

Table S2. EHP identified by HPLC/MSMS EHP identified using HPLC/MSMS and the antioxidant activity of peptides in the QSAR model

Peptides Sequence	Molecular Mass (Da)	Charged ion(m/z)	Retention Time(min)	Activity
YEDN(+.98)GDAVN(+.98)NLVVLVQK	1890.921	946.4719	26.42	3.094416
ADLEM(+15.99)QIESLTEELAYLKK	2239.129	747.3864	45.78	2.357068
VLYDAEISQIHQSVTDNTNVILSMDNSR	3047.487	1016.839	34.56	4.41314
TSQNSELNNMQDLVEDYKK	2255.038	752.6888	23.99	2.5751
DIENQYETQITQIEHEVSSSGQEVQSSAK	3263.507	1088.844	36.16	2.21429
LLAELEGKDIN(+.98)EVIAAGTAK	2055.11	686.0473	31.03	5.288311
YEDN(+.98)GDAVNNLVVLVQK	1889.937	945.9794	29.42	3.094416
VPTPTVSVDLVVQVEK	1808.03	905.0219	34.2	2.1276
AGAEIFGDDGIQYLGIPGLINAK	2331.211	778.0784	43.97	5.450156
YEDN(+.98)GDAVNN(+.98)LVVLVQK	1890.921	946.4711	33.42	3.094416
VPTLDVSVVDLTVNLDKPAK	2122.189	708.3974	34.4	3.321271
THNLEPYFESFINNLR	1992.969	665.3312	39.17	4.855789
AAGIEVEPYWPALFAK	1760.914	587.9805	40.74	4.179178
TITLEVESSDTIENVK	1776.899	889.4581	22.27	4.113249
VVAAYLLAALGGN(+.98)AAPAEADIKK	2226.226	743.0765	35.19	1.201185
LPAGVWEDVLAAVK	1466.813	734.4136	42.82	1.872748
LLAELEGKDINEVIAAGTAK	2054.126	685.7175	28.91	5.288311
ISTVQEAADLIAAQMDK	1802.908	601.9787	41.49	3.345185
WAM(+15.99)LGALGC(+57.02)VTPELLQR	1929.981	644.3336	36.32	5.166186
ISTVQ(+.98)EAADLIAAQM(+15.99)DK	1819.887	910.9534	31.72	3.345185
NVSTGDVNEMNAAPGVDLTQLLNNMR	2871.386	958.1385	44.16	4.228911
GPFDPLGLADDPEVLAELK	1995.02	666.0156	44.92	3.788655
HGVQELEIELQSLSK	1836.958	919.4897	28.47	5.655108
SDLEMQYETLQEELMALKK	2298.112	767.0458	37.57	1.576727
TTFDVIIEDVPADKR	1717.889	573.6396	24.15	2.044679
RM(+15.99)PTFFETFPVLLDKDGVVR	2481.309	621.3347	37.78	6.526337
FDLNAVADTLPK	1302.682	652.3487	27.39	1.461321
GGGGGGYGSGGSSYGSGGSSYGSGGGGGGGR	2382.945	795.3353	5.7	8.268596
VAAASVLDVQEATDK	1515.778	758.8984	14.67	1.713609
EIETYHNLLEGGQEDFESSGAGK	2509.125	837.3909	23.04	4.622056
NVQALEIELQSQUALK	1796.004	599.6773	37.45	2.825362
FLEQQNQVLQTK	1474.778	738.4012	12.64	2.994335
DTDSEAEELLEAFK	1466.678	734.3491	33.24	2.349638
TAAELLQDKPLLK	1438.84	720.4319	16.87	3.166215
M(+15.99)PTFFETFPVLLDKDGVVR	2325.208	776.0796	42.65	6.096686

VDLLNQEIEFLK	1459.792	730.9026	36.79	4.084672
FDLN(+.98)AVADTLPK	1303.666	652.8412	27.89	1.461321
AVNVGTVFQVGDGIAR	1601.853	534.9602	28.41	5.692646
LLAGLDDLALDIPDAAR	1750.946	876.4788	38.75	3.776844
IVAVTGEEAQAAIALADQLAAQVEAAGK	2707.439	903.4813	50.22	2.414049
N(+.98)GAANFGEAVWFK	1410.657	706.3381	34.94	5.845443
YSEM(+15.99)VFPILAPDPAK	1692.843	847.4319	29.45	3.628622
ELTTEIDNNIEQISSYK	1995.964	998.99	30.52	2.660309
YC(+57.02)VQLSQIQAQISALEEQLQQIR	2745.412	916.1466	49.47	4.116221
FDIQLDEEGA EK	1392.641	697.3323	18.89	3.381736
N(+.98)GVANFGEAVWFK	1438.688	720.3521	38.49	5.910272
SLNNQFASFIDK	1382.683	692.3502	27.11	2.425302
WLGPFSEGSVPSYLK	1665.84	833.9282	34.98	4.232334
VAAASVLDVQEATDKK	1643.873	548.9678	10.95	0.699534
FVGYPDAKEFDAEILR	1983.958	662.335	27.04	3.937038
GEFPGDYGWDTAGLSADPETFAR	2458.071	820.3682	34.98	5.650221
IINEPTAAAIA YGLDK	1658.888	553.9728	25.98	4.298241
TLEVAEATWAETFK	1594.788	798.4015	28.46	3.087761
LNDLEDALQQAK	1356.689	679.3544	20.72	5.553867
LLEGEDAHLSSSQFSSGSQSSR	2308.057	770.3701	12.29	3.339777
AGASIFN(+.98)EDGLN(+.98)YLG N	1655.731	828.8729	37.61	6.03802
VAGVDDVTGEPLVK	1397.74	699.8749	15.82	2.97495
NQILNLTTDNANILLQIDNAR	2366.255	789.7602	39.43	4.937128
ADLEMQIESLTEELAYLKK	2223.134	742.0527	45.36	2.357068
VLM(+15.99)LADGS AVFAK	1336.706	669.3613	23.21	4.351017
TTFDVIIEDVPADK	1561.788	781.9026	28.95	1.443551
IKFEMEQNLR	1306.67	436.5681	14.12	5.559506
RIDADLDAYIAK	1362.714	455.2481	18.25	4.500611
MIVELIQPIAIEK	1495.868	748.9407	33.98	2.549794
M(+15.99)IVELIQPIAIEK	1511.863	756.9407	29.73	2.549794
GFFDPLGLADDPDTLAELK	2032.999	1017.505	45.87	4.272106
IRPAVQEDGGDIVFR	1670.874	557.9699	15.18	2.636075
VAAASVLDVQ(+.98)EATDKK	1644.857	549.297	13.67	0.699534
YEDN(+.98)GDAVNN(+.98)LVVLVQ(+.98)K	1891.905	946.9615	36.55	3.094416
ISTVQEAADLIAAQM(+15.99)DK	1818.903	607.3094	30.81	3.345185
TIDDLKNQILNLTTDNANILLQIDNAR	3051.62	1018.212	47.55	4.531282
VAAASVLDVQ(+.98)EATDK	1516.762	759.3928	16.17	1.713609
GSLGGGFSSGGFSGGSFSR	1706.765	854.3991	21.43	3.826548
QAGFDIIYEAR	1281.635	641.8286	24.51	4.602492
TVLIM(+15.99)ELINNVAK	1472.827	737.4205	37.97	3.276097
GGSGGSHGGSGFGGESGGSYGGGEEASG	3222.274	1075.105	6.37	8.254469
SGGGYGGGSGK				
IAQIPVGDAFLGR	1355.756	452.9261	27.63	5.432212
VVAWYDN(+.98)EWGYSQR	1772.779	887.3998	28.26	3.05539

GEYPGDYGWDTAGLSADPETFAR	2474.066	825.6995	32.49	5.466883
SM(+15.99)AILNSFIVDQFEK	1756.871	879.4434	36.19	4.101922
IDADLDAYIAK	1206.613	604.3152	22.15	3.223599
AGAQIFQEGGLDYLG	1651.784	826.9021	33.7	6.067209
ALEESNYELEK	1380.641	691.332	10.96	3.540331
VVAAYLLAALGGN(+.98)AAPAEADIK	2098.131	700.3829	41.78	1.687362
N(+.98)GVAN(+.98)FGEAVWFK	1439.672	720.8442	40.42	5.910272
IIN(+.98)EPTAAAIAYGLDKK	1787.967	596.9933	23.87	1.235513
RM(+15.99)PTFFETFPVLLDK	1955.023	652.6808	40.17	3.456669
WAM(+15.99)LGALGC(+57.02)IFPEVLEK	1948.979	975.4975	45.51	4.126597
VVDALGNPIDGK	1196.64	599.3318	14	2.026823
WAM(+15.99)LGALGC(+57.02)VTPELLQ(+.98)R	1930.965	966.4913	37.33	5.166186
Q(+.98)AGFDIIEAR	1282.619	642.3194	25.99	4.602492
LGVQEGFVNLSR	1416.773	709.3933	28.28	5.579679
HGVQELEIELQSQLSKK	1965.053	656.0252	25.14	4.119127
KPDFDAYIDPQKK	1563.793	522.2762	12.03	2.676661
DIELVM(+15.99)TQAGVSR	1433.718	717.8683	15.12	5.074851
PSKEQ(+.98)DFPGVVLR	1471.767	491.5994	16.22	2.225238
FADPADPLLSVR	1446.751	724.3848	32.27	4.63996
GIRPAINVGLSVSR	1437.842	480.2879	13.25	3.045506
GIRPAINVGISVR	1437.842	480.2879	13.25	3.045506
NLDLDSIIAEVK	1328.719	665.3673	38.42	4.744527
N(+.98)GAAN(+.98)FGEAVWFK	1411.641	706.8302	37.17	5.845443
AATVGDIIIIVVK	1268.77	635.393	38.1	3.968148
SPTGEIIFGGETM(+15.99)R	1509.713	755.869	17.81	2.818424
GDSLYPGGFFDPLGLADDPDTLAELK	2722.301	908.4451	47.72	3.866052
IAFLDGN(+.98)TAVM(+15.99)LGK	1465.749	733.8842	27.97	5.298836
ADLEMQIESLTEELAYLK	2095.04	699.3534	49.92	3.649302
EFQREDFEGIFTAM(+15.99)DGLPVTIR	2586.242	863.0917	35.94	2.515433
NIFVVGVPVGK	1125.655	563.8364	22.08	3.246092
VTGEDSFSIN(+.98)GK	1253.578	627.8016	12.6	1.521659
SLDLDSIIAEVK	1301.708	651.8607	38.57	4.272328
EIKFEFETIDTL	1483.745	742.8812	35.79	0.976619
FNLGTESLSAGVTWK	1608.815	805.412	24.97	1.427317
SLQEALASELAAR	1357.72	453.584	28.34	4.27031
ILSSVGIEAEAER	1372.72	687.3702	15.37	4.140952
LAGDYGFDPLGLGVDSR	1865.88	933.9521	35.3	3.042197
VEM(+15.99)ALYAFGFN(+.98)GDN	1563.655	782.8361	36.33	2.619119
IRPDEISSIK	1269.729	424.2534	14.44	3.886637
TISDDLEFLISQAVDPK	1889.962	630.9968	50.38	1.183225
RAQLGEIFEFR	1479.747	494.2596	25.66	5.677311
LNDLEEALQQA	1370.704	686.3612	22.92	5.553867
YEDNGDAVNNLVVLVQK	1888.953	945.475	28.36	3.094416

IDADLDAYIAKAYWTEGR	2070.006	691.0098	31.2	2.643528
AVNVGTVFQ(+.98)VGDGIAR	1602.837	802.4216	26.31	5.692646
ARQAGFDIIEAR	1508.774	503.9352	17.97	4.42238
LNDLEDALQQAKEDLAR	1940.98	648.003	34.54	6.533206
DVPADKFIEAFAAYLK	1796.935	599.9875	48.63	3.762379
PSKEQDFPGVVLR	1470.783	491.2716	15	2.225238
LAADVAGTPTVLIAR	1466.846	734.4297	21.92	4.466387
YFEVILVDPAAHK	1429.761	477.5967	25.23	1.788579
GILAVSDEPLVSC(+57.02)DYR	1792.867	897.4388	27.02	2.380411
IVEVLLEKESM(+15.99)TGDEFER	2009.998	671.0121	20.89	2.775159
NYSPYYNTIDDLKDQIVDLTVGNNK	2901.403	968.1439	43.59	5.152757
AAALNIVPTTTGAAK	1397.788	699.9051	12.92	5.277548
TVLIM(+15.99)ELINNIAR	1486.843	496.6234	42.45	3.547136
LALDLEIATYR	1276.703	639.3532	30.64	3.106286
LALDIEIATYR	1276.703	639.3532	30.64	3.106286
VVLVDDLIATGGTLR	1540.882	771.4471	34.58	4.929078
SFVEVGLLGGDASR	1405.72	703.8669	26.91	3.053346
DFTAQIQTLTDIPGEVK	1773.915	887.9647	31.22	4.87734
LGAN(+.98)VASAQGPTGLGK	1440.757	721.3848	11.62	7.971924
ADDPLAAKLN(+.98)DVEDVER	1869.896	624.3134	21.34	3.480283
ELEDLDAVLAELGLEAK	1826.951	914.4818	49.15	3.598534
IGDTVELVGLR	1170.661	586.3394	22.43	6.523536
FTQAGSEVSALLGR	1434.747	718.3785	23.14	3.942627
WN(+.98)PSKEQ(+.98)DFPGVVLR	1772.873	591.968	26.51	4.253433
KGDLNVGAVLILPEGFELAPPDRIPEEM(+15.99)K	3162.663	791.6749	36.39	7.172476
KGDLNVGAVLILPEGFEIAPPDRIPEEM(+15.99)K	3162.663	791.6749	36.39	7.172476
FLFVAEAIYK	1199.659	600.8375	32.98	3.613396
QFSAEEISSM(+15.99)VLSK	1570.755	786.3859	25.61	2.535905
ALSLSEISVLLEQK	1528.871	765.4446	40.61	3.191908
FVQAGSEVSALLGR	1432.767	717.3934	25.46	4.094015
KGDLNVGAVLILPEGFELAPPDR	2419.311	807.4431	39.32	6.671945
KGDLNVGAVLILPEGFEIAPPDR	2419.311	807.4431	39.32	6.671945
LLFEVAPLALLVEK	1553.943	777.9788	48.35	3.970777
ILRPESYWFR	1365.719	456.248	21.54	5.01801
IVTGVPDAIPGVGPALVELLR	2085.22	696.0765	47.78	4.170556
TVLIM(+15.99)ELIN(+.98)NVAK	1473.811	737.9101	28.53	3.276097
LYFQPYSAEK	1244.608	623.3143	17.21	3.489219
EQIFEM(+15.99)PTGGAAIM(+15.99)R	1681.78	841.9044	14.99	4.015168
NKLNDLEDALQQAK	1598.826	533.9537	22.63	3.920521
DINEVIAAGTAK	1200.635	601.3284	17.17	4.669747
VVLAYSGLDTSVILK	1633.929	817.9709	30.3	1.603292
SLYPGGFFDPLGLADDPDTLAEK	2550.253	1276.135	48.08	3.309771

QISNLQQSISDAEQR	1715.844	858.9324	17.01	2.558379
NVSTGDVNVEM(+15.99)NAAPGVDLTQLL NNMR	2887.38	963.472	41.19	4.228911
AVN(+.98)VGTVFQVGDIAR	1602.837	535.2877	29.4	5.692646
LGANVASAQGPTGLGK	1439.773	720.8939	10.61	7.971924
FYPEEEKN(+.98)DAEFAK	1716.752	573.2619	11.51	5.462216
VLDITDDDLGNLITAGLR	1913.011	957.5108	41.86	5.160092
EADQDGDGQVDYSEFVK	1900.796	951.4108	19.53	5.524653
WAM(+15.99)LAAAGAIPEGLAAN(+.98)GA DVK	2226.136	743.0586	34.44	4.456899
AGAGSATLSM(+15.99)AYAAAR	1483.709	742.8612	11.7	5.750762
QAGFDIIYEARDLDPQGVR	2275.16	759.4017	32.27	4.623152
TVLIMELINNVAK	1456.832	729.4238	45.5	3.276097
YDDPVLLAADVEK	1446.724	724.3715	25.92	3.095543
TGTIVDVPVGK	1084.613	543.3126	13.32	6.088117
SIGIN(+.98)EFGASAPGPLYEK	1962.994	982.4994	32.39	3.128158
ARQ(+.98)AGFDIIYEAR	1509.758	504.2629	19.72	4.42238
AVN(+.98)VTGPN(+.98)GAPPEGAPR	1604.779	803.4003	8.93	4.530311
LALDVEIATYR	1262.687	632.3467	26.86	3.106286
FLFVAEAIYKSQAETGEIK	2143.12	715.374	31.14	6.179964
LLFELGGIPER	1242.697	622.3583	32.41	4.027011
LKYENEVALR	1233.672	412.2334	9.78	4.315253
ATAELKN(+.98)GEVLLLENVR	1869.021	624.0143	24.54	3.916233
IAFLDGNTAVMLGK	1448.77	725.3978	31.03	5.298836
DIELVM(+15.99)TQ(+.98)AGVSR	1434.702	718.3617	16.41	5.074851
GDLNVGAVLILPEGFELAPPDRIPEEM(+15.9 9)K	3034.568	1012.528	40.48	2.443667
GDLNVGAVLILPEGFEIAPPDRIPEEM(+15.9 9)K	3034.568	1012.528	40.48	2.443667
LAVFM(+15.99)EWVDSFR	1514.723	758.369	43.54	3.975643
VVDALGNPIDGKGPLK	1591.893	531.6401	13.91	4.58763
VVDALGNPIDGKGPIK	1591.893	531.6401	13.91	4.684391
YEELQVTVGR	1192.609	597.3148	13.86	4.592395
GADVVIIPAGVPR	1262.735	632.3731	22.12	6.737946
ADLEM(+15.99)QIESLTEELAYLK	2111.034	704.6871	50.14	3.649302
VVAWYDN(+.98)EWGYSQ(+.98)R	1773.763	887.8992	29.13	3.05539
YDSTM(+15.99)GTFAADVK	1420.618	711.3145	11.73	2.874879
LPTIAAAIYR	1087.639	544.8277	23.76	3.428936
YNLSLGIGLADV K	1361.755	681.8834	30.11	3.284175
EC(+57.02)LPLILLR	1238.742	620.3779	44.32	3.752701
IAFLDGNTAVM(+15.99)LGK	1464.765	733.3837	27.3	5.298836
VAERTISDDLEFLISQAVDPK	2345.211	782.7517	42.65	0.348945
EAYPGDVFYLSHR	1552.731	518.5873	20.11	4.228579
GC(+57.02)IVEVDAAPFK	1304.643	653.3377	21.17	2.401757

VGKN(+.98)N(+.98)IDELGSPDK	1486.715	496.5824	9.85	3.773616
ELDYLDGAVSAPK	1376.682	689.3525	19.8	3.679375
EISPEILNAIR	1253.698	627.8564	27.92	4.499454
ISTVQ(+.98)EAADLIAAQMDK	1803.892	602.3048	42.6	3.345185
VGWKPDFVEK	1203.629	402.2195	14.79	4.810115
ETA EVEYLTAR	1280.625	641.3226	14.62	3.233485
KNIFVVGVPVPGK	1253.75	418.9268	15.21	3.669901
AGEGFALLIPSK	1201.671	601.8414	29.19	4.028118
FDLNAVADTLPKAAK	1572.851	525.2927	24.67	2.328703
WNPSKEQDFPGVVLR	1770.905	591.3167	25.34	4.253433
SQYEQLAEQNR	1364.632	683.3286	7.97	4.39434
IQAGEM(+15.99)VEFGSGVR	1494.714	748.3702	13.48	3.227871
KYSEM(+15.99)VFPILAPDPAK	1820.938	607.9864	22.89	4.625483
VAAASVLDVQ(+.98)EATDKK GK	1829.973	458.5043	10.17	3.912469
VGLTALTM(+15.99)AEYFR	1486.749	744.3817	27.01	6.989433
DIELVMTQAGVSR	1417.724	709.8718	24.23	5.074851
M(+15.99)VADVFQFLYR	1403.691	702.8544	37.35	2.899641
FEAQVYVLT K	1196.644	599.3278	19.73	2.108022
TNAENEFVTIK	1264.63	633.3265	14.52	2.718438
VGKN(+.98)NIDELGSPDK	1485.731	496.2541	8.63	3.773616
YEDN(+.98)GDAVN(+.98)NLVVLVQ(+.98)K	1891.905	631.6459	28.91	3.094416
EGIRPDVFL LINVPDELLIDR	2435.342	812.7874	47.96	4.987835
ASSIAQVVNTLQER	1514.805	758.4043	26.59	4.297266
GVEFVLPTDVIVADK	1600.871	801.4386	36.4	1.963353
TAIAIDAIINQK	1269.729	635.8713	24.93	1.493575
LIESPAPGIIS R	1251.719	626.8691	16.34	2.419496
DAGAIAGLEVLR	1183.656	592.8378	28.06	3.905588
IYLDISDEIK	1207.634	604.826	24.82	3.598243
SGGGFSSGSAGIINYQR	1656.786	829.3972	15.75	6.363785
VLDELTLTK	1030.591	516.3032	17.55	3.540145
LDGLDAVLSK	1029.571	515.7932	22.32	1.768684
IDM(+15.99)VEDEELVELVEM(+15.99)ELR	2222.033	741.684	47.53	3.971875
LYDALSPFIR	1193.644	597.8312	31.73	5.580448
ELQDIIAILGLDELSEEDRLIVAR	2722.475	908.5002	49.65	4.127458
IIN(+.98)EPTAAAIAYGLDK	1659.872	554.3021	28.97	4.298241
GM(+15.99)M(+15.99)PGILEM(+15.99)LER	1423.651	712.8366	23.42	5.203787
S(+42.01)KSELAC(+57.02)VYAVLALADDGL	3360.737	1121.268	50.48	3.421232
EVT PENIVTLTK				
ITIGLYGDEV PK	1303.702	652.8549	22.82	1.37053
VSGVSL LALFR	1160.692	581.3511	41.42	2.745646
DLGGYDKFVEAFK	1487.73	496.9191	31.3	1.920327
TLDESVAGDNVGILLR	1670.884	836.4393	28.4	4.769502
EAQEEVAYEIAEAVISALK	2062.047	688.359	53.64	3.777793
YEDNGDAVN(+.98)N(+.98)LVVLVQ(+.98)K	1891.905	946.9598	40.15	3.094416

VLGVTTLDVVR	1170.697	586.3565	23.94	3.985761
AFDEEALADLVALK	1503.782	752.8989	40.43	3.007116
VLYDAEISQIHQSVTDTNVILSM(+15.99)DN SR	3063.482	1022.153	31.22	4.41314
KEQC(+57.02)LALLTQLR	1471.818	491.6158	21.83	4.474069
VVAGPGDKPM(+15.99)IEVEFK	1730.891	577.9755	15.43	-0.05956
EFAEFVSQLR	1224.614	613.3164	27.67	4.211858
GFAAAAVEEIVK	1203.65	602.8303	27.43	4.152566
FELGYYGLKPDIK	1541.813	514.9462	25.17	2.001234
YEVLTRSADGDEG	1410.626	706.3284	10.19	2.318827
AFAEYKN(+.98)GSLM(+15.99)EDDAK	1804.783	602.6055	9.8	2.821639
QSLEASLAETEGR	1389.674	464.2374	15.66	3.231574
TISDDLEFLISQ(+.98)AVDPK	1890.946	946.483	49.47	1.183225
AIGAELDLTDKGLGVR	1626.894	543.3089	22.74	2.95241
VVDLLAPYR	1044.597	523.3089	25.73	3.037776
VEIESLVEGVDLSEPLTR	1984.036	662.3507	38.14	3.251213
AVN(+.98)VGTVFQ(+.98)VGDGIAR	1603.821	535.618	30.63	5.692646
AGAEIFGDDGIQYLGIPGLIN(+.98)AK	2332.195	1167.104	44.73	5.450156
IVDWLAEDFQK	1362.682	682.3457	30.85	4.073024
EIEIDIEPTDTVQR	1656.821	829.4143	22.06	2.82458
LGLDVTVIEGR	1170.661	586.3333	25.45	6.114502
PFSEGSVPSYLK	1309.655	655.8383	19.7	4.286531
LEEQ(+.98)KGVDILLAAIK	1639.94	547.6566	31.98	3.188458
LEEQ(+.98)KGVDILLAAALK	1639.94	547.6566	31.98	3.091697
LSDEILPLLSELR	1496.845	499.953	43.92	4.413822
AQLGEIFEFDNR	1323.646	662.8334	31.67	3.713689
VN(+.98)YAGVSTN(+.98)N(+.98)YALDEVEE VKA	2287.038	1144.526	28.85	1.759802
ADLNVPLDGDLDK	1268.661	635.3391	20.92	3.52292
IGM(+15.99)PDVEEVISAELDYK	1922.918	641.9815	38.03	4.605637
SYWVDLLADSVEK	1523.751	762.8864	40.32	3.529162
AVVTVPAYFN(+.98)DSQR	1566.768	784.3918	23.21	2.249741
EIIDVPLAWK	1295.749	648.8829	37.5	2.176313
GM(+15.99)QEFAGALLAR	1278.639	640.3314	20.46	5.649725
LEQEQQFLIAK	1345.724	673.8693	17.28	4.089113
DTFYLYSAIVAAGLER	1787.909	596.9787	46.46	6.006249
EVTLGFVDLM(+15.99)R	1294.659	648.3389	27.75	4.531163
FM(+15.99)QIFDEIYR	1376.643	689.332	28.35	4.551404
Q(-17.03)SLEASLAETEGR	1372.647	687.3308	24.4	3.231574
LLFELGGIPERELEK	1741.961	581.6648	30.25	5.020274
YEELQITAGR	1178.593	590.3078	13.3	4.465108
FDPLGLADDPDTLAELEK	1828.909	915.4619	38.37	3.144524
SDLSILFK	921.5171	461.7692	28.44	1.106054
GGAFTGELSAEM(+15.99)LK	1425.681	713.8526	18.68	8.075564

DLDLPQGV	1011.535	506.7784	15.98	5.709387
KARQ(+.98)AGFDIIEAR	1637.853	410.474	14.72	4.571433
WELLQQVDTSTR	1474.742	738.3823	26.06	3.665902
NKLNDLEEALQQA	1612.842	538.623	24.36	3.920521
GGEM(+15.99)VPFM(+15.99)FTVK	1373.636	687.8281	24.15	6.943757
GTFDRPALLAR	1215.672	406.235	13.91	5.190312
DINVVLVAPK	1066.639	534.3257	21.13	1.38441
LGEIPGAIPK	993.5858	497.8023	14.65	5.982169
ISTVQEAADLIAAQ(+.98)M(+15.99)DK	1819.887	607.6385	33.23	3.345185
KARQAGFDIIEAR	1636.868	546.6349	13.57	4.571433
VN(+.98)GGPAGEGLDALYPGEAFDPLGLA	3531.657	1178.229	47.83	2.195128
DDPDTFaelK				
ISAALAEVVQR	1155.661	578.8375	16.72	1.53425
VAVELSPYDLR	1260.671	631.3371	22.71	4.161007
EQIATFQQELGK	1390.709	696.3587	17.36	4.129311
VIGGGPLVGAAYGGK	1243.692	622.8549	16.06	2.22931
ILSEEFGWdKELAK	1663.846	555.624	24.15	4.956772
Q(-17.03)AGFDIIEAR	1264.609	633.3134	35.22	4.602492
EFLNLPSEIVPATLK	1669.929	835.9726	37.36	2.592886
TAAELLQ(+.98)DKPLLK	1439.824	720.9222	18.41	3.166215
KADM(+15.99)IIQVLPTQLVPDEK	2053.113	685.3787	27.44	3.411015
SDTYVIFGEAK	1228.598	615.307	20.36	4.682886
VVDLLAPYQK	1144.649	573.3335	22.64	3.238636
DRFLFVAEAIYK	1470.787	491.2708	34.75	3.513485
M(+15.99)PTFFETFPVVLLDK	1798.922	900.4662	46.33	3.027018
FYPEEEKN(+.98)DAEFAKK	1844.847	462.2237	8.83	2.68075
EGAVLC(+57.02)FDEVM(+15.99)TGFR	1745.775	873.9014	29.77	5.71701
QIIEGGEFFVLK	1378.75	690.3847	32.69	2.940485
GEFPGDYGWDTAGLSADPETFARYR	2777.236	926.7536	31.9	4.894365
AGYSPIGFVR	1065.561	533.7886	20.14	9.726983
VVVVDEFLGR	1131.629	566.8223	27.78	3.904751
FEFETIDTL	1113.523	557.7696	38.31	2.217964
EVTLGFVDLM(+15.99)RDDYIEKDR	2329.126	583.2908	25.52	4.560224
ISGLIYEETRGVLK	1576.882	526.6371	17.76	4.498637
SIDLLKDTLK	1144.67	382.5654	19.51	3.92815
KM(+15.99)KDTDSEAELEAFK	1869.903	624.3142	20.57	2.984812
QLIVGVNKM(+15.99)DSDTAGYKEER	2268.106	568.0391	8.95	4.053833
LAEQVIYVAGDR	1332.704	667.361	16.27	3.161809
FVTFDGLAK	996.528	499.2729	21.51	5.830532
VAEAIDRDLGGYDK	1520.747	507.9264	11.75	5.033037
AVNVTGPN(+.98)GAPPEGAPR	1603.795	802.9062	7.7	4.530311
DYQELMNTK	1140.512	571.2706	13.36	3.651428
VLNFAVPDQLLVDR	1597.883	799.9493	35.8	3.603157
IGLFGGAGVGK	974.5549	488.2861	19.93	8.062766

GIPAM(+15.99)LWETSLLDPEEGIR	2142.067	715.0303	40.21	4.997188
EQDFPGVVLR	1158.603	580.311	21.31	4.574968
QYN(+.98)EEN(+.98)GITPPARPPR	1839.875	614.3008	9.2	4.144492
LPISGIYK	889.5273	445.7736	15.21	3.263962
LVDILAQQYEIVAR	1629.909	815.968	32.46	4.016139
VTFPEASQIAEELLKTEFDTAR	2494.259	832.4326	47.94	3.552058
IQTFFGPGIVAK	1276.718	639.361	26.05	3.301144
DNIQ(+.98)GITKPAIR	1325.73	442.9212	11.08	3.485204
EISPEILN(+.98)AIR	1254.682	628.3468	29.29	4.499454
VDAIVFLVDAADRER	1687.889	563.6407	36.28	3.927298
EIYIDDLREEFVR	1695.847	566.2898	30.7	6.181792
TAIAVDTILNQK	1285.724	643.8691	21.73	2.083183
QGVDDADINGLR	1156.584	579.3008	12.63	7.56237
VLLLPEDPNAVIIC(+57.02)VATGTGIAPFR	2635.441	879.4843	48.68	3.300338
DNIQGITKPAIR	1324.746	442.591	9.64	3.485204
LYFQ(+.98)PYSAEK	1245.592	623.8052	18.57	3.489219
TAIAVDTILNQ(+.98)K	1286.708	644.352	20.96	2.083183
DAVLLVFANK	1088.623	545.319	29.75	2.735893
IFVHPVADVIR	1264.729	422.5876	16.53	3.272165
DAEAWFNEK	1108.483	555.2522	19.55	3.023328
TVTAFDVVYALK	1325.723	663.8688	34.79	2.995065
KEQC(+57.02)LALLTQ(+.98)LR	1472.802	491.943	23.83	4.474069
EVVEGVDILIVR	1339.771	670.8918	30.85	3.877383
GIAELGIYPAVDPLDSTSR	1973.011	987.5095	34.17	3.319146
DIN(+.98)EVIAAGTAK	1201.619	601.8208	19.06	4.669747
GGLDFTKDDENVN(+.98)SQPFM(+15.99)R	2185.959	729.6605	18.27	7.15936
QQ(+.98)AEQLALALR	1240.678	621.3444	20.82	3.8618
GPWLEPLR	966.5287	484.274	22.67	5.265771
WAM(+15.99)LGVAGIVIPAELTR	1811.997	907.0075	40.97	5.958201
AIEDM(+15.99)LIM(+15.99)AAR	1264.616	633.3189	18.61	3.723546
RAQ(+.98)LGEIFEFD	1480.731	494.5868	27.42	5.677311
ISTVQEAADLIAAQ(+.98)MDK	1803.892	602.3055	43.78	3.345185
VLEQELIPVQR	1322.756	662.3861	19.55	2.381773
AGAEIFGDDGIQ(+.98)YLGIPGLINAK	2332.195	1167.104	44.73	5.450156
YSEM(+15.99)VFPILAPDPAKN(+.98)K	1935.965	646.3365	24.47	3.280432
VPFELPK	828.4745	415.2475	18.11	3.417281
QSVEADINGLR	1200.61	601.3178	15.04	4.544759
VVAGPGDKPMIEVEFK	1714.896	572.6429	19.38	-0.05956
LVPFEEVLPR	1197.676	599.8467	28.8	2.970092
DEVTVTLK	903.4913	452.7554	11.08	2.224113
AAAATAEALEAER	1330.637	666.3284	10.4	3.849948
IISLAPEVL	953.5797	477.7986	35.67	2.534149
EFVWATLK	992.5331	497.2748	27.46	3.577465
AIVISVIDNLVK	1282.786	642.4014	40.1	4.342412

KEQ(+.98)DFPGVVLR	1287.682	430.238	16.22	4.11599
GAALN(+.98)AVQ(+.98)VAELLL	1382.766	692.3897	53.61	4.916586
LGWTVVPEQLR	1296.719	649.3677	28.35	8.02127
Q(-				
17.03)LIVGINKM(+15.99)DSDTAGYKQ(+.98)	2265.095	567.2713	8.7	4.568232
ER				
TLFYVPAPR	1062.586	532.302	22.42	3.597046
SSFAFAFYM(+15.99)DR	1356.581	679.3005	30	4.333066
AYDFVSQEIR	1226.593	614.3152	19.03	5.646524
EVTLGFVDLM(+15.99)RDDYIEK	2057.998	687.0114	29.65	3.929279
ALGVLSQGVWSR	1271.699	636.8588	25.42	3.97957
VAVLGASGYTGEEVVR	1605.836	803.9232	17.75	4.800473
LEQ(+.98)EQQFLIAK	1346.708	674.36	18.09	4.089113
YADIMAALK	994.5157	498.2658	24.04	4.705672
AGLQFPVGR	943.5239	472.7722	17.37	5.874735
GPWLEPLRGPN(+.98)GLDLNK	1875.984	626.3356	28.66	4.046135
GEEGNVQVAQAALLK	1525.81	763.9156	17.46	4.00927
VNDLLDFK	962.5073	482.262	22.42	3.435457
LSEQFVEAYR	1240.609	621.317	16.27	2.90217
QIVTLDM(+15.99)GLLVAGTK	1573.875	787.943	27.62	1.998179
DLGLPWVILGHSER	1590.852	531.2913	37.2	3.426252
VLEQ(+.98)ELIPVQ(+.98)R	1324.724	663.3695	22.78	2.381773
KGDLN(+.98)VGAVLILPEGFELAPPDR	2420.295	807.7715	40.32	6.671945
KGDLN(+.98)VGAVLILPEGFEIAPPDR	2420.295	807.7715	40.32	6.671945
IASGDVPETIEGK	1314.667	658.3445	11.06	2.527053
DIELVMTQ(+.98)AGVSR	1418.708	710.3594	27.12	5.074851
SN(+.98)YN(+.98)YEKPFYLYAR	1778.851	593.9617	29.58	5.575304
TIAEC(+57.02)LADELINAAK	1630.824	544.6166	42.71	2.98891
VADYVSQLR	1049.551	525.786	12.91	5.212766
GAGGAFVLVLYDEIKK	1678.929	560.6525	37.03	2.451999
TFAEEVN(+.98)EAFR	1312.594	657.3105	17.35	3.033428
GLALVAEKPLGSGVK	1437.856	480.2947	14.58	4.470616
VGKNN(+.98)IDELGSPDK	1485.731	496.2549	8.38	3.773616
EVTLGFVDLMR	1278.664	640.3401	36.89	4.531163
DFTAQ(+.98)IQTLDIPGEVK	1774.899	888.4523	33.31	4.87734
SIPDEDAGTEGAIFVFR	1822.874	912.4536	32.21	3.027431
AGIQLSDTFVK	1177.634	589.8242	19.9	6.045974
YPLVADLK	917.5222	459.7705	17.65	2.554114
Q(-17.03)FSAEEISSM(+15.99)VLSK	1553.728	777.8737	34.87	2.535905
WPYGEFEVPK	1250.597	626.3073	26.97	2.758936
LFTIALPR	929.5698	465.7943	26.4	4.444546
HPEIDVPNLEVIK	1501.814	501.6155	24.88	3.655833
SVPILPISGWM(+15.99)GDNLIK	1854.991	619.3368	37.5	4.477592
LADPLGFVK	958.5487	480.2825	25.52	6.7761

LELQEVVDFLK	1331.734	666.8737	42.35	4.270926
YEDN(+.98)GDAVN(+.98)N(+.98)LVVLVQK	1891.905	631.649	38.85	3.094416
FN(+.98)LGTESLSAGVTWK	1609.799	805.9069	27.66	1.427317
TFAEEVNEAFR	1311.61	656.8154	26.48	3.033428
GFDIIEAR	1082.54	542.2786	23.48	5.941211
RDEGGYYWILGR	1541.726	514.9177	28.13	3.915063
IDGPAGSLAAELR	1268.672	635.3374	22.85	2.194342
DINKQDVLLFIDNIFR	1962.057	655.0269	49.24	2.772713
NMQDM(+15.99)VEDYR	1315.517	658.7698	10.81	3.85266
QSVEADINGLRR	1356.711	453.2454	12.09	4.268072
IYNLM(+15.99)DQVDAIYPTPER	2052.983	685.3443	29.76	3.711355
DGVVVIIK	841.5273	421.7748	16.04	5.602871
REQAEQLALALR	1396.779	466.604	14.82	4.401985
KPDFDAYIDPQK	1435.698	479.58	15.07	3.324166
VQQLLQDFFN(+.98)GK	1436.73	719.3697	34.08	3.976918
LGAN(+.98)VASAQ(+.98)GPTGLGK	1441.741	721.8816	12.5	7.971924
IVSVETITGPK	1142.655	572.3347	14.8	1.991136
EVAFAAQFGSDLDAATQ(+.98)YLLNR	2400.16	801.0656	50.14	2.847102
IGVIESLLEK	1099.649	550.8328	31.06	6.167008
VLITTDLLAR	1113.676	557.8464	25.94	4.192062
AVDSLVPIGR	1025.587	513.8011	17.13	3.631344
TVLIMELIN(+.98)NVAK	1457.816	729.9193	39.21	3.276097
GLNVGSSLVEEDKLALAK	1842.01	615.0134	21.8	4.887117
VSVEAGSTYGWQK	1410.678	706.3467	13.2	5.036921
VPFAISPGSEQIR	1399.746	700.8836	19.81	4.557735
NLQDIIAILGM(+15.99)DELSEEDKM(+15.99)	2735.336	684.8433	43.21	4.412734
TVAR				
YTLEVDLK	979.5226	490.7719	19.12	1.725241
QATKDAGAIAGLEVLR	1611.894	538.3073	19.37	4.221557
ITGASTLPSDEVER	1473.731	737.8748	11.24	2.40459
QEYEQLIAK	1120.576	561.2957	12.07	4.364527
VLSVGDIAR	985.5556	493.7864	11.85	6.681897
SDLEMQYETLQEELM(+15.99)ALKK	2314.107	772.374	35.97	1.576727
VLQ(+.98)VDEPALR	1139.619	570.8189	15.18	3.840119
ETEKPFML(+15.99)AVEDVFSITGR	2184.077	729.0316	46.82	1.919876
VVVLGFFDK	1022.58	512.2999	31.62	2.717435
TM(+15.99)KPAAAEYFAAI	1526.744	764.3842	23.71	1.952421
ISLVDAIVIR	1097.681	549.8473	28.38	3.109851
VVAWYDNEWGYSQ(+.98)R	1772.779	887.4012	28.89	3.05539
FKIDGYIIR	1173.618	392.2169	18.18	4.113416
IRLENIQTYR	1433.763	478.9312	13.01	3.038935
LGAN(+.98)SLLDIVVFGR	1473.819	737.9167	47.78	6.607616
EFAEGILSK	992.5178	497.2686	17.72	2.401805
RVLQ(+.98)VDEPALR	1295.72	432.9162	11.85	2.73176

IGELQAAAFK	1046.576	524.2953	15.28	5.32073
GVDILLAAIK	1011.633	506.8249	32.79	4.289899
GVDILLAALK	1011.633	506.8249	32.79	4.193138
GAYFGLYDTAK	1204.576	603.3019	20.85	5.224535
IGGLEVLR	855.5178	428.7683	17.34	7.000569
SAVDEAIEM(+15.99)LK	1220.596	611.3046	22.39	4.417288
AFM(+15.99)QADLQAEIELLEK	1977.013	989.5086	47.4	3.255782
DVEDALVLIK	1113.628	557.8214	30.49	2.623573
TGFVLDGFPR	1107.571	554.7925	28.23	9.315999
FAGPIAIR	956.5807	479.2968	23.55	3.701028
GELVSLASIFR	1190.666	596.3403	38.13	4.211838
AGAQIFQEGGLDYLG(+.98)	1652.768	827.3931	39.57	6.067209
DSTLIM(+15.99)QLLR	1204.649	603.3298	35.43	5.185824
LYFEPLTVEDVLNVIEK	2020.077	1011.044	50.44	3.618698
DGLIEFEK	1062.56	532.2922	33.47	5.994914
KEQIFEM(+15.99)PTGGAAIM(+15.99)R	1809.875	604.3065	11.2	4.751171
DLDLPQ(+.98)GVR	1012.519	507.2694	17.34	5.709387
QDVLLFIDNIFR	1491.809	746.9098	49.35	3.917743
MTLDDFR	896.4062	449.2133	18.35	2.302494
EGAAALADLLR	1098.603	550.3094	29.01	7.30722
EFD AEILR	991.4974	496.7592	23.02	5.278389
IAGLDVLR	855.5178	428.7684	20.49	4.225432
FLSQPFFVAEVFTG	1587.797	794.9064	49.82	0.632967
FLEYLEM(+15.99)GR	1172.554	587.2877	21.84	5.920323
EDFEGIFTAM(+15.99)DGLPVTIR	2025.972	676.338	38.64	3.704175
IPAVQELVEK	1124.644	563.3309	18.4	1.953544
ETRLIESPAGIISRR	1794.011	449.5129	11.88	1.144952
EAEKRIDADLDAYIAK	1819.932	455.9936	16.18	3.508442
VLQVDEPALR	1138.635	570.319	14.17	3.840119
GLSADPETFAR	1162.562	582.2935	12.21	5.624408
AVALVLPK	809.5374	405.779	16.43	1.854481
VVGFD PVR	887.4865	444.7548	13.98	3.266639
SFFDGFTDK	1062.466	532.2421	26.58	2.724816
ATLSYFQAVK	1126.602	564.3104	18.96	2.162645
ILSEEF GWDK	1222.587	612.3088	25.45	6.292409
GM(+15.99)EVVDSGKPLNVPVGQATLGR	2239.163	747.3863	16.21	5.224847
TVLIM(+15.99)ELINN(+.98)VAK	1473.811	492.2838	31.94	3.276097
YAMLVDDGTVK	1210.59	606.3069	15.32	6.482394
LLLIGDSGVGK	1070.634	536.3234	21.48	5.800573
LIESPAGIISRR	1407.82	470.2835	12.65	0.86394
LLAALGGN(+.98)AAPAEADIK	1594.857	798.4342	21.6	2.953772
AGAQIFADGGLN(+.98)YLG	1580.747	791.3909	34.97	6.067209
DINKQ(+.98)DVLLFIDNIFR	1963.041	655.3537	49.92	2.772713
LNQIPLFIK	1084.664	543.3387	28.16	5.554716

GTAGYFVEPTVFR	1442.719	722.3667	27.05	1.898888
DM(+15.99)IGILEGAIR	1202.633	602.3264	27.82	5.161221
YAM(+15.99)LVDDGTVK	1226.585	614.3003	10.78	6.482394
KEQDFPGVVLR	1286.698	429.9128	15.73	4.11599
ALEEANADLEVK	1300.651	651.3365	11.69	3.521221
YADIM(+15.99)AALK	1010.511	506.2685	13.5	4.705672
LVLPGELAK	938.58	470.2993	18.42	3.321967
VTLVYGQM(+15.99)N(+.98)EPPGAR	1647.793	824.9133	13.34	2.617379
IGDTVELVGLRDTK	1514.83	505.954	16.78	5.7574
VAEFAFDYAR	1187.561	594.7896	22.71	5.828962
YPLVADLKK	1045.617	523.8161	11.75	2.437995
DLEKLSIEEVM(+15.99)LK	1561.827	521.6176	23.69	2.522041
GFGILDIK	861.496	431.7548	27.88	3.310065
NGVANFGEAVWFK	1437.704	719.8643	36.71	5.910272
AYWTEGRN(+.98)ELR	1394.658	465.8973	11.96	5.149186
FTQAN(+.98)SEVSALLGR	1492.752	747.3858	27.05	3.942627
YEDNGDAVN(+.98)N(+.98)LVVLVQK	1890.921	631.3234	32.09	3.094416
VYFDITIDDKPAGR	1608.815	537.287	22.39	4.397501
LGELLDTVASLR	1285.724	643.8702	32.8	7.152255
LQEVIDEIR	1113.603	557.8119	16.33	4.506228
VVAAYLLAALGGNAAPAEADIK	2097.147	700.0569	40.1	1.687362
ATAELKN(+.98)GEVLLLEN(+.98)VR	1870.005	624.3433	27.85	3.916233
GDLNVGAVLILPEGFELAPPDR	2291.216	764.7475	45.14	1.943136
GDLNVGAVLILPEGFEIAPPDR	2291.216	764.7475	45.14	1.943136
LEGEREVTLGFVDLM(+15.99)R	1878.951	627.3263	25.84	4.031899
EILLQPPSGDELPAR	1633.867	817.9459	23.67	3.854829
TGEVLPERLPEK	1366.746	456.5918	10.34	5.298619
ELEFYVK	926.4749	464.2468	18.81	5.473324
QLSADVGIPIR	1054.577	528.2961	13.42	5.903505
QLIVGVN(+.98)KM(+15.99)DSDTAGYKEER	2269.09	568.2863	10.14	4.053833
EQ(+.98)AEQLALALR	1241.662	621.8427	22.39	3.919039
QVGVPNIVVFLNK	1425.834	713.9278	34.69	2.141885
ISISTSGGSFR	1110.567	556.2933	12.87	3.948274
LKDEAVLLALAQK	1410.845	471.2897	23.3	3.489814
VYINQGM(+15.99)GVGAFR	1426.703	714.3588	15.51	4.424862
AADAVVAAIDQAALAIFLAQK	2069.152	690.7237	52.75	2.842295
FEELNM(+15.99)DLFR	1328.607	665.3149	25.91	4.613312
LLNLLGVK	868.5746	435.2964	26.36	4.303997
SAFIDFFR	1001.497	501.7547	35.32	5.511563
GIYPAVDPLDSTSR	1489.741	745.8846	21.81	3.613032
VNKVQEFGN(+.98)AM(+15.99)GADDFM(+15.99)QR	2317.01	773.3484	11.52	3.860506
VLDELTAR	1028.587	515.2961	18.91	4.925371
IAGLEVLR	869.5334	435.7755	19.44	4.473435

YPIYVGGN(+.98)R	1038.513	520.2693	12.91	4.807981
VRTIPLEVM(+15.99)VK	1299.758	434.2635	14.65	3.875368
Q(-17.03)NLEPLFEQYINNL	1872.937	937.4764	49.79	5.49873
VSASQIVADLSK	1216.666	609.3317	27.6	2.250846
IVSKFEEIAAEQR	1518.804	507.2741	11.89	1.577192
VYIN(+.98)Q(+.98)GM(+15.99)GVGAFR	1428.671	715.3436	17.95	4.424862
AYWTEGRNELR	1393.674	465.5688	10.69	5.149186
DIN(+.98)KQDVLLFIDNIFR	1963.041	655.3553	50.17	2.772713
TVLIMELINNI	1470.848	736.4315	48.21	3.547136
TGDIVLVGLR	1041.618	521.818	22.67	6.93384
DN(+.98)GLLLHIHR	1187.641	396.8941	14.26	3.308738
VLEQLTGQQPVFGK	1542.841	772.4413	21	3.334917
EFEFAFK	916.433	459.226	26.26	2.873072
YKELQDIIAILGLDELSEEDRLIVAR	3013.634	1005.552	47.72	4.551475
VVFDFVEK	981.5171	491.7683	22.81	2.756347
TRLEQEIATYR	1378.721	460.5855	12.8	2.578021
QSLQPLNVEIDPEIQK	1963.063	655.3632	32.91	3.125521
KEEKVEEEEDM(+15.99)GFSLFD	2319.958	774.3337	24.09	2.522927
AFPDAYIR	951.4814	476.7506	17.27	5.365223
AGAQIFQ(+.98)EGGLDYLG	1652.768	827.3961	39.14	6.067209
VVLADIAVGK	983.6015	492.8096	18.74	2.073574
GQLQEALFAQEYLAPR	1961.985	655.0048	47.46	3.240412
VAAASVLDVQEATDKKGK	1828.989	458.2549	9.68	3.912469
IVEVLLEK	941.5797	471.8	17.69	2.790797
AKDFETFLEPLFAAFK	1872.966	625.3292	48.42	3.727224
VYVSNLAWR	1106.587	554.2958	21.51	2.634664
ANLVVFPR	914.5338	458.2779	18.77	3.946264
SILGDGC(+57.02)IVEPDAR	1500.724	751.3743	19.67	1.852066
EYSSEVILAK	1137.592	569.804	12.91	3.790929
FDIYEAR	1025.518	513.7692	20.63	4.027463
VTIM(+15.99)PKDIQLAR	1399.786	467.6042	13.18	3.794464
VFPN(+.98)GEVQYLHPK	1527.772	510.2735	16.5	2.294477
AVITVPAYFN(+.98)DSQR	1580.783	791.4026	26.45	2.206031
VNIFPIR	857.5123	429.7639	22	4.606834
VLYLPGGLLAR	1170.712	586.3612	31.13	5.481946
QVQVSGFLVNRPSVR	1771.969	591.6651	16.44	3.808595
AGLQ(+.98)FPVGR	944.5079	473.2638	18.6	5.874735
DFTAQIQ(+.98)TLDIPGEVK	1774.899	888.4579	33.03	4.87734
GVLLVGPPGTGK	1093.65	547.8344	16.15	5.365366
IVPVTLELGGK	1124.68	563.3513	19.3	3.166793
LGIN(+.98)GFGR	833.4395	417.7303	16.78	9.153717
ALGLPIERPK	1092.666	365.2323	12.83	3.893796
E(-18.01)IKFEFETIDTL	1465.734	733.874	40.03	0.976619
VADYVSQ(+.98)LR	1050.535	526.2778	14.51	5.212766

DIN(+.98)KQ(+.98)DVLLFIDNIFR	1964.025	655.6825	50.63	2.772713
ASTLQDLLEK	1116.603	559.3079	24.36	3.702676
WELLQQVNTSTR	1473.758	492.2597	26.12	3.665902
TAGLSADPETFAR	1334.647	668.3397	14.91	4.291674
LYVTGQ(+.98)FLGYK	1288.67	645.3419	26.83	2.464068
DYQELMNVK	1138.533	570.2762	17.48	4.366107
VFEIGPVFR	1062.586	532.3008	28.87	2.747289
FGAQLFR	837.4497	419.7352	18.11	6.255172
SLLDIVVFGR	1117.65	559.8327	42.28	4.335317
TVIAFVDDPTGYK	1424.719	713.3657	24.13	0.599964
IINEPTAASLAYGLDKK	1802.978	601.9983	15.64	1.235513
IPDWFLNR	1059.55	530.7814	29.68	4.285133
WN(+.98)PSKEQDFPGVVLR	1771.889	591.6418	23.31	4.253433
LIFPYVDLK	1106.638	554.3281	33.82	2.279278
AAAALADTKAKLDAVIAK	1740.014	436.0157	12.51	2.545651
TTLTAAITM(+15.99)ALAAR	1419.776	474.2673	36.42	2.495911
LGDEEAGLIGGN(+.98)QLR	1541.769	771.8904	21.99	8.707296
DFVFPM(+15.99)FR	1073.5	537.7583	32.9	3.510474
QNLEPLFEQYINNLR	1889.964	630.9958	42.64	5.49873
AVIAFLDELVK	1216.707	609.3608	41.49	3.341127
IGLIGDLAN(+.98)GR	1098.603	550.3014	23.76	7.129676
TAELAIN(+.98)AIR	1071.592	536.8054	18.32	5.050767
LN(+.98)QIPLFIK	1085.648	543.8318	29.96	5.554716
YAVVSAIAASALPALVM(+15.99)AR	1889.044	630.6887	40.38	4.56278
TSQNSELNNMQ(+.98)DLVEDYKK	2256.022	753.0206	25	2.5751
ILM(+15.99)VGLDAAGK	1102.606	552.308	15.66	3.962946
FVDLGADSLDTVEIM(+15.99)M(+15.99)ALE EK	2357.102	1179.564	38.87	3.099348
DSVLLPEVK	998.5648	500.2907	19.05	2.549355
GAALN(+.98)AVQVAELLL	1381.782	691.8975	51.64	4.916586
LALQELVDK	1027.591	514.8057	21.86	2.167461
VPFAISPGSEQ(+.98)IR	1400.73	701.3635	21.03	4.557735
IM(+15.99)YALTAIK	1038.578	520.2951	17.13	3.172557
GGLDFTKDDEN(+.98)VN	1423.61	712.8136	15.19	6.73869
YFDFEFTAK	1166.528	584.2742	29.15	4.554449
AVQLVILPR	1007.649	504.8337	23.4	3.159082
IFIEFLER	1065.586	533.8004	34.11	3.782676
VFLENVVR	974.5549	488.2876	19.19	4.298178
GFDPLGLSR	960.5028	481.2614	24.43	6.501442
ELLSFYK	898.48	450.2503	20.42	3.06093
VN(+.98)DLLDFK	963.4913	482.7529	24.64	3.435457
EDIVN(+.98)VIK	929.507	465.764	22.7	3.582394
A(+42.01)AVAEELRK	1027.566	514.7931	14.65	2.266066
LLN(+.98)LLGVK	869.5586	435.7882	28.27	4.303997

IFN(+.98)VLGEPVDN(+.98)LGPVN	1697.851	849.9336	20.09	4.410864
VVILLSGR	855.5541	428.7881	16.6	3.339176
AGASIFN(+.98)EDGLNYLGN	1654.747	828.3892	39.11	6.03802
VLEWFR	848.4545	425.2354	26.08	5.857105
M(+15.99)EFPDPVIK	1090.537	546.2723	16.68	3.441903
LNAEQALEM(+15.99)AFYVASR	1827.882	610.3053	44.28	3.028035
GVDLEQLLDM(+15.99)STDELVELFPAR	2505.231	836.0873	53.05	5.079449
AEELLEQLR	1099.587	550.8052	20.07	5.399862
GLVVPVLR	851.5593	426.7897	21.79	4.495641
LN(+.98)DVEDVER	1088.499	545.2657	9.79	5.280097
SM(+15.99)AILN(+.98)SFIVDQFEK	1757.855	879.9428	39.08	4.101922
IPSAVGYQPTLATDLGQLQER	2256.175	753.0625	30.29	3.29774
YPVVVRFEK	1135.639	379.5575	12.34	3.788755
KIGDTLEEFLLLEATPDPK	2015.046	672.6815	36.85	1.126526
VLEQ(+.98)ELIPVQR	1323.74	662.8674	21.31	2.381773
FDIDAN(+.98)GILSVTATDKGTGK	2023.011	675.3553	25.56	4.402523
TAIAVDTILN(+.98)QK	1286.708	644.3494	18.12	2.083183
GQLPQQPVVVR	1219.704	610.8594	10.74	3.483201
LTVAIEDPR	1012.555	507.2852	13.21	2.415986
Q(-17.03)SVEADINGLRR	1339.684	670.8515	18.75	4.268072
MSIADIPR	901.4691	451.7457	16.95	3.088563
YGVELIGAK	948.528	475.2749	15.8	5.754656
QGQFQPM(+15.99)PIENQIVVLYAATR	2418.237	807.0841	36.26	6.690697
ADLN(+.98)VPLDGDLK	1269.645	635.8294	22.53	3.52292
QFADVLA AVR	1088.598	545.3071	26.12	3.710027
SKEQDFPGVVLR	1373.73	458.925	14.61	3.233406
LAM(+15.99)VSFLGF	999.5099	500.7608	44.17	5.720883
VAVLGAAGGIGQPLSLLM(+15.99)K	1810.039	604.345	34.82	3.397347
VLTPAEVADYLA EVE	1617.814	809.9134	47.32	2.580738
Q(+.98)RAQARGGTAAAAAAK	1498.796	500.6027	10.24	2.705767
PVLIGEPGVGK	1064.623	533.319	13.78	4.361604
ISGLIYEETR	1179.614	590.8173	15.36	3.121454
AIDLIDEAGSR	1158.588	580.2949	16.33	3.979281
AIDLLDEAGSR	1158.588	580.2949	16.33	3.979281
RVLELSLEEAR	1313.73	438.9197	15.21	4.021122
EQLLLEIK	984.5855	493.3007	23.37	3.549154
LWELLK	800.4796	401.2494	26.89	5.482051
ALLELEEELRK	1341.75	448.2585	22.49	2.626992
WEAVLTELK	1087.591	544.8084	25.02	3.224031
SLN(+.98)LTDITK	1004.539	503.2787	15.91	3.709303
LPM(+15.99)FGC(+57.02)TDGGQVIR	1565.733	783.876	19.67	4.761224
DNVALPGIAAFFK	1361.734	681.8746	44.17	3.426364
LALQELVDKTQQ(+.98)FVEGTVR	2174.158	725.725	45.46	5.717316
QM(+15.99)VLDLLQTLEK	1445.78	723.8918	36.82	3.400081

EGLFEIGR	919.4763	460.748	22.67	8.059816
EGLFELGR	919.4763	460.748	22.67	8.333114
LLFEALK	832.5058	417.2619	24.18	4.855168
DLAVQTVLNVGSR	1370.752	457.9254	21.4	2.859214
SPAEGAYSEGFIR	1382.647	692.3398	15.5	5.933137
FTIEEIR	906.4811	454.2501	17.41	3.646572
VLNLEEGGAFTVSGAEDILAALS	2275.158	1138.586	51.69	3.118395
VEPYVAYGYPNLK	1511.766	756.8928	21.67	3.44017
TSQNSELNLM(+15.99)QDLVEDYKK	2271.033	758.0211	11.31	2.5751
FGLYEYFK	1065.517	533.7653	31.06	6.950443
LPWGAM(+15.99)NIDLVIEGTGVFIDEAGAG K	2688.347	897.1262	50.86	4.436161
AGIQ(+.98)LSDTFVK	1178.618	590.3085	22.29	6.045974
GEFPGDYGWDTAGLSADPQTFAR	2457.087	820.0232	33.81	5.650221
SIGINEFGASAPGPLLYEK	1962.01	982.0042	32.89	3.128158
KGDLN(+.98)VGAVLILPEGFELAPPDRIPEE M(+15.99)K	3163.648	791.9232	37.04	7.172476
KGDLN(+.98)VGAVLILPEGFEIAPPDRIPEE M(+15.99)K	3163.648	791.9232	37.04	7.172476
AYWTEGRN(+.98)ELRR	1550.759	388.7003	8.94	3.823191
ADILDN(+.98)ALLRPGR	1423.778	475.6003	23.93	3.930987
TVFC(+57.02)IALK	950.5259	476.2709	22.46	2.177559
LATAQ(+.98)AGLAEAQAK	1342.709	672.3666	15.75	4.014241
EGGEPIPEGLLWLLM(+15.99)TGEM(+15.99) PTVDQAK	2842.377	948.4745	48.01	6.271215
QFPTVGFEK	1051.534	526.7772	18.18	5.551895
A(+42.01)AVAEELR	899.4712	450.7443	21.02	4.169492
ITVTSEIPM(+15.99)SK	1220.632	611.3225	10.46	1.614229
RISGLIYEETR	1335.715	446.2482	12.2	3.492581
AELLQYFR	1038.55	520.284	27.14	4.934594
VLDITDDDLGN(+.98)LITAGLR	1913.995	958.0082	45.26	5.160092
EWELSFR	965.4606	483.7397	26.61	4.276404
LDLFDDR	892.429	447.2246	21.23	2.590032
Q(-17.03)M(+15.99)VLDLLQTLEK	1428.753	715.3823	48.17	3.400081
Q(-17.03)IEGGEFFVLK	1361.723	681.8671	44.71	2.940485
DELTLEGIK	1016.539	509.2797	19.23	3.665898
SLVDELRPELPER	1551.826	518.2823	24.78	3.414682
FWDFR	769.3547	385.6863	24.35	5.286684
AAVEEVRAQIAALAPA	1578.873	790.4423	20.83	1.201645
LAGGVAVIK	826.5276	414.2717	10.03	2.547224
VATVSLPR	841.5021	421.7596	10.62	4.215673
INIDEIGR	928.4977	465.2605	14.44	5.168341
LIPDDDDDEELVEK	1528.714	765.3652	15.2	2.818715
YVVLF	639.3632	640.3691	35.53	3.326262

EFPNVLTLR	1087.603	544.8099	28.97	3.849946
LAVGDKLPTDVK	1254.718	419.2485	11.15	2.189824
DFVFPMFR	1057.506	529.7596	40.24	3.510474
EVFDFPALR	1092.56	547.2861	30.64	3.767774
N(+.98)LQDIIAILGM(+15.99)DELSEEDKM(+15.99)TVAR	2736.32	913.1182	45.9	4.412734
FIEAFAAYLK	1171.628	586.8267	33.83	3.800309
VN(+.98)YAGVSTN(+.98)NYALDEVEEVKA	2286.054	763.0262	29.2	1.759802
DLGEAIEAFLK	1204.634	603.3243	47.07	3.908448
FLVRNM(+15.99)VDASALR	1506.798	503.2754	11.36	2.985447
WAM(+15.99)AAVAGILFTEILGK	1805.975	602.9988	48.88	4.228942
IM(+15.99)NVIGEPVDEK	1358.675	680.348	11.76	1.995767
TAIAIDAIINQ(+.98)K	1270.713	636.3608	24.12	1.493575
TVAQALEELEGR	1314.678	658.3425	30.04	2.544612
ISTVQ(+.98)EAADLIAAQ(+.98)M(+15.99)DK	1820.871	607.9688	33.87	3.345185
AAAAAAAAASAAAKQAADQ(+.98)AAAK	2012.029	671.6837	5.32	2.807077
IFNVLGEPVDN(+.98)LGPVN	1696.867	849.4438	18.86	4.410864
VM(+15.99)GVTTLDVVR	1204.649	603.3239	15.61	3.872423
EVFDDYLR	1055.492	528.7567	21.05	5.761082
QLNEGQ(+.98)AGDNVGLLR	1696.874	849.4434	26.81	5.232613
DIIPLEQVTR	1295.745	648.8798	38	2.602901
GPPLFELLDEIESAAR	1755.904	586.3099	51.1	4.494698
DLTEDLLAK	1016.539	509.2776	21.86	4.440346
LLINVPDELLDR	1521.877	761.9478	38.68	3.157852
DSLYPGGFFDPLGLADDPDTLAEK	2665.28	889.4266	49.04	2.734123
ATFDFRPGM(+15.99)IGK	1354.67	452.5676	16.22	3.809258
LFEGEALLR	1046.576	524.2953	23.55	3.972259
VGVLN(+.98)VPDWAEAGK	1454.741	728.3735	30.22	6.456392
GFAHVQFEELEGAAK	1631.794	544.9403	19.94	4.492284
GLTLIFVETK	1119.654	560.8336	30.7	3.392461
STQLELHIVTK	1267.714	423.5823	12.65	1.692475
STTTGRLLFELGGIPER	1845.995	616.3336	28.03	2.046631
TGDVM(+15.99)ILKSDATLK	1506.796	503.2748	12.62	6.459877
LADALLRPR	1023.619	512.8127	21.16	4.885358
DVVIVGVR	855.5178	428.7713	14.47	3.034261
YALPIDC(+57.02)KPIR	1344.722	449.2501	15.07	4.40461
VASLIEEVAR	1085.608	543.8127	20.85	5.260151
IVFVDN(+.98)EDFLKELEQK	1965.993	656.3271	37.56	2.303437
VLQDYRNLQDIIAILGM(+15.99)DELSEEDKM(+15.99)TVAR	3509.738	878.4498	44.83	3.876194
STN(+.98)ALTDEAQALLK	1474.752	738.3862	30.4	2.693701
DVLGVVSIK	1043.586	522.7986	23.09	1.134097
EAVGTWN(+.98)SFTVV	1309.619	655.8162	36.75	2.402072
DVKQYN(+.98)EEN(+.98)GITPPARPPR	2182.065	546.5233	9.22	2.068624

KSPLTKPADAM(+15.99)ER	1458.75	487.2529	13.35	4.925089
GLVTEVLR	885.5283	443.7716	17.86	5.112097
LLAELEGK	871.5015	436.762	13.46	3.4709
VLPWFTKEEIEK	1517.813	506.9503	24.21	4.415581
LILWDLR	927.5541	464.7864	32.86	4.467812
YLPFLQK	907.5167	454.7675	24.21	4.294557
VLPWFTK	889.5062	445.7603	27.32	5.10622
SISISVAR	831.4814	416.75	11.01	4.141661
VN(+.98)IFPIR	858.4963	430.2503	23.69	4.606834
LN(+.98)DVEDVERELPGELKK	1983.016	662.0054	26.48	4.494859
LGDEEAGLIGGNQ(+.98)LR	1541.769	771.8938	21.74	8.707296
VVDLLAPY	888.4956	445.2553	33.54	3.468952
ELIEDLTVLR	1199.676	600.8416	30.88	3.953088
KDDIELEPRFN(+.98)LGTESLSAGVTWK	2705.355	677.3474	29.54	2.437032
EGLLAYLR	933.5283	467.7749	26.65	8.255118
Q(-17.03)AGFDIIYEARDLDPQ(+.98)GVR	2259.117	754.044	40.71	4.623152
M(+42.01)(+15.99)KN(+.98)DEGEIVDLYIPR	1849.877	617.6369	31.66	4.646898
VEIPAFIPRPDLIDQLVR	2090.189	697.7372	43.04	4.243194
ILGLLLDM(+15.99)TR	1159.664	580.8414	28.45	4.35454
AFLVGLR	774.4752	388.2451	21.16	3.200763
ALLQDIAIVTGAEFVAK	1757.993	587.0084	45.64	3.091891
AEVLGDLVER	1099.587	550.8023	18.92	3.872045
L(+42.01)TYYPDYQPKDTDILAAFR	2432.19	811.7375	40.68	3.180763
TDN(+.98)ANILLQIDNAR	1570.795	786.3933	39.35	3.468261
LSADPETFAR	1105.54	553.7839	12.77	4.189782
WVLPLN(+.98)GR	954.5287	478.2725	26.86	3.703407
E(-18.01)SMELYQ(+.98)DLFVPK	1580.743	791.391	33.74	2.960097
LTTREGQLVVEAEK	1571.852	524.957	9.65	1.833367
IFNVLGEPVDNLGPVN(+.98)	1696.867	849.4421	18.62	4.410864
LAAVLFPTGETLGDVR	1657.904	829.9496	31.75	5.848414
GFPFEVPQ(+.98)EYANLPQLK	1976.988	989.5074	38.44	4.329332
LAGDYGFDPLGLGVDSDRLK	2107.059	703.3628	32.44	4.210905
DVDLQEAYGKGEAGSSEDEEEGGEEGAAA GDQAG	3326.345	832.5944	48.78	1.607679
VN(+.98)YAGVSTNN(+.98)YALDEVVEEVKA	2286.054	1144.039	28.5	1.759802
S(+42.01)AQ(+.98)LVWELVK	1214.655	608.3331	47.77	5.003347
LAM(+15.99)LSM(+15.99)FGF	1047.477	524.7496	37.52	6.481973
TVIWN(+.98)GPM(+15.99)GVFEFDAFSK	2060.955	1031.493	41.55	2.96499
AVGVVPLHLN(+.98)GK	1203.698	402.2408	16.95	2.543453
RGGADAVAAGAEER	1328.643	665.3369	13.86	5.627608
LSELLEGFIK	1147.649	574.8304	33.26	6.369409
NGVASFGEAVWFK	1410.693	706.3521	35.93	5.910272
AVAAAETAGSPPK	1168.609	585.317	16.86	1.258114
LIN(+.98)GILDAK	1027.591	514.8024	22.35	2.604158

LADEITYFLEK	1340.686	671.35	26.23	4.511042
FEKVNYAGVSTNNYALDEVVEEVKA	2688.292	897.1016	28.05	1.076131
KEEKVEEEEDM(+15.99)GF	1857.746	620.2605	8.14	4.663115
VFPNGEVQYLHPK	1526.788	509.9383	17.76	2.294477
FIGGFLVK	879.5218	440.7714	27.39	2.462032
S(+42.01)AQLVWELVK	1213.671	607.8406	46.03	5.003347
VLEQLTGQ(+.98)QPVFGK	1543.825	772.9136	23.18	3.334917
GLPALVGLLR	1007.649	504.8331	30.1	7.372726
VVDDN(+.98)FGIK	1006.497	504.2642	15.88	3.427976
VFLEN(+.98)VVR	975.5389	488.7787	21.93	4.298178
TVVELEGVGAGGK	1214.651	608.332	20.12	2.460017
LYPGGPFDPLGLADDPEVLAELK	2425.242	809.4077	47.18	3.265296
LQAQAEQLADAARK	1640.848	821.4326	13.59	0.815697
ALDKPFAM(+15.99)PVEDVFSIQ(+.98)GR	2136.056	713.0286	31.21	3.799749
E(-18.01)M(+15.99)SLLLR	858.4633	430.2401	21.09	5.70411
LGYSDEDLLPLLDVSVK	1988.072	663.6976	47.67	5.545578
LIFAFK	737.4476	369.7321	25.34	2.605729
TSQNSELNNMQDLVEDYK	2126.943	1064.485	29.1	1.590976
LASYLDKVQ(+.98)ALEEANNDLENK	2377.165	793.3861	27.23	3.214425
IDGYIYR	898.4548	450.239	11.39	2.804397
ALVLVGGYGTR	1104.629	553.3224	18.15	4.532362
GAPAAAAAPAAGGAAAAEEK	1692.843	847.4302	6.85	3.444037
TAIAIDAIIIN(+.98)QK	1270.713	636.3615	26.3	1.493575
ELVAQEGTDVN(+.98)EKDDEGR	2003.892	668.9723	7.37	4.27714
VAIN(+.98)GFGR	833.4395	417.7303	14.02	6.238151
SELAC(+57.02)VYAVLALADDGLEVTPENIV	3103.6	1035.536	51.62	2.310158
TLTK				
LHNNQLEGSIPAEWGQ(+.98)PTAFAR	2436.182	813.0746	36.83	4.424236
EFLEGLR	862.4548	432.2408	19.02	4.550042
ITPDDLRL	941.5182	471.7665	20.67	4.315457
LFDPVYLFDDQ	1312.634	657.3214	47.78	-0.25497
LGDEEAGLIGGN(+.98)Q(+.98)LR	1542.753	772.3834	23.46	8.707296
SWDVFAEILEK	1335.671	668.8441	43.53	3.975435
ALAIAALLSLR	1110.712	556.3574	36.7	4.318589