i>G. hirsutum</i>	33.66/6.46	43.60/9.31	2.13
8129	gi 164321379	caffeoyl-o- methyltransferase	254	45/HQEVGHK;79/SLLQSDALYQYILETSVYPR;16/EPE PMKELR;83/ENYELGLPVIR;30/DFVLELNK	19%	5/210	<i>G. hirsutum</i>	35.04/6.58	31.81/5.79	3.88
8213	gi 32479439	aldo keto	156	52/LDVDYIDLYYIIR;34/YIGISEASPETIR;26/DVEEII PLCR	10%	4/148	<i>G. hirsutum</i>	41.75/6.57	42.01/8.05	2.68
8304	gi 48739277	poly -specific endoribonuclease-b-	154	23/LWQLDLNR;80/QEQAAFIEEISR;52/GGTSGSSSAF EHV FVGEIK	16%	3/210	<i>G. raimondii</i>	46.07/6.39	27.77/4.97	2.40
8314	gi 3326420	IAA-conjugate- resistant 4	114	114/FADINNA YEVLSDSEKR	7%	1/210	<i>G. hirsutum</i>	45.81/6.47	43.69/7.16	2.64
8434	gi 48745701	hydroxymethylglutar yl- synthase	86	24/LVFNDFVR;62/LAPFSTLTGDESYQSR	8%	2/158	<i>G. raimondii</i>	51.72/6.41	30.33/9.53	2.16
8523	gi 5049652	dihydrolipoyl dehydrogenase	278	78/DTLEVDAALIATGR;158/APFTNGLGLENNVVTQ R;42/GFVPVDER	19%	3/210	<i>G. hirsutum</i>	55.75/6.51	22.74/6.66	0.20

8607	gi 164270428	adenylyl cyclase associated protein	356	43/RSDFFNHLK;41/SAGDSLALAWIAYTGK;57/NKDQIHVEWAK;49/ELYLPGLR;72/SHYPLGPVWSASGK;62/KWAVENQIGR;34/WAVENQIGR	16%	7/210	<i>G. hirsutum</i>	59.21/6.41	44.82/9.58	2.49
8712	gi 164316346	2-hydroxyacyl- lyase	315	57/KAERPLIVFGK;106/GLVNDDHELAASAAR;104/FILVDVSEEEIKLR;49/DVVVFNFLTPMR	12%	4/158	<i>G. hirsutum</i>	61.54/6.48	46.68/10.08	3.24
8801	gi 5049242	transketolase 1	62	62/ALPTYTPESPADATR	7%	1/210	<i>G. hirsutum</i>	70.73/6.37	22.75/6.73	2.01
9201	gi 48741079	26s proteasome non-atpase regulatory subunit 14	326	79/AVAVVVDPISVK;66/HYYSIAINYR;25/MLLNLIK;49/WTDGLTLR;26/RFDTHSK;81/TNEQTVQEMLNLAIK	21%	6/151	<i>G. raimondii</i>	37.11/6.64	30.95/7.31	0.47
9202	gi 48750384	malate dehydrogenase	163	36/ANTFVAEVMGLDPR;58/EIDYLTNR;70/CGVEEIYPLGPLNEYER	14%	3/158	<i>G. raimondii</i>	38.13/6.64	29.76/8.74	2.01
9404	gi 48745701	hydroxymethylglutaryl- synthase	176	39/LVFNDFVR;119/LAPFSTLTGDESYQSR;17/SRHEFAPEK	12%	3/210	<i>G. raimondii</i>	51.64/6.63	30.33/9.53	2.14
9407	gi 48828974	isocitrate dehydrogenase	335	36/LVPGWTKPICIGR;62/HAFGDQYR;66/SKYEAAGIWYEHR;63/YEAAGIWYEHR;108/GGETSTNSIASIFAFPENQLLQR;26/LFTPSLAQR	17%	5/210	<i>G. raimondii</i>	48.99/6.73	32.47/8.19	0.50
9418	gi 13246368	transcription factor	82	82/SVSINEFLKPAEGER	8%	1/210	<i>G. arboreum</i>	51.21/6.68	20.46/8.89	--
9503	gi 48816177	monodehydroascorbate reductase	312	131/EFVIVGGGNAAGYAAR;29/EAYAPYERPALK;39/LPGFHTCVGSGGER;42/IGGNLPGVHYIR;45/LDTSIIFPENQLLQR;26/LFTPSLAQR	28%	6/210	<i>G. raimondii</i>	53.78/6.61	30.16/9.14	2.11
9606	gi 48804741	aldehyde dehydrogenase family 2 member mitochondrial-like	308	96/TLVHESVYDEFVEK;51/DEIFGPVQSISK;74/FKDL EEVVQR;87/ANASSYGLAAGVFTQNIETANTLTR	23%	4/210	<i>G. raimondii</i>	57.18/6.66	29.48/6.99	5.27
9615	gi 48810466	methylmalonate-semialdehyde dehydrogenase	228	54/AISFVGSNTAGMHIYGR;16/AISFVGSNTAGMHIYGR;92/DATLNALLAAGFGAAGQR;82/ADSLEDALNIVNR	18%	4/210	<i>G. raimondii</i>	56.70/6.85	26.96/9.16	2.19

^a Sample spot protein number.

^b NCBI gi number.

^c Score for matched peptides.

^d Sequence of matched peptides.

^e Count of the number of distinct peptide sequences assigned to each protein.

^f Number of unique peptides identified.

^g Molecular mass.

^h Average fold change of ≥ 2 or ≤ 0.5 and $P \leq 0.05$, as assessed by a Student *t*-test of three biological replicates. (" ≥ 2 " means up-regulated; " ≤ 0.5 " means down-regulated; "N" means other regulatory patterns. "++" means no detection in infection samples, while "--" means no detection in Mock sample.)

Information of single-peptide-based protein identifications

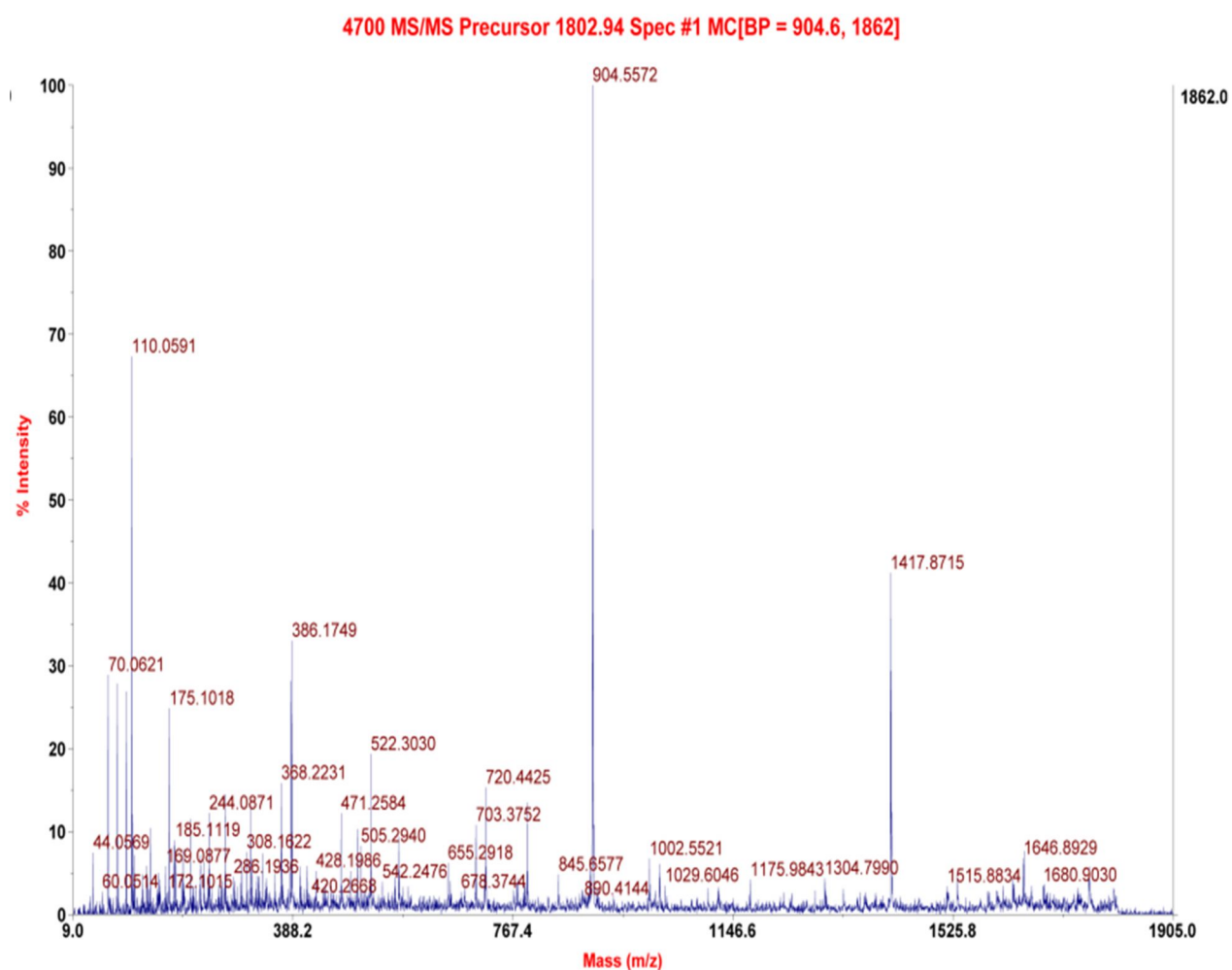
ssp No.: 12

sequence identified: **AAQDIALTDLAPTHPIR**

the precursor m/z and charge observed: **1802.9431**

score/E-value for this peptide: **115/5.1e-009**

Annotated MS/MS spectra:



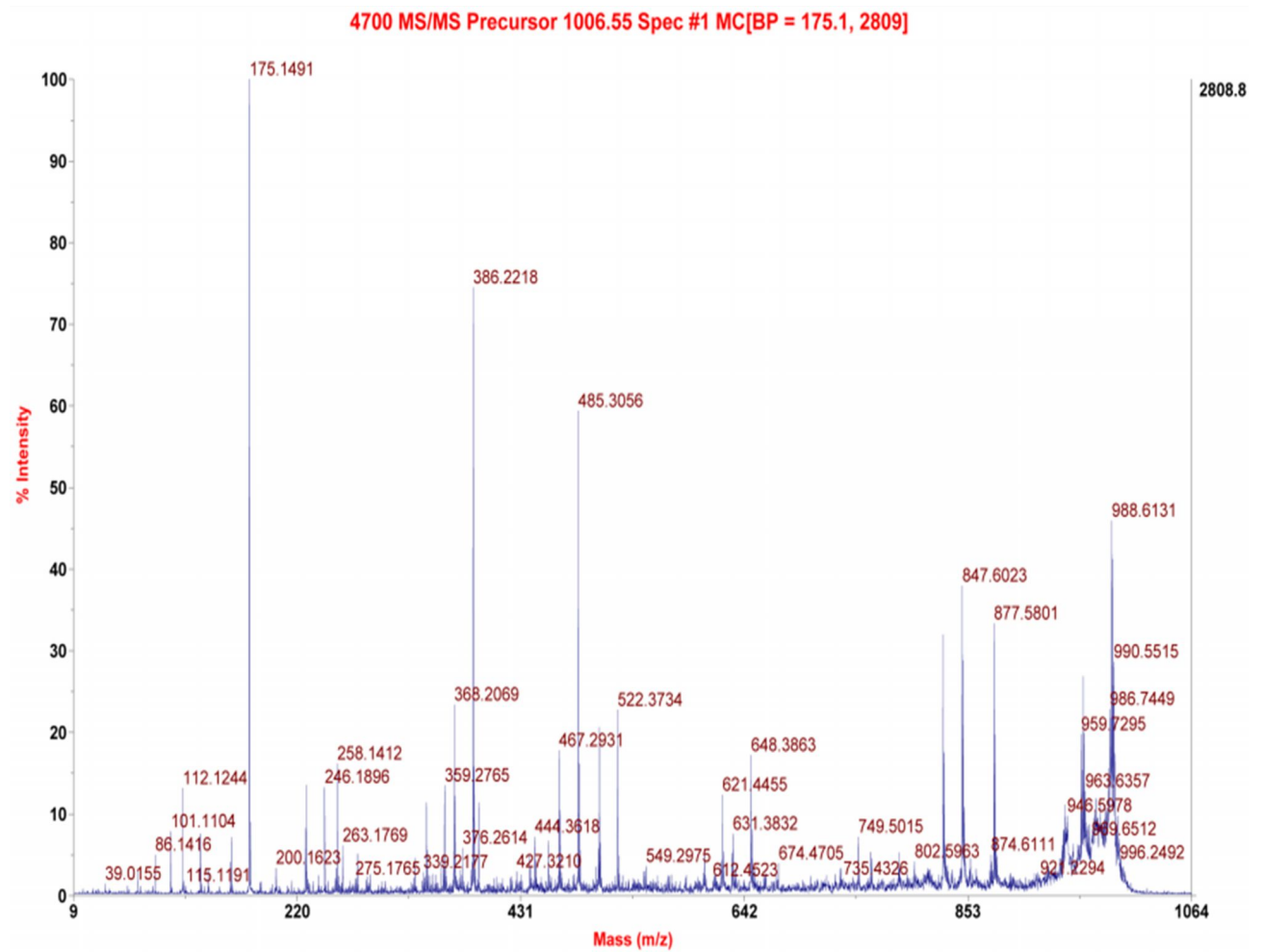
ssp No.: 123

sequence identified: **EQQVYLAR**

the precursor m/z and charge observed: **1006.5546**

score/E-value for this peptide: **49/0.038**

Annotated MS/MS spectra:



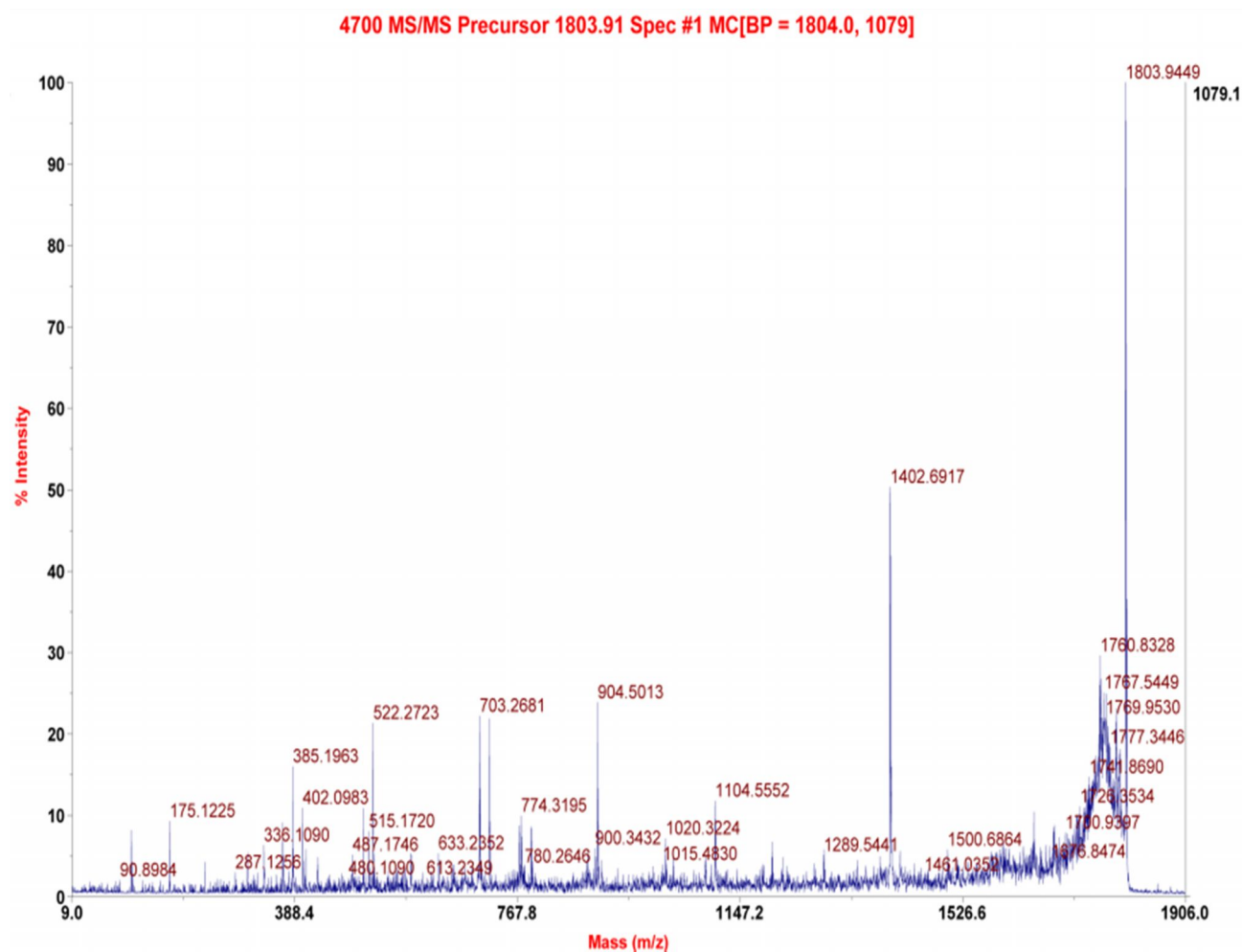
ssp No.: 233

sequence identified: SAQDIANAELAPTHPIR

the precursor m/z and charge observed: 1803.9147

score/E-value for this peptide: 59/0.002

Annotated MS/MS spectra:



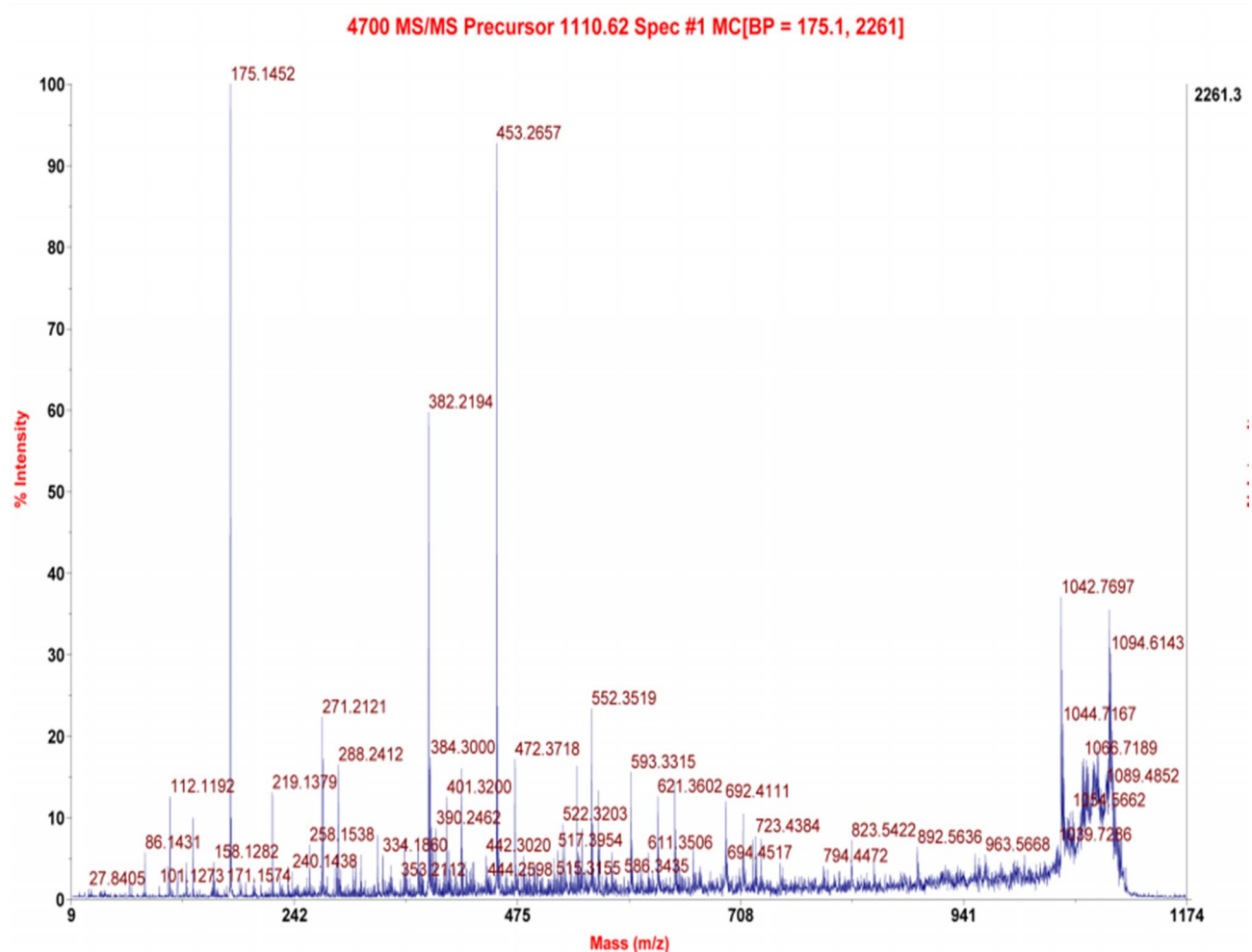
ssp No.: 424

sequence identified: AFYAVSALIR

the precursor m/z and charge observed: 1110.6155

score/E-value for this peptide: 53/0.013

Annotated MS/MS spectra:



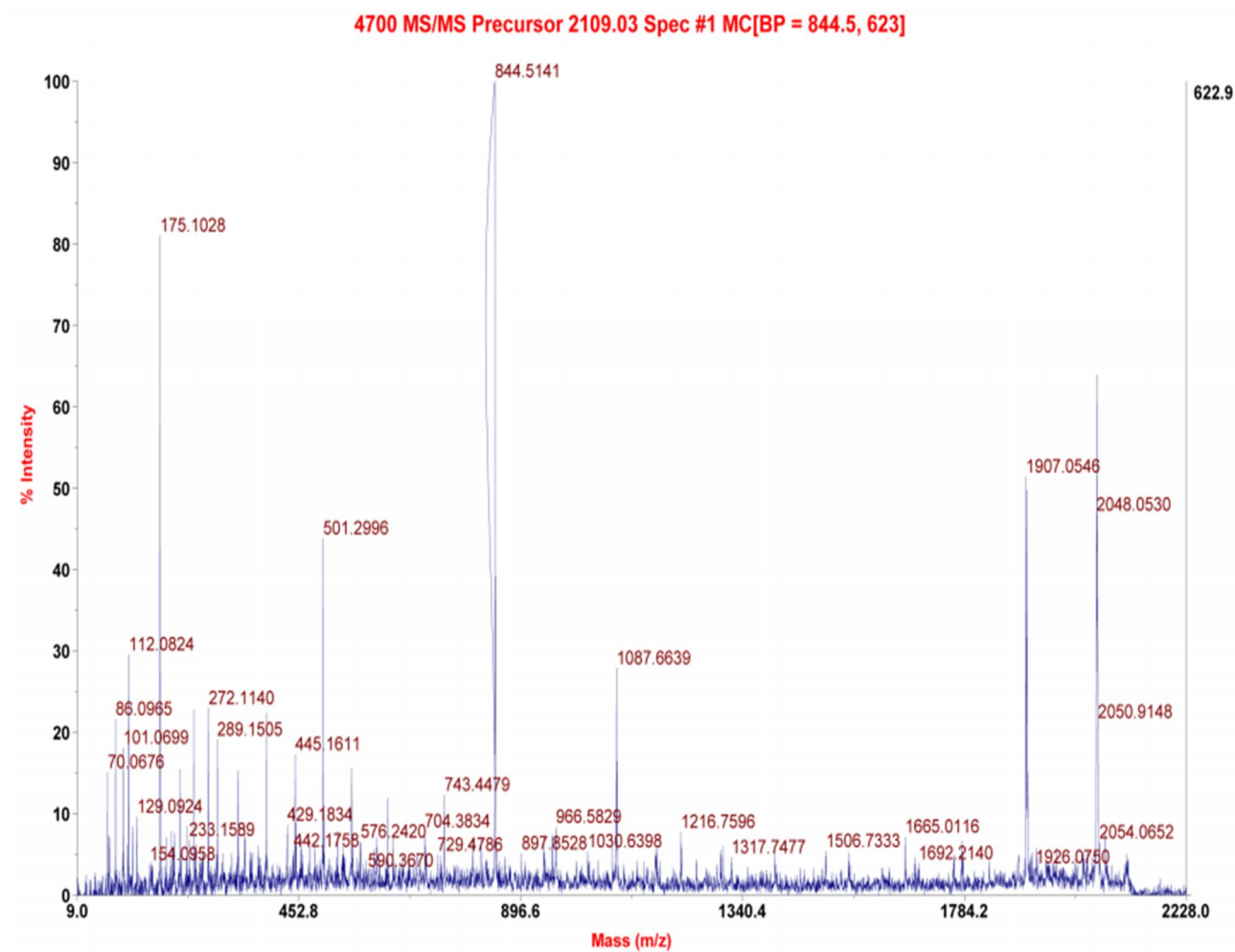
ssp No.: 524

sequence identified: SDQNLFSTEGADTIEIVNR

the precursor m/z and charge observed: 2109.0349

score/E-value for this peptide: 170/1.1e-014

Annotated MS/MS spectra:



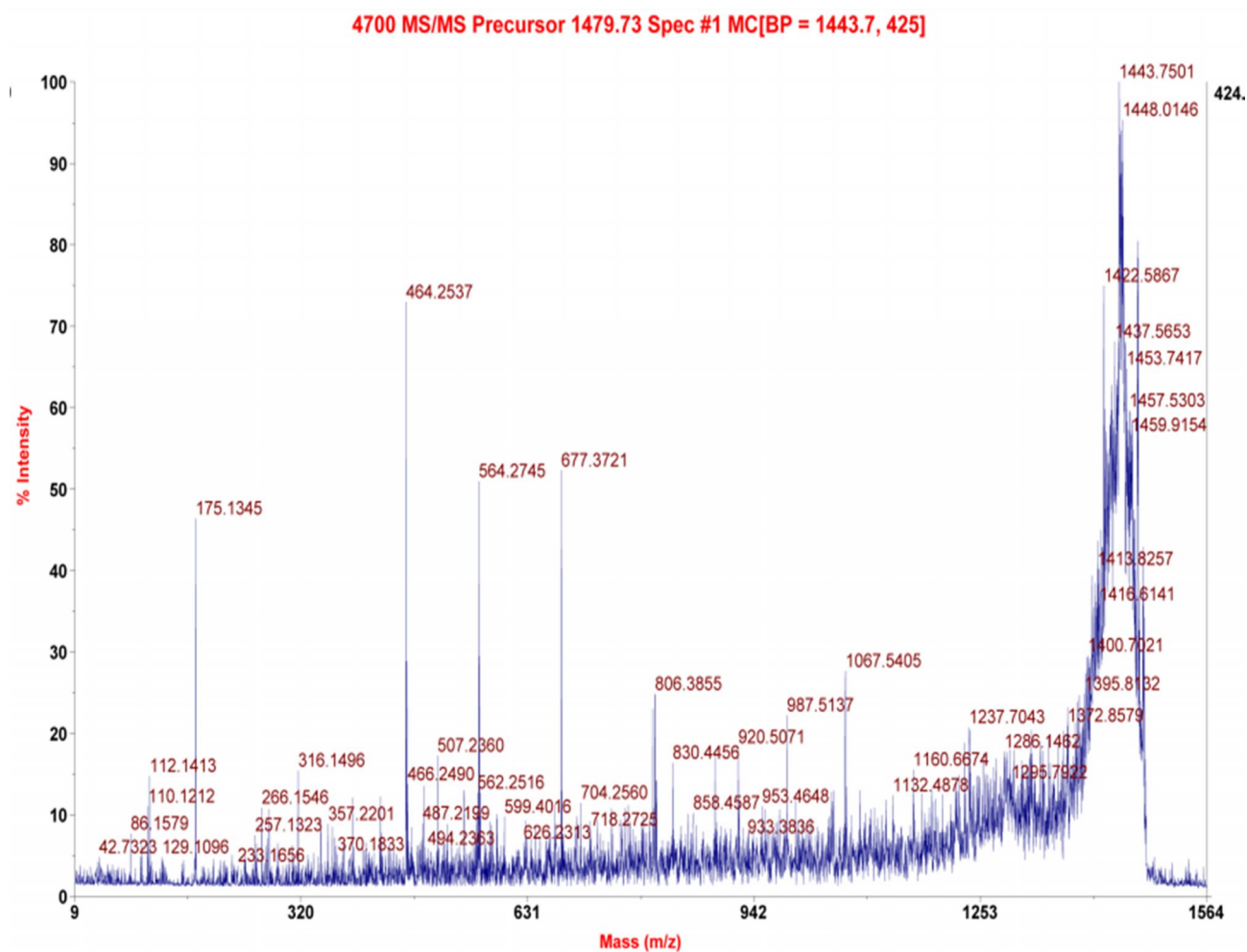
ssp No.: 1150

sequence identified: **LEGLFNELGCEAK**

the precursor m/z and charge observed: **1479.7294**

score/E-value for this peptide: **43/0.099**

Annotated MS/MS spectra:



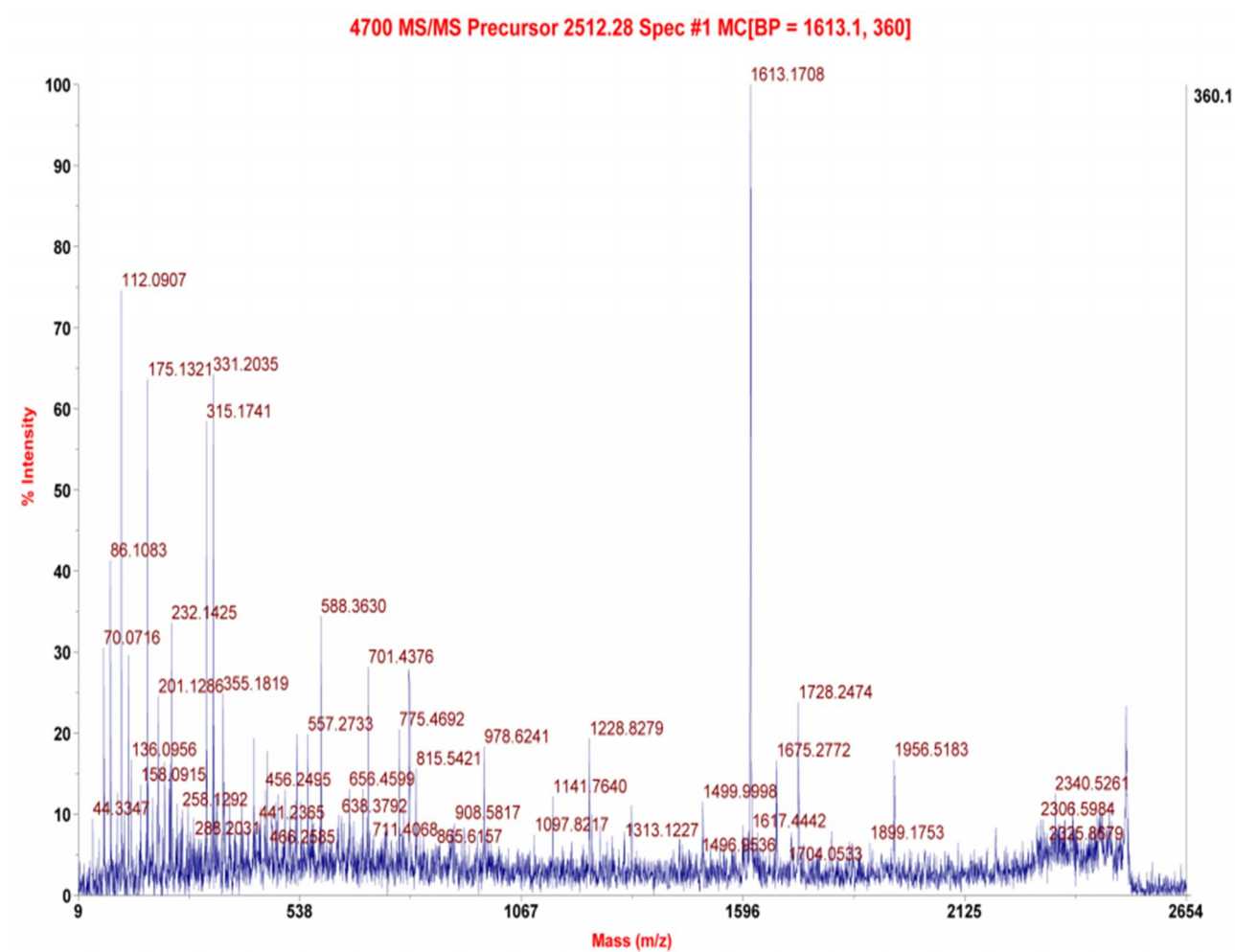
ssp No.: 2250

sequence identified: **SLNIEVEDLGITSYYNIGAEVGR**

the precursor m/z and charge observed: **2512.2803**

score/E-value for this peptide: **66/0.00022**

Annotated MS/MS spectra:



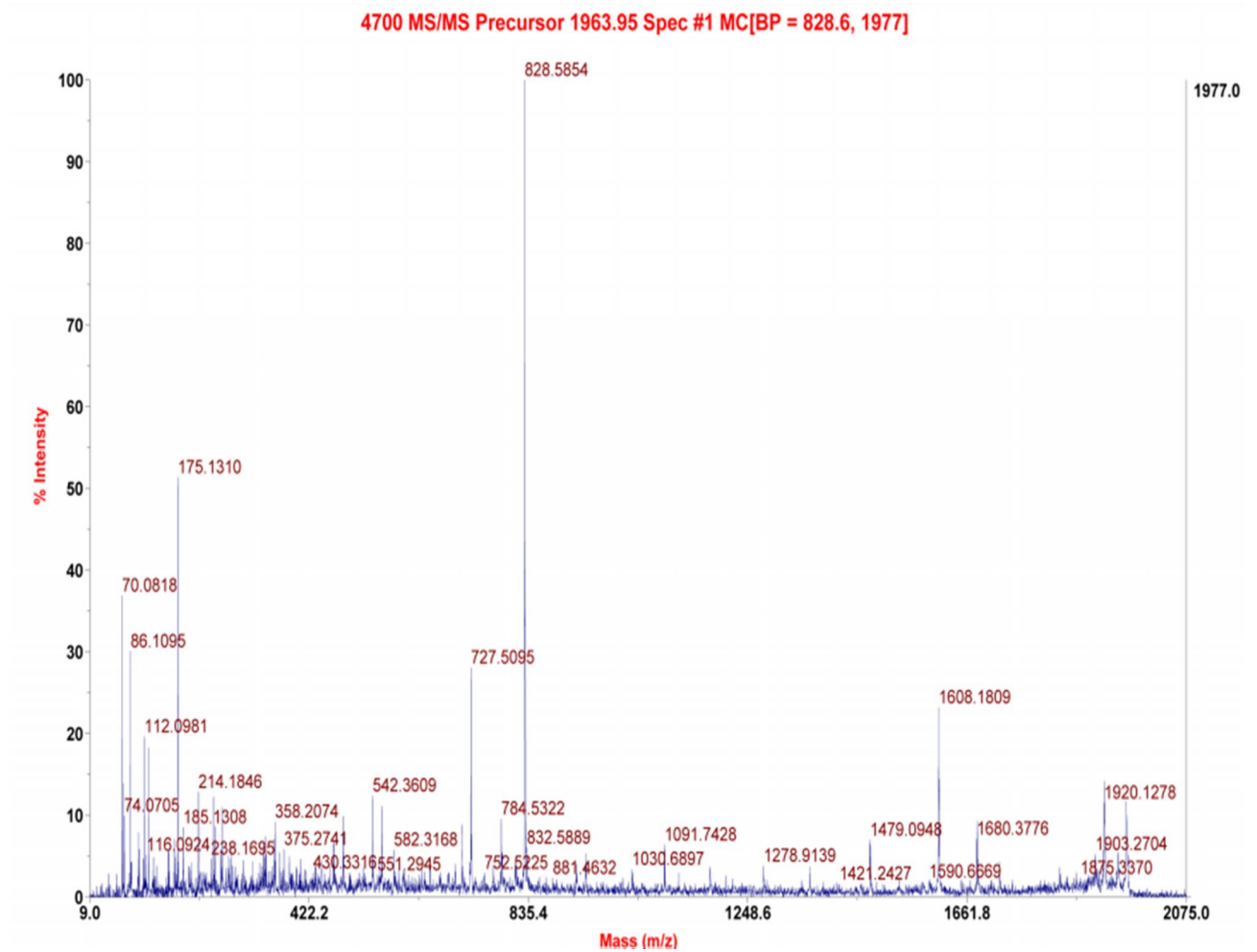
ssp No.: 2611

sequence identified: QIDELSTFSDTPAPSVTR

the precursor m/z and charge observed: 1963.9510

score/E-value for this peptide: 64/0.00054

Annotated MS/MS spectra:



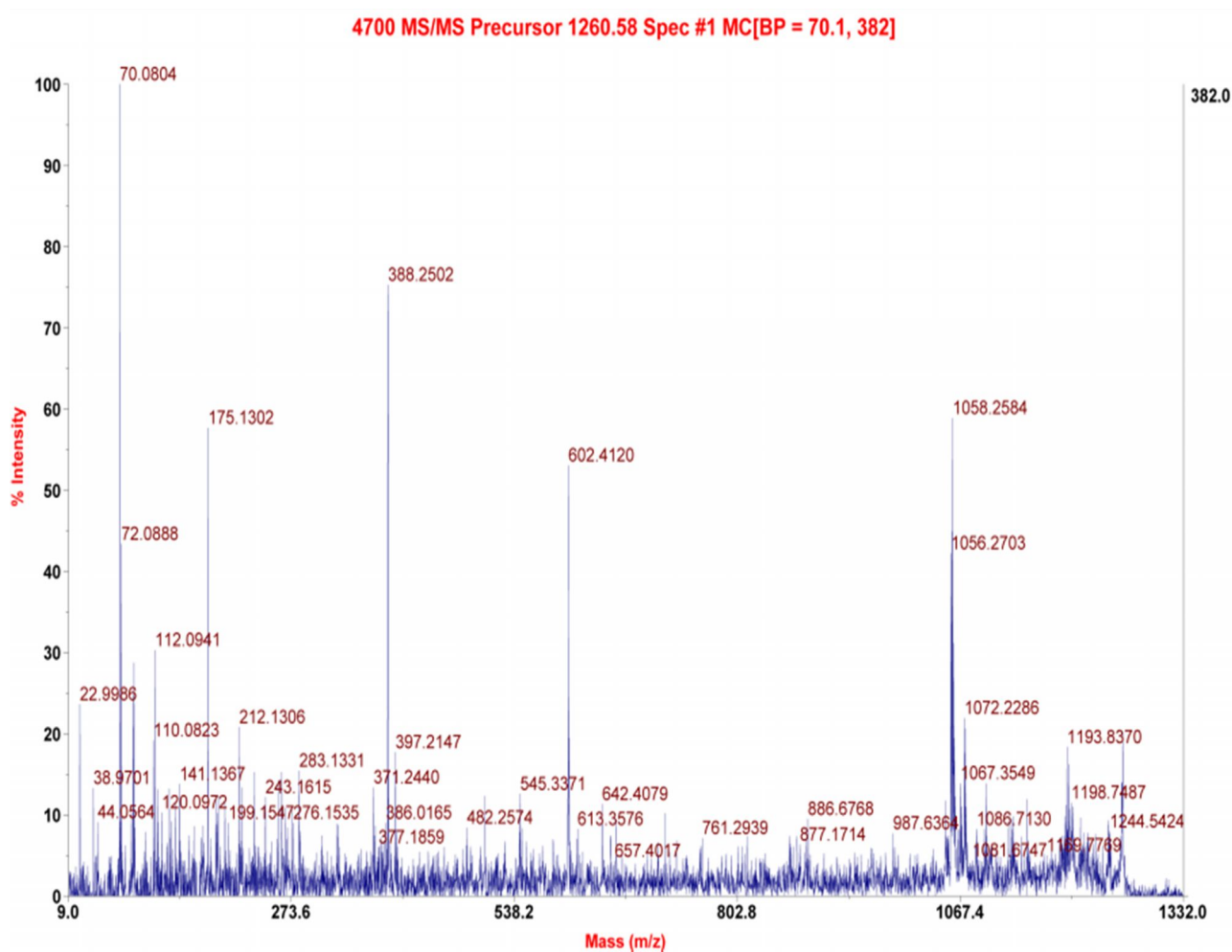
ssp No.: 3725

sequence identified: NPANFDVDNVR

the precursor m/z and charge observed: 1260.5808

score/E-value for this peptide: 52/0.016

Annotated MS/MS spectra:



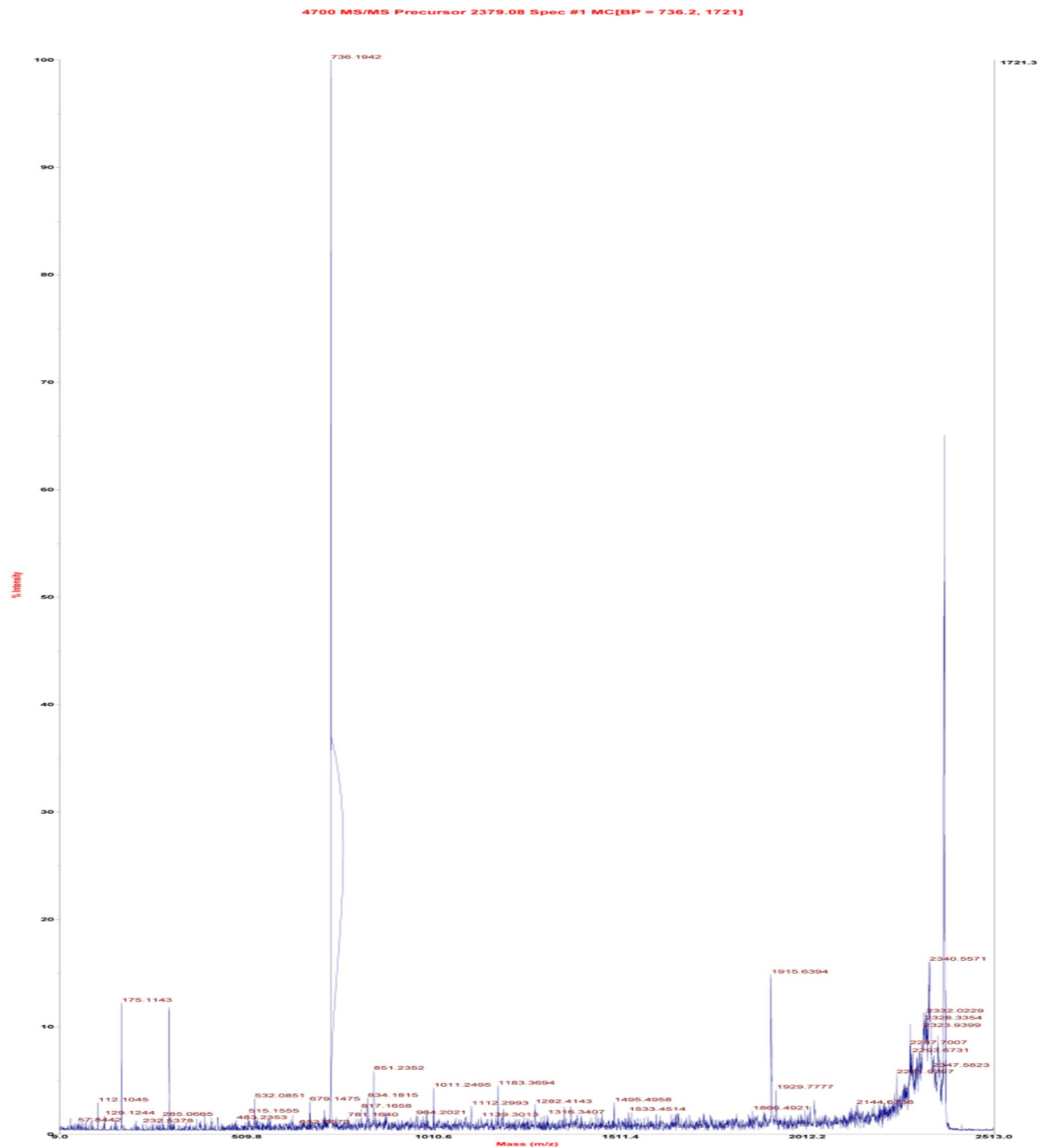
ssp No.: 4159

sequence identified: YANDYSLVNVATCDGFVEER

the precursor m/z and charge observed: 2379.0769

score/E-value for this peptide: 112/4.6e-009

Annotated MS/MS spectra:



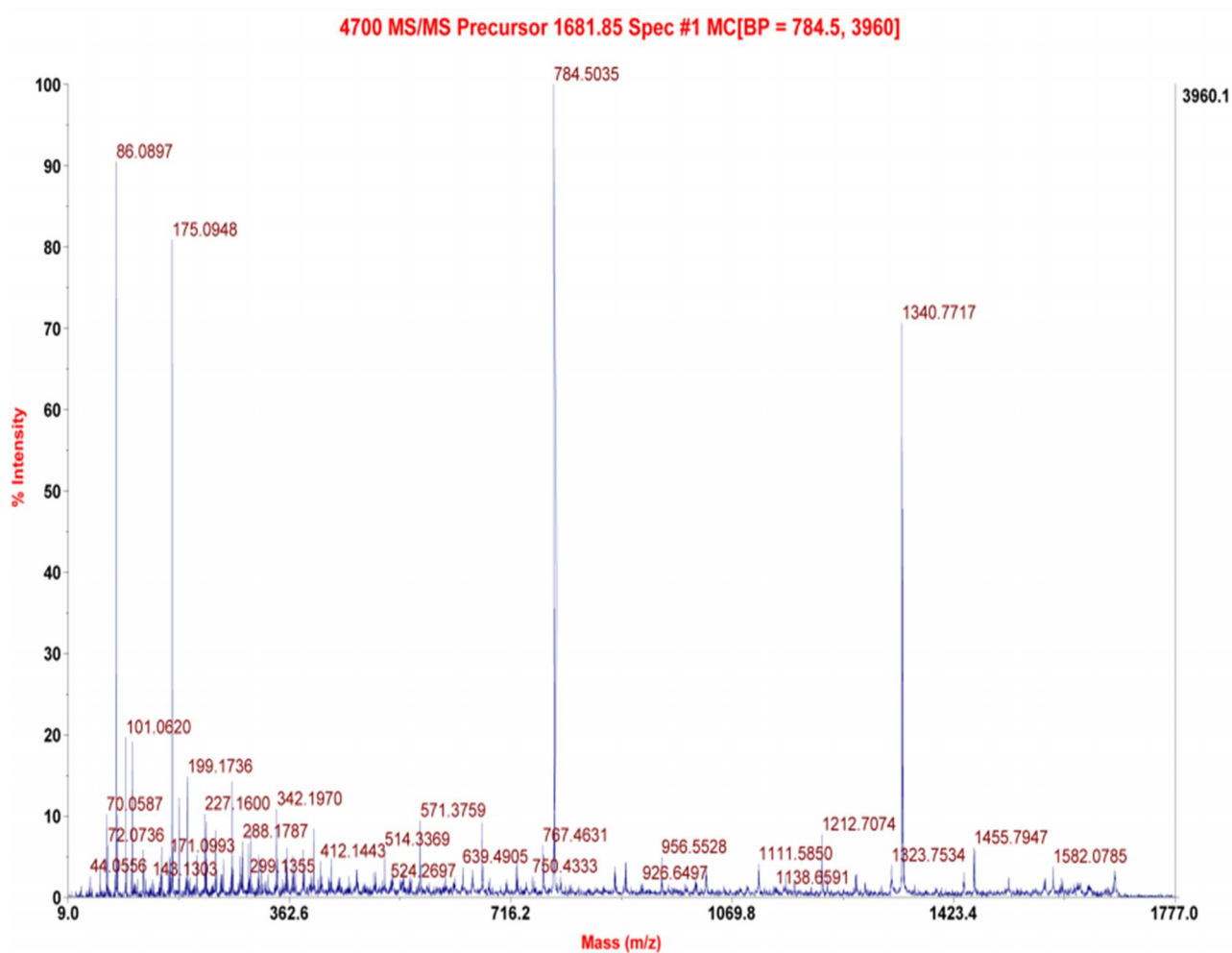
ssp No.: 4422

sequence identified: **ILDQQAGDNVGLLR**

the precursor m/z and charge observed: **1681.8540**

score/E-value for this peptide: **144/7.4e-012**

Annotated MS/MS spectra:



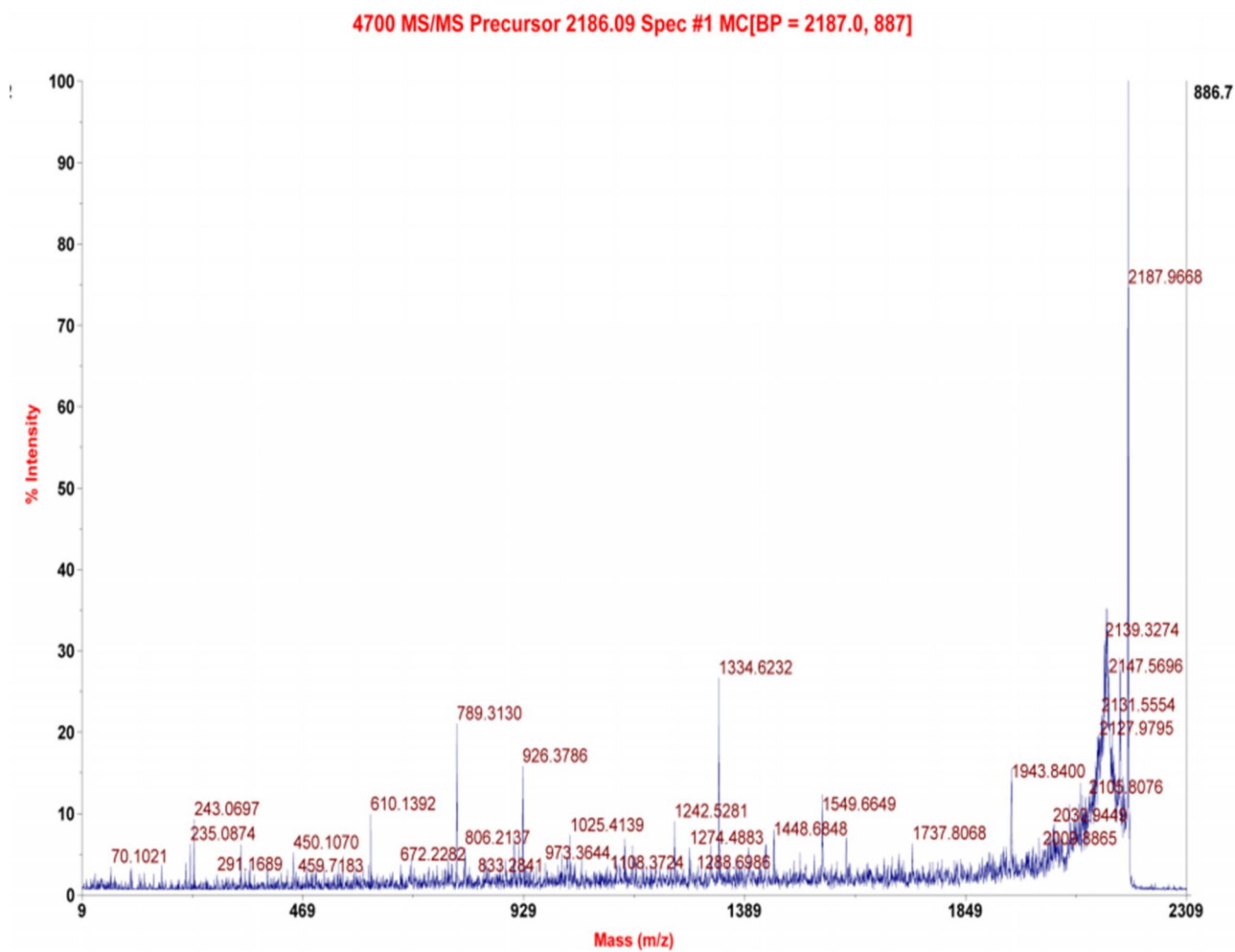
ssp No.: **4803**

sequence identified: **NQPPAETNPVIVHPLEFAGR**

the precursor m/z and charge observed: **2186.0879**

score/E-value for this peptide: **76/3e-005**

Annotated MS/MS spectra:



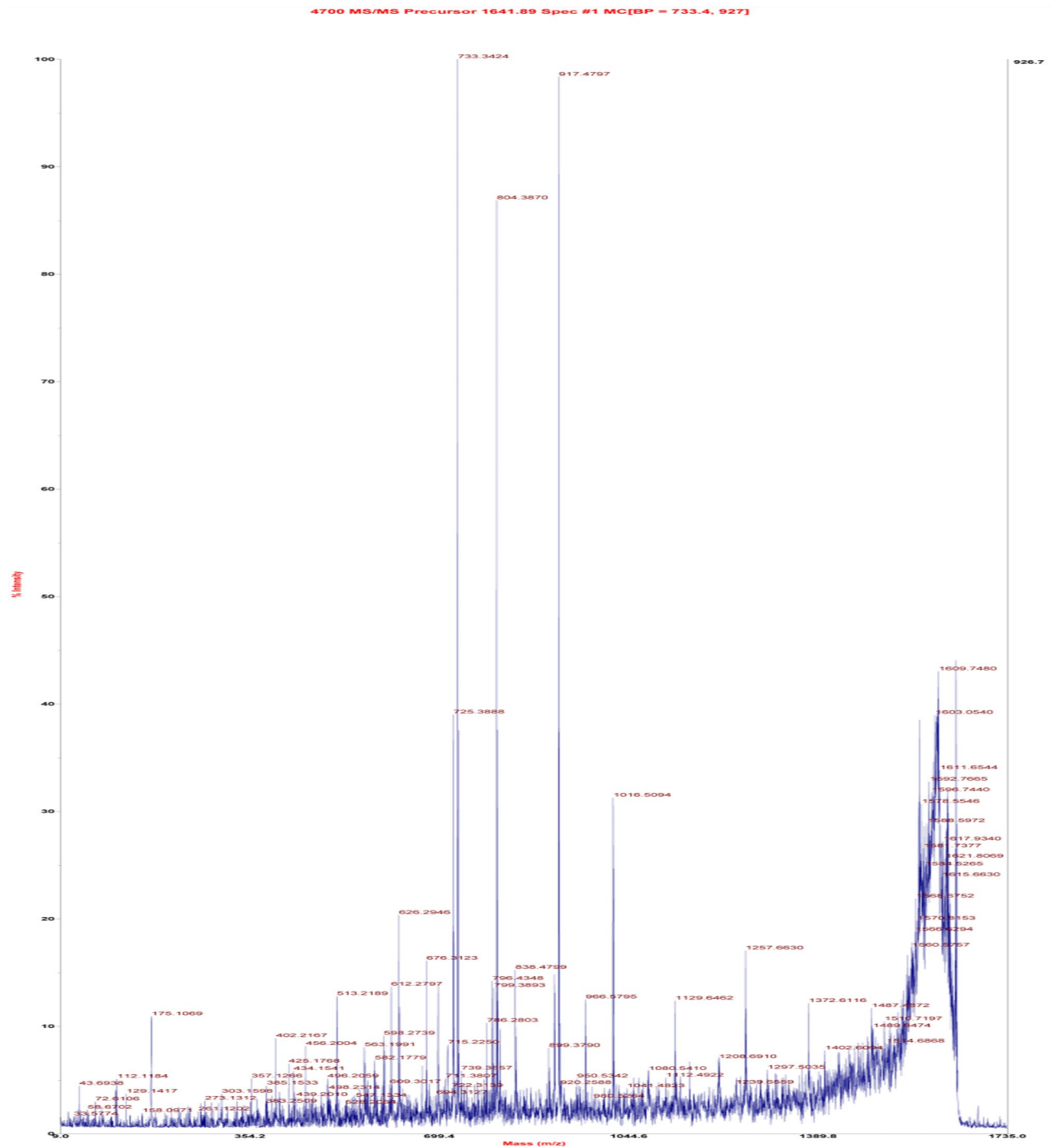
ssp No.: 5242

sequence identified: LGVDQLVLAGLESEAK

the precursor m/z and charge observed: 1641.8945

score/E-value for this peptide: 63/0.00095

Annotated MS/MS spectra:



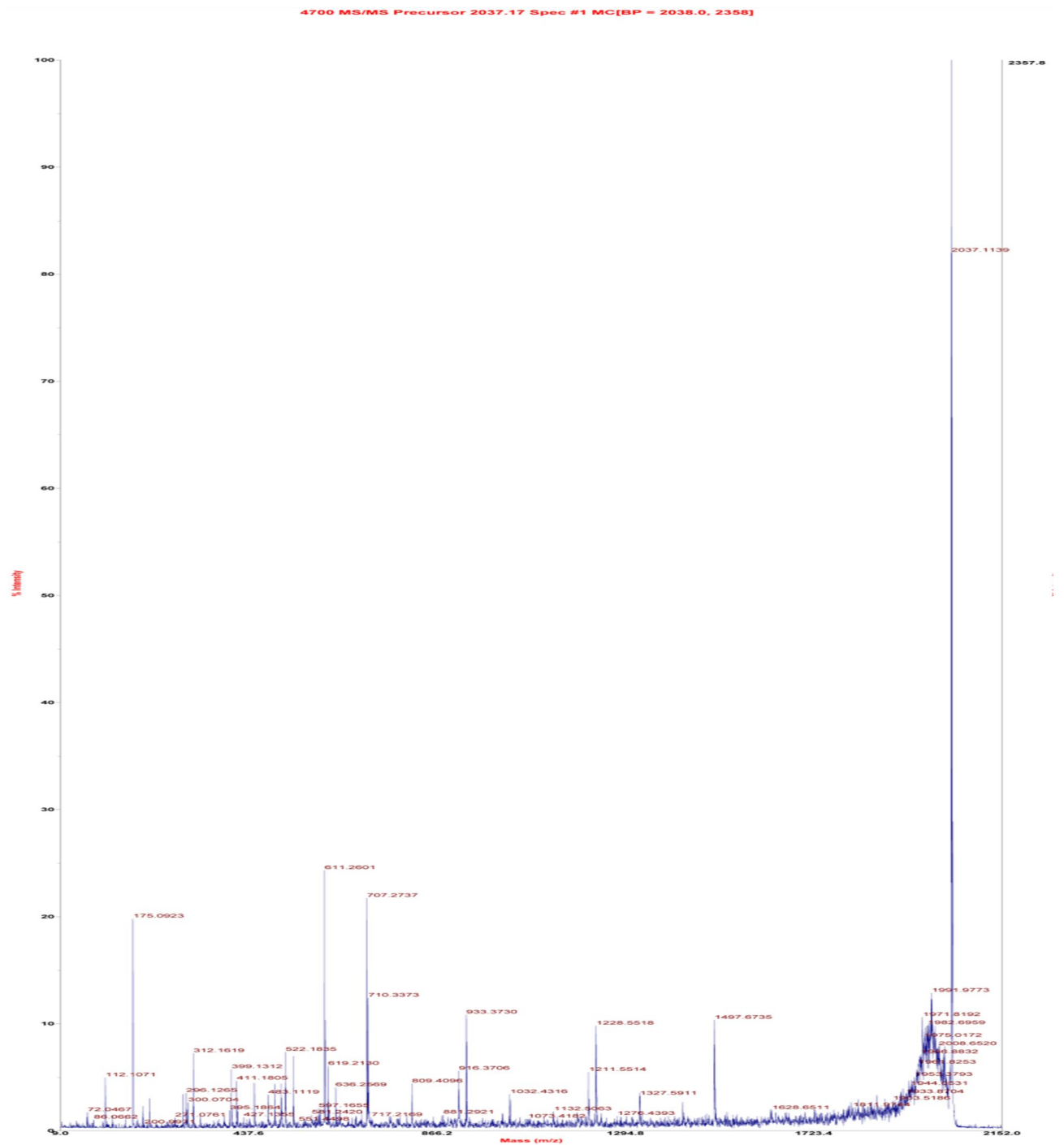
ssp No.: 7204

sequence identified: VIVVEAVVPVPEANAYLR

the precursor m/z and charge observed: 2037.1680

score/E-value for this peptide: 86/2.2e-006

Annotated MS/MS spectra:



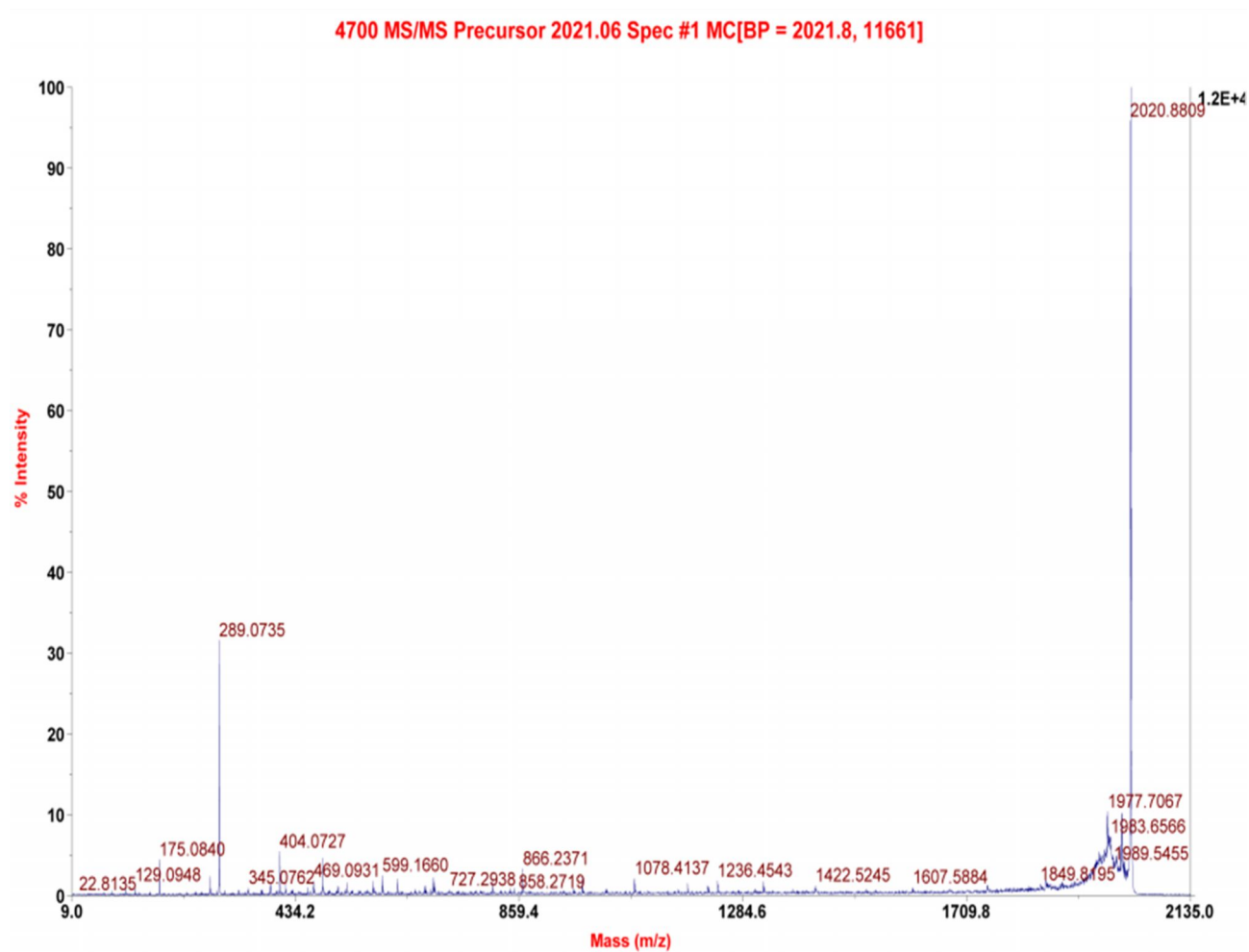
ssp No.: **7503**

sequence identified: **GNTAAAIVSGTVLGLYEDNR**

the precursor m/z and charge observed: **2021.0631**

score/E-value for this peptide: **124/5.4e-010**

Annotated MS/MS spectra:



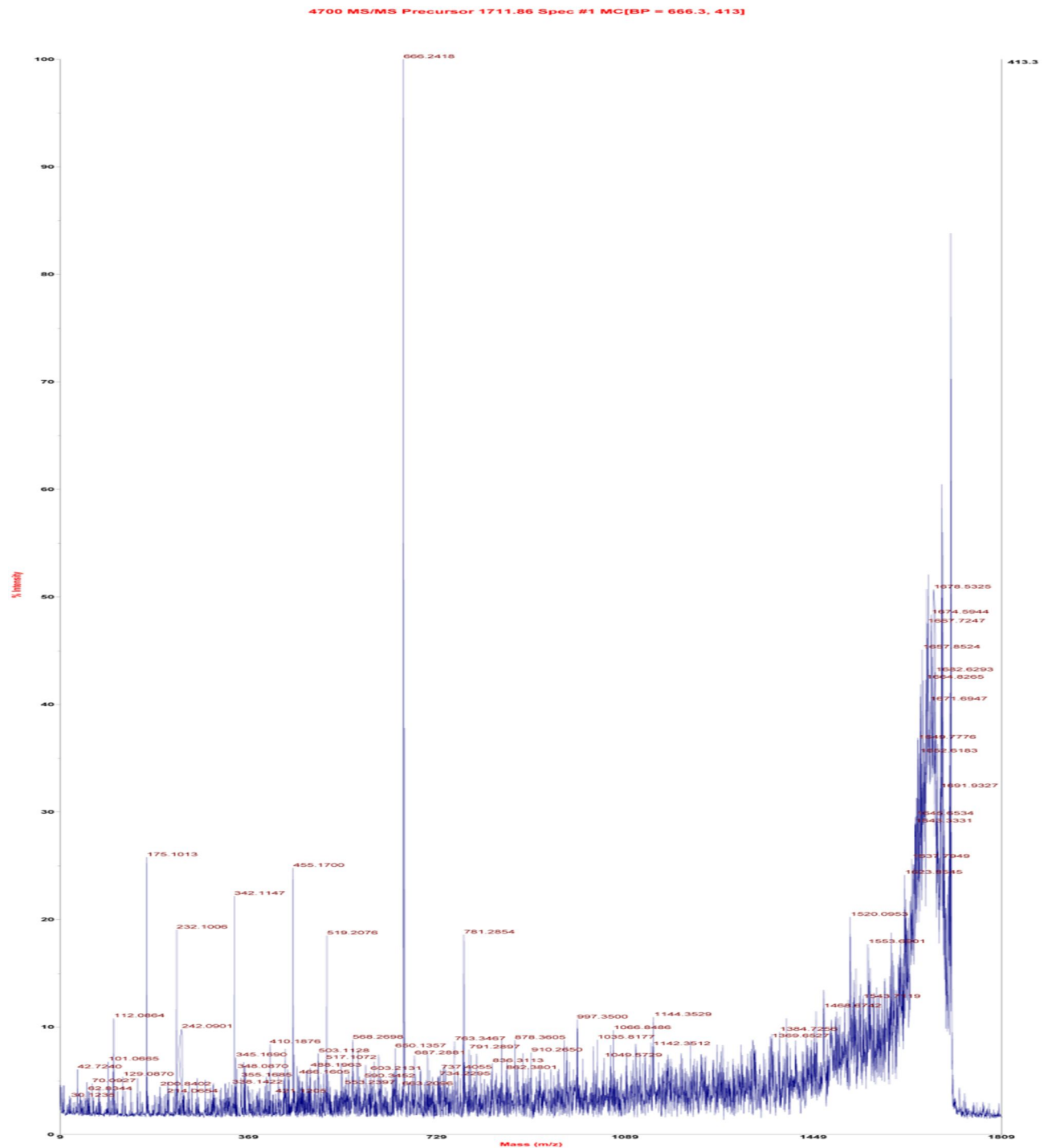
ssp No.: 7717

sequence identified: NVQIFSEDFGTEGR

the precursor m/z and charge observed: 1711.8552

score/E-value for this peptide: 58/0.0028

Annotated MS/MS spectra:



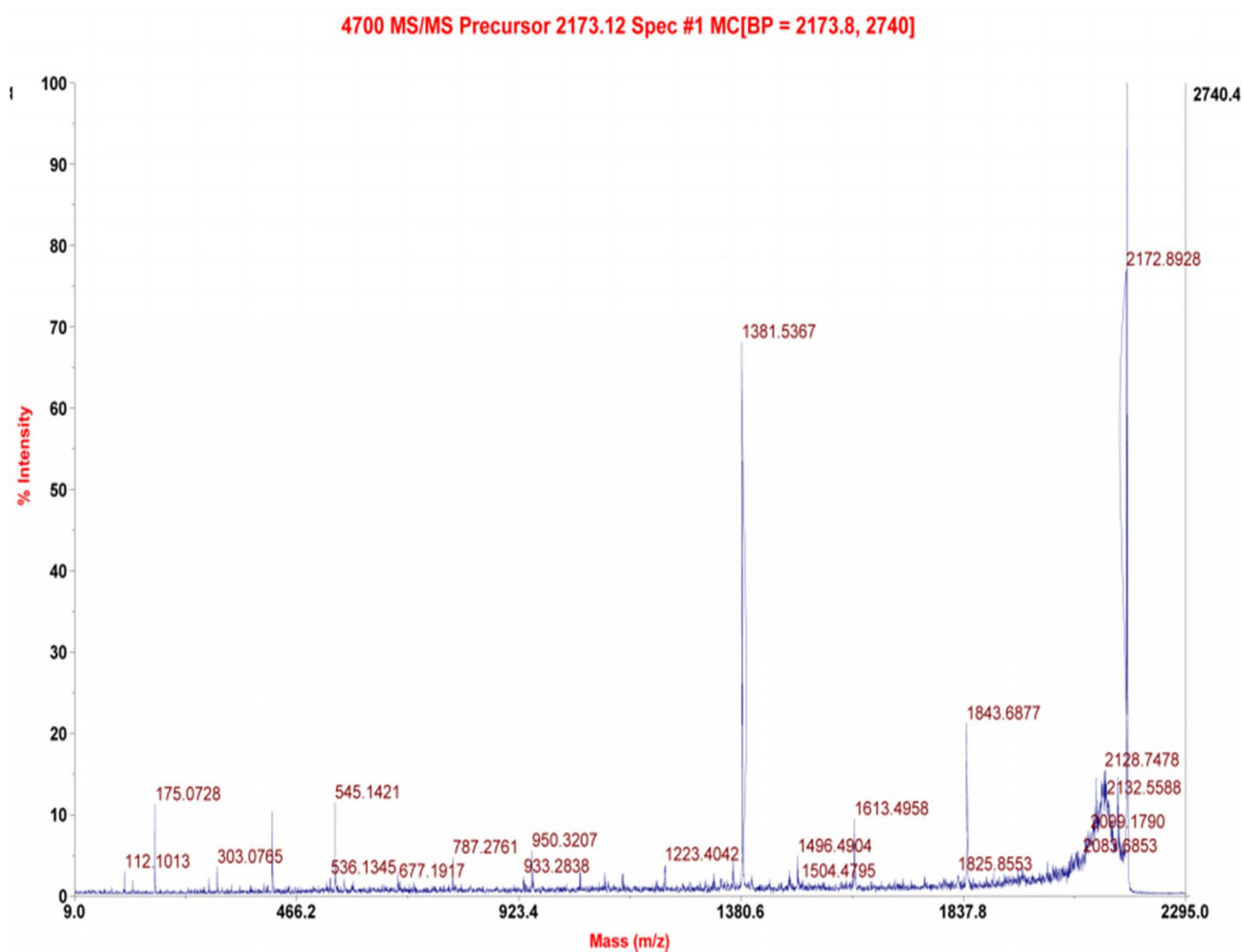
ssp No.: **7934**

sequence identified: **LTDSFLDGTSSVYLEELQR**

the precursor m/z and charge observed: **2173.1211**

score/E-value for this peptide: **133/5.3e-011**

Annotated MS/MS spectra:



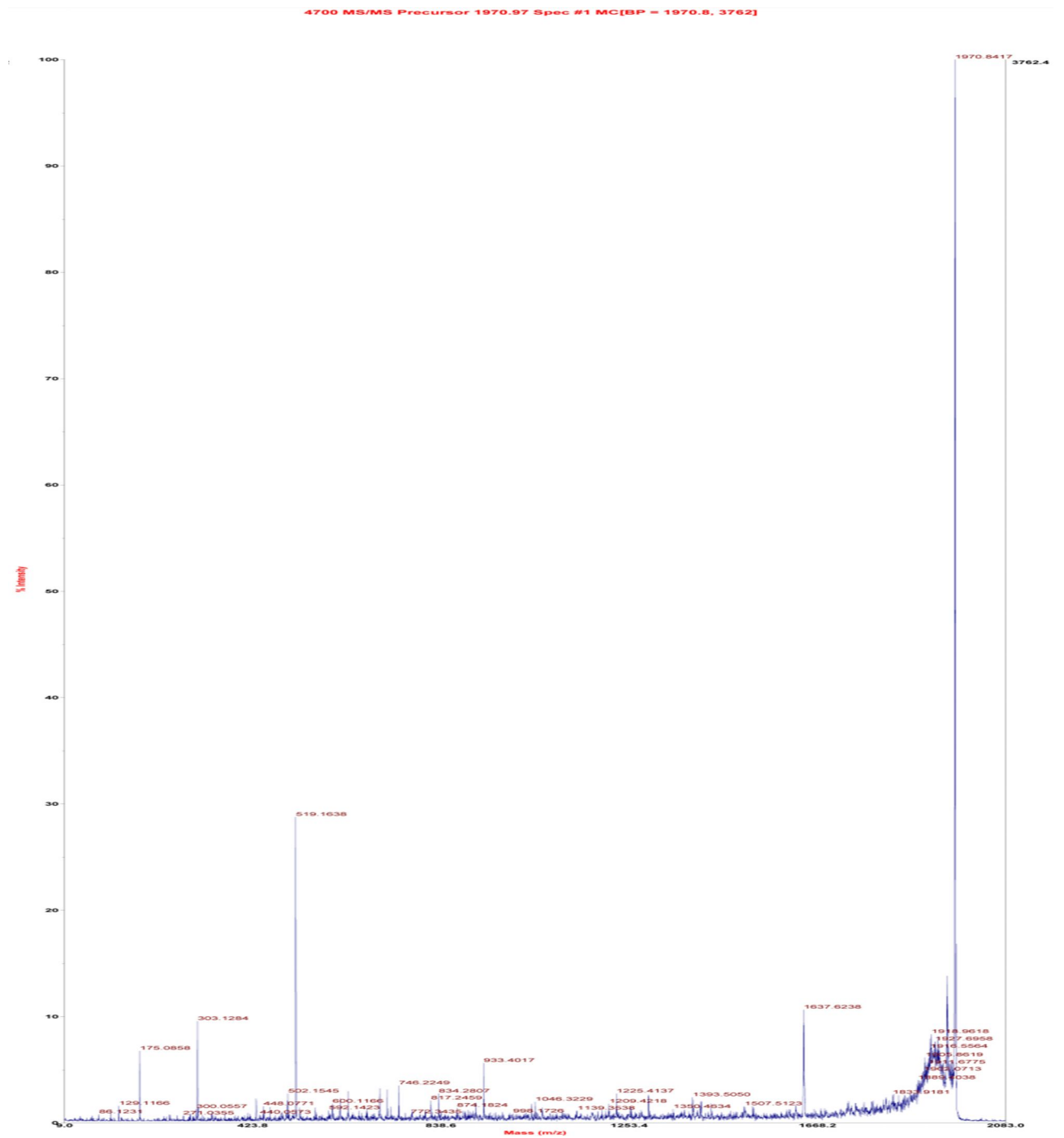
ssp No.: **8314**

sequence identified: **FADINNAYEVLSDSEKR**

the precursor m/z and charge observed: **1970.9670**

score/E-value for this peptide: **114/5.7e-009**

Annotated MS/MS spectra:



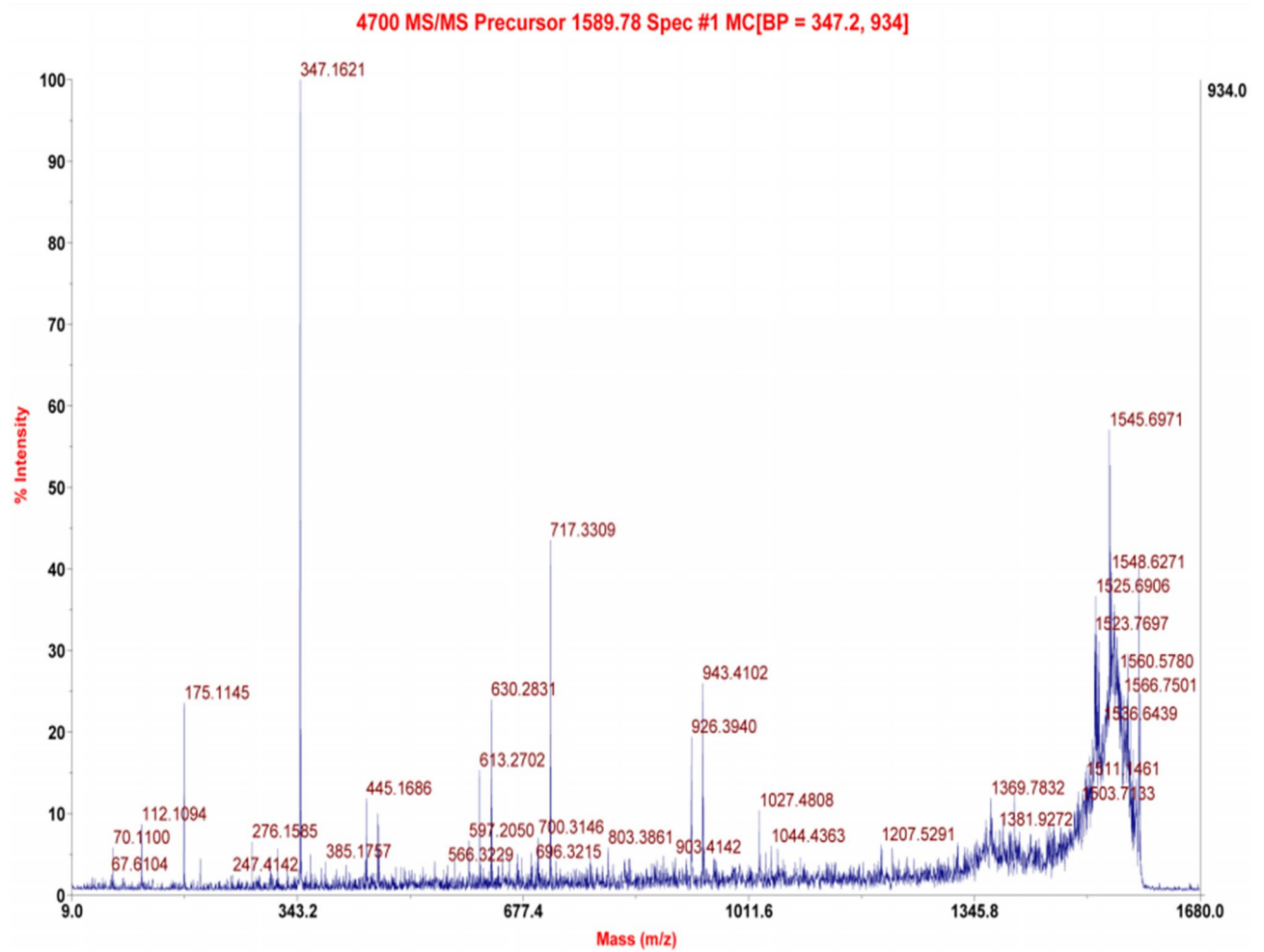
ssp No.: **8801**

sequence identified: **ALPTYTPESPADATR**

the precursor m/z and charge observed: **1589.7849**

score/E-value for this peptide: **62/0.0012**

Annotated MS/MS spectra:



ssp No.: **9418**

sequence identified: **SVSINEFLKPAEGER**

the precursor m/z and charge observed: **1675.9115**

score/E-value for this peptide: **82/1.1e-005**

Annotated MS/MS spectra:

