

Table 3. Semi-trypsin 0.25 Da search

Peptide no.	IPI number	Sequence	m/z	z	MS2-score	MS3-ion	MS3-score	Combined
1	IPI00120451.1	AIGLPEDLIQK	598.9539	2	28	P y7	95.65	123.7
2	IPI00120451.1	AIGLPEDLIQK	598.8489	2	42	P y7	95.65	137.7
3	IPI00120451.1	AIGLPEDLIQK	598.8475	2	44	P y7	95.65	139.7
4	IPI00120451.1	AIGLPEDLIQK	598.8488	2	46	P y7	116	162.0
5	IPI00120451.1	AIGLPEDLIQK	598.8474	2	51	P y7	95.65	146.7
6	IPI00120451.1	GVSEIVHEGK	352.1891	3	15	y6	16.9	31.9
7	IPI00120451.1	GVSEIVHEGK	527.7807	2	53	y8	58.1	111.1
8	IPI00120451.1	GVSEIVHEGK	527.7807	2	58	y5	57.05	115.1
9	IPI00120451.1	GVSEIVHEGKK	394.8877	3	17	y4	0.9	17.9
10	IPI00120451.1	GVSEIVHEGKK	591.8279	2	54	y6	52.95	107.0
11	IPI00120451.1	KIKLTITYGP	567.3072	2	17	y6	6.6	23.6
12	IPI00120451.1	LTITYGPK	892.5302	1	29	y5	38.2	67.2
13	IPI00120451.1	LTITYGPK	892.5302	1	29	y5	38.2	67.2
14	IPI00120451.1	MNFSGK	725.3350	1	20		0	20.0
15	IPI00120451.1	MNFSGK	725.3316	1	25		0	25.0
16	IPI00120451.1	MVTTFK	363.6965	2	16	y4	44.5	60.5
17	IPI00120451.1	MVTTFK	726.3856	1	21		0	21.0
18	IPI00120451.1	MVTTFK	726.3855	1	24		0	24.0
19	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	796.0687	3	15		0	15.0
20	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5906	2	22	y6	29.45	51.5
21	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	796.3984	3	26	y6	69.75	95.8
22	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5955	2	59	y8	46.75	105.8
23	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5966	2	61	y6	69.75	130.8
24	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5966	2	64	y8	44.3	108.3
25	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0949	2	66	y6	75.6	141.6
26	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5966	2	66	y8	12.15	78.2
27	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0951	2	67	y8	20.1	87.1
28	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0965	2	67	y8	33.75	100.8
29	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5961	2	69	y6	69.75	138.8
30	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5967	2	69	y7	57.05	126.1
31	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	69	y4	41.95	111.0
32	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5952	2	69	y8	21.2	90.2
33	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5969	2	72		0	72.0
34	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5961	2	72	y8	44.3	116.3
35	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0954	2	72	y8	58.1	130.1
36	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5898	2	72	y8	73.4	145.4
37	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5959	2	72	y8	61.35	133.4
38	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5953	2	72	y8	44.3	116.3

39	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5961	2	72	y6	69.75	141.8
40	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	72	y8	31.95	104.0
41	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	72	y8	33.75	105.8
42	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	73	y8	33.75	106.8
43	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5954	2	74	y8	58.1	132.1
44	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5959	2	75	y8	31.95	107.0
45	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5960	2	75	y8	33.75	108.8
46	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	76	y8	12.85	88.9
47	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5973	2	77	y8	33.75	110.8
48	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0951	2	77	y8	30.4	107.4
49	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5968	2	78	y8	55.3	133.3
50	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	78	y6	52.95	131.0
51	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	78	y8	31.95	110.0
52	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5962	2	78		0	78.0
53	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	78	y8	12.15	90.2
54	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5951	2	79	y8	55.3	134.3
55	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	79	y8	44.3	123.3
56	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5966	2	79	y6	69.75	148.8
57	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5969	2	79		0	79.0
58	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5958	2	79	y8	22.4	101.4
59	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5956	2	80	y8	73.4	153.4
60	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5960	2	81	y6	89	170.0
61	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5965	2	81	y8	30.4	111.4
62	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	81	y8	30.4	111.4
63	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5961	2	82	y8	22.4	104.4
64	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	83	y8	55.3	138.3
65	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5952	2	83	y8	31.95	115.0
66	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	83	y6	69.75	152.8
67	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5967	2	83	y6	52.95	136.0
68	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5966	2	83	y8	20.1	103.1
69	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5962	2	83		0	83.0
70	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5965	2	84	y8	31.95	116.0
71	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	85	y8	33.75	118.8
72	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	86	y8	55.3	141.3
73	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5956	2	86	y4	18.5	104.5
74	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5961	2	86	y8	46.75	132.8
75	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5957	2	86		0	86.0
76	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5967	2	86	y7	46.75	132.8
77	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5951	2	87	y7	35.8	122.8
78	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5955	2	88	y8	46.75	134.8
79	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5954	2	88	y6	57.05	145.1

80	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5960	2	88	y8	31.95	120.0
81	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5950	2	88	y8	31.95	120.0
82	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0945	2	89	y8	42.15	131.2
83	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5943	2	89	y8	77.6	166.6
84	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5964	2	91	y8	44.3	135.3
85	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1194.0950	2	94		0	94.0
86	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5952	2	94	y8	31.95	126.0
87	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5955	2	94	y6	69.75	163.8
88	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5958	2	94	y8	33.75	127.8
89	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5954	2	94	y8	33.75	127.8
90	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5957	2	94	y8	42.15	136.2
91	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5962	2	94	y8	21.2	115.2
92	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5960	2	94	y8	44.3	138.3
93	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5957	2	95	y8	21.2	116.2
94	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5955	2	97	y7	46.75	143.8
95	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	97	y8	35.8	132.8
96	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5960	2	98	y6	52.95	151.0
97	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5963	2	99	y8	42.15	141.2
98	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5947	2	100		0	100.0
99	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5966	2	102	y8	46.75	148.8
100	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5960	2	111	y8	31.95	143.0
101	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5958	2	111	y8	46.75	157.8
102	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5958	2	116	y8	33.75	149.8
103	IPI00120451.1	SVTELANGDTITNTMTLGDIVYK	1193.5962	2	135		0	135.0
104	IPI00120451.1	YQLQSQENFEPFMK	894.9162	2	42	y5	29.45	71.5
105	IPI00120451.1	YQLQSQENFEPFMK	895.4200	2	50		0	50.0
106	IPI00120451.1	YQLQSQENFEPFMK	903.4181	2	53		0	53.0
107	IPI00120451.1	YQLQSQENFEPFMK	894.9161	2	56	P y4	62.3	118.3
108	IPI00120451.1	YQLQSQENFEPFMK	894.9595	2	59		0	59.0
109	IPI00120451.1	YQLQSQENFEPFMK	894.9595	2	59	y5	32.3	91.3
110	IPI00120451.1	YQLQSQENFEPFMK	895.4165	2	60	P y4	62.3	122.3
111	IPI00120451.1	YQLQSQENFEPFMK	895.4450	2	63	P y4	62.3	125.3
112	IPI00120451.1	YQLQSQENFEPFMK	895.4201	2	65	P y4	62.3	127.3
113	IPI00120451.1	YQLQSQENFEPFMK	895.4493	2	65	y5	49.1	114.1
114	IPI00120451.1	YQLQSQENFEPFMK	894.9161	2	65	P y4	44.5	109.5
115	IPI00120451.1	YQLQSQENFEPFMK	895.4199	2	68	P y4	62.3	130.3
116	IPI00120451.1	YQLQSQENFEPFMK	895.4166	2	88		0	88.0
117	IPI00283531.4	AFLSSPEHVNRPINGNGK	646.6683	3	15		0	15.0
118	IPI00283531.4	AFLSSPEHVNRPINGNGK	646.3373	3	21		0	21.0
119	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.3530	3	15		0	15.0
120	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.6814	3	15		0	15.0

121	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.0278	3	16	P y++14	10.05	26.1
122	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.6900	3	16	y6	14.55	30.6
123	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	690.0186	3	18	y6	6.2	24.2
124	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.3557	3	20		0	20.0
125	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.6874	3	21	y5	16.9	37.9
126	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.6874	3	22		0	22.0
127	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.3590	3	23	y++15	4.95	28.0
128	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	689.3591	3	26		0	26.0
129	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	1034.0237	2	38		0	38.0
130	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	1034.0238	2	43	y5	7.7	50.7
131	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	1033.5317	2	44	P y++14	4.8	48.8
132	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	1034.0237	2	47		0	47.0
133	IPI00283531.4	AFLSSPEHVNRPINGNGKQ	1034.5158	2	50		0	50.0
134	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	534.5459	4	15	y7	82.65	97.7
135	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	712.7377	3	22	y8	5.35	27.4
136	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	712.7286	3	26	y8	90.2	116.2
137	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	1068.5847	2	28	c b6	27.2	55.2
138	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	712.7286	3	31	y8	58.1	89.1
139	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	712.4055	3	32	y7	46.75	78.8
140	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	712.4029	3	34	y5	27.2	61.2
141	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	712.4029	3	36	y8	58.1	94.1
142	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	1068.5850	2	41	y7	1.6	42.6
143	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	1068.5851	2	42	y7	25.35	67.4
144	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	1068.5850	2	44	c b6	38.2	82.2
145	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	1068.5849	2	44	c b6	6.6	50.6
146	IPI00283531.4	ALPGHLKPFETLLSQNQGGK	1068.5850	2	49		0	49.0
147	IPI00283531.4	EAAQMDMVNDGVEDLR	896.8988	2	104	y6	25.35	129.4
148	IPI00283531.4	EAAQMDMVNDGVEDLRGK	660.3086	3	18		0	18.0
149	IPI00283531.4	EAAQMDMVNDGVEDLRGK	660.6391	3	22		0	22.0
150	IPI00283531.4	EAAQMDMVNDGVEDLRGK	659.9718	3	36		0	36.0
151	IPI00283531.4	EAAQMDMVNDGVEDLRGK	665.6456	3	37		0	37.0
152	IPI00283531.4	EAAQMDMVNDGVEDLRGK	659.9717	3	38		0	38.0
153	IPI00283531.4	EAAQMDMVNDGVEDLRGK	659.9717	3	41		0	41.0
154	IPI00283531.4	EAAQMDMVNDGVEDLRGK	989.9548	2	53	y8	31.95	85.0
155	IPI00283531.4	EAAQMDMVNDGVEDLRGK	989.9541	2	54	y8	46.75	100.8
156	IPI00283531.4	EAAQMDMVNDGVEDLRGK	989.9548	2	74	y8	31.95	106.0
157	IPI00283531.4	FEDGDLTLYQSNAILR	928.4668	2	24	y8	11	35.0
158	IPI00283531.4	FEDGDLTLYQSNAILR	619.3141	3	38	c b8	11.55	49.6
159	IPI00283531.4	FEDGDLTLYQSNAILR	619.3235	3	46		0	46.0
160	IPI00283531.4	FEDGDLTLYQSNAILR	928.4664	2	60	y8	19.15	79.2
161	IPI00283531.4	FEDGDLTLYQSNAILR	928.4981	2	61	y8	40.2	101.2

162	IPI00283531.4	FEDGDLTYQSNAILR	928.4670	2	64	y6	23.75	87.8
163	IPI00283531.4	FEDGDLTYQSNAILR	928.4664	2	66	y8	19.15	85.2
164	IPI00283531.4	FEDGDLTYQSNAILR	928.4672	2	67	y7	12.85	79.9
165	IPI00283531.4	FEDGDLTYQSNAILR	928.4710	2	68	y6	41	109.0
166	IPI00283531.4	FEDGDLTYQSNAILR	928.4671	2	69	y7	46.75	115.8
167	IPI00283531.4	FEDGDLTYQSNAILR	927.9657	2	69	y6	27.2	96.2
168	IPI00283531.4	FEDGDLTYQSNAILR	928.4669	2	70	c b8	44.3	114.3
169	IPI00283531.4	FEDGDLTYQSNAILR	928.4667	2	72	y8	19.15	91.2
170	IPI00283531.4	FEDGDLTYQSNAILR	928.4707	2	75	y8	28.95	104.0
171	IPI00283531.4	FEDGDLTYQSNAILR	927.9657	2	78	y8	33.75	111.8
172	IPI00283531.4	FEDGDLTYQSNAILR	928.0074	2	89	c b8	22.4	111.4
173	IPI00283531.4	FEDGDLTYQSNAILR	927.9658	2	92		0	92.0
174	IPI00283531.4	FEDGDLTYQSNAILR	927.9656	2	93	y6	38.2	131.2
175	IPI00283531.4	LSARPK	336.2137	2	24	y5	16.9	40.9
176	IPI00283531.4	MDMVNDGVEDLRGK	789.8805	2	40	y8	21.2	61.2
177	IPI00283531.4	MLLADQGGQSWK	638.8205	2	45	y8	55.3	100.3
178	IPI00283531.4	MLLADQGGQSWKEEVVTIDTWMQGLLK	756.1373	4	26		0	26.0
179	IPI00283531.4	MLLADQGGQSWKEEVVTIDTWMQGLLK	756.1395	4	34		0	34.0
180	IPI00283531.4	MLLADQGGQSWKEEVVTIDTWMQGLLK	1007.5187	3	46	y4	15.6	61.6
181	IPI00283531.4	MLLADQGGQSWKEEVVTIDTWMQGLLK	1007.5190	3	55	y7	22.4	77.4
182	IPI00283531.4	MLLADQGGQSWKEEVVTIDTWMQGLLKPTCLYGQLPK	1045.7422	4	46		0	46.0
183	IPI00283531.4	MLLADQGGQSWKEEVVTIDTWMQGLLKPTCLYGQLPK	1045.5368	4	49	y++16	14.9	63.9
184	IPI00283531.4	MPPYTIVYFPVR	741.8938	2	48	y5	14.55	62.6
185	IPI00283531.4	NQREAAQMDMVNDGVEDLRGK	793.0375	3	50	y4	7.1	57.1
186	IPI00283531.4	NQREAAQMDMVNDGVEDLRGK	793.0398	3	53	y8	33.75	86.8
187	IPI00283531.4	PPYTIVYFPVR	676.3740	2	60	y7	46.75	106.8
188	IPI00283531.4	SLGLYGK	369.2132	2	21	y5	41	62.0
189	IPI00283531.4	SLGLYGK	737.4191	1	21		0	21.0
190	IPI00283531.4	YTIVYFPVR	579.3317	2	35	y5	52.95	88.0
191	IPI00283531.4	YVTLIYTNYENGK	789.8864	2	20		0	20.0
192	IPI00283531.4	YVTLIYTNYENGK	789.4347	2	33	y8	31.95	65.0
193	IPI00283531.4	YVTLIYTNYENGK	789.8862	2	34		0	34.0
194	IPI00283531.4	YVTLIYTNYENGK	789.9239	2	36		0	36.0
195	IPI00283531.4	YVTLIYTNYENGK	789.4102	2	44	y8	58.1	102.1
196	IPI00283531.4	YVTLIYTNYENGK	789.4102	2	51	y8	73.4	124.4
197	IPI00283531.4	YVTLIYTNYENGK	789.9198	2	52		0	52.0
198	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.4053	3	17	b5	6.2	23.2
199	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.4018	3	17	y++10	1.75	18.8
200	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.3661	3	24		0	24.0
201	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.7046	3	25	b5	32.3	57.3
202	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.3661	3	26	b5	27.2	53.2

203	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.3824	3	27	b5	32.3	59.3
204	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.7047	3	34	b5	36.1	70.1
205	IPI00283531.4	YVTLIYTNYENGKNDYVK	733.6947	3	49		0	49.0
206	IPI00283531.4	YVTLIYTNYENGKNDYVK	1100.0393	2	64	y7	35.8	99.8
207	IPI00283531.4	YVTLIYTNYENGKNDYVK	1099.5481	2	90	y7	27.2	117.2
208	IPI00323816.2	DGFNPAHVEAGLYGSR	845.4345	2	42	y++15	83.4	125.4
209	IPI00323816.2	GSFVLLDGETFEVK	770.8984	2	39	y8	31.95	71.0
210	IPI00323816.2	GTWEKPGGASPMGYDFWYQPR	811.0382	3	24	y4	15.6	39.6
211	IPI00323816.2	GTWEKPGGASPMGYDFWYQPR	811.0382	3	29	c b10 P	18.3	47.3
212	IPI00323816.2	HEIIQTLQMTDGLIPLEIR	741.0743	3	30	b6	1.4	31.4
213	IPI00323816.2	HEIIQTLQMTDGLIPLEIR	741.0940	3	39		0	39.0
214	IPI00323816.2	HEIIQTLQMTDGLIPLEIR	1111.1101	2	59	y8	21.2	80.2
215	IPI00323816.2	HNVMVSTEWAAPNVFK	610.6380	3	18	y6	69.75	87.8
216	IPI00323816.2	HNVMVSTEWAAPNVFK	610.6464	3	21	y6	52.95	74.0
217	IPI00323816.2	HNVMVSTEWAAPNVFK	915.9563	2	59	c b8	5.35	64.4
218	IPI00323816.2	HNVMVSTEWAAPNVFK	915.4540	2	78	P y5	62.3	140.3
219	IPI00323816.2	HNVMVSTEWAAPNVFK	915.9530	2	87	c b8	22.4	109.4
220	IPI00323816.2	IFVVDWQR	575.7971	2	20	y6	49.6	69.6
221	IPI00323816.2	IYVVDVGSEPR	617.3288	2	66	y9	27.7	93.7
222	IPI00323816.2	IYVVDVGSEPR	617.3287	2	71	y5	41	112.0
223	IPI00323816.2	LILPGLMSSR	543.8204	2	40	P y7	61.35	101.4
224	IPI00323816.2	LNPNFLVDFGKEPLGALAHCLR	850.1289	3	38	P y8	30.4	68.4
225	IPI00323816.2	LNPNFLVDFGKEPLGALAHCLR	850.1288	3	47	P y8	33.75	80.8
226	IPI00323816.2	LNPNFLVDFGKEPLGALAHCLR	850.1318	3	55		0	55.0
227	IPI00323816.2	NEEGTWSVEK	589.7704	2	37	y7	22.4	59.4
228	IPI00323816.2	NEEGTWSVEK	589.7705	2	39	y8	58.1	97.1
229	IPI00323816.2	NTGTEAPDYLATVDVDPK	953.9603	2	61	y5	14.55	75.6
230	IPI00323816.2	NTGTEAPDYLATVDVDPK	953.9604	2	63		0	63.0
231	IPI00323816.2	NTGTEAPDYLATVDVDPK	953.9602	2	74		0	74.0
232	IPI00323816.2	NTGTEAPDYLATVDVDPK	953.9602	2	75		0	75.0
233	IPI00323816.2	PGGASPMGYDFWYQPR	915.4095	2	52		0	52.0
234	IPI00323816.2	PGGASPMGYDFWYQPR	915.4128	2	56	y4	29.45	85.5
235	IPI00323816.2	PGGASPMGYDFWYQPR	915.4094	2	71	y6	33.75	104.8
236	IPI00323816.2	PGGASPMGYDFWYQPR	914.9068	2	98	y6	46.75	144.8
237	IPI00323816.2	QFYPDHIR	526.2830	2	31	P y5	65.15	96.2
238	IPI00323816.2	QYDISNPQKPR	673.3469	2	45	P y5	38.2	83.2
239	IPI00323816.2	QYDISNPQKPR	673.3493	2	46	P y5	69.75	115.8
240	IPI00323816.2	SPQYSQVIHR	607.8179	2	59		0	59.0
241	IPI00323816.2	SPQYSQVIHRLPMPYLK	686.3810	3	20	y++12	5.35	25.4
242	IPI00323816.2	SPQYSQVIHRLPMPYLK	686.7147	3	22		0	22.0
243	IPI00323816.2	VIQVPSK	385.7424	2	29	y4	57.05	86.1

244	IPI00323816.2	VIQVPSKK	300.1956	3	15		0	15.0
245	IPI00323816.2	VIQVPSKK	449.7900	2	19	P y4	44.5	63.5
246	IPI00153317.2	ADPLGLEAEK	521.7748	2	42	P y8	58.1	100.1
247	IPI00153317.2	AGLILFGNDDR	596.3225	2	27	y6	27.2	54.2
248	IPI00153317.2	AGLILFGNDDR	596.3121	2	29	y6	41	70.0
249	IPI00153317.2	AGLILFGNDDR	595.8141	2	44	y6	38.2	82.2
250	IPI00153317.2	ALYVSDK	398.2164	2	22	y5	89	111.0
251	IPI00153317.2	ALYVSDK	795.4279	1	22	c b4	16.9	38.9
252	IPI00153317.2	ANATEFGLASGVFTR	770.8915	2	18	y5	15.6	33.6
253	IPI00153317.2	ANATEFGLASGVFTR	514.5978	3	33		0	33.0
254	IPI00153317.2	ANATEFGLASGVFTR	514.2641	3	50		0	50.0
255	IPI00153317.2	ANATEFGLASGVFTR	771.3925	2	58	y5	29.45	87.5
256	IPI00153317.2	ARGQALPEVVAK	619.8653	2	41	c b8	21.2	62.2
257	IPI00153317.2	AVQMGMSVFFNK	723.8502	2	46	y4	44.5	90.5
258	IPI00153317.2	AVQMGMSVFFNK	723.3489	2	49		0	49.0
259	IPI00153317.2	DGVPVFK	381.2133	2	22		0	22.0
260	IPI00153317.2	DGVPVFK	761.4246	1	25		0	25.0
261	IPI00153317.2	DLGEAALNEYLR	682.8504	2	44	y5	49.1	93.1
262	IPI00153317.2	DLGEAALNEYLR	682.3543	2	64	y7	22.4	86.4
263	IPI00153317.2	EAFENGLWGK	575.7808	2	22		0	22.0
264	IPI00153317.2	EESFGPIMIISR	689.8809	2	59	y8	58.1	117.1
265	IPI00153317.2	EESFGPIMIISR	689.8660	2	60	y4	75.6	135.6
266	IPI00153317.2	EGHEVVGVFTIPDK	509.5997	3	22	y6	61.35	83.4
267	IPI00153317.2	ETAMINWDQPAEAIHNWIR	766.0395	3	26		0	26.0
268	IPI00153317.2	ETAMINWDQPAEAIHNWIR	1148.5544	2	50	y7	5.55	55.6
269	IPI00153317.2	FADGDVDAVLSR	632.8124	2	68		0	68.0
270	IPI00153317.2	FAELTLK	411.2424	2	33	y6	69.75	102.8
271	IPI00153317.2	FLFPEGIK	475.7714	2	21	y6	61.35	82.4
272	IPI00153317.2	GASAINWTLIHGDK	741.9001	2	66	y7	82.65	148.7
273	IPI00153317.2	GMVQAVR	380.7104	2	29	y5	49.6	78.6
274	IPI00153317.2	GQALPEVVAK	506.2953	2	24	P y6	95.65	119.7
275	IPI00153317.2	GVVNILPGSGSLVGQR	776.9620	2	27	P y10	50.5	77.5
276	IPI00153317.2	GVVNILPGSGSLVGQR	518.2982	3	45	y4	49.1	94.1
277	IPI00153317.2	HGSIYHPSLLPR	497.2806	3	30	P y6	57.05	87.1
278	IPI00153317.2	HGSIYHPSLLPR	497.2807	3	31	P y6	69.75	100.8
279	IPI00153317.2	HGSIYHPSLLPR	745.4277	2	52	y8	73.4	125.4
280	IPI00153317.2	HRGASAINWTLIHGDK	888.9696	2	22	y4	29.45	51.5
281	IPI00153317.2	HRGASAINWTLIHGDK	444.7379	4	32		0	32.0
282	IPI00153317.2	HRGASAINWTLIHGDK	444.9892	4	34	y5	44.5	78.5
283	IPI00153317.2	HRGASAINWTLIHGDK	592.6500	3	44	y7	61.35	105.4
284	IPI00153317.2	IGFTGSTEVGK	548.2889	2	51	y7	46.75	97.8

285	IPI00153317.2	IGNPLDRDTNHGPNHEAHLR	798.0743	3	38		0	38.0
286	IPI00153317.2	IGNPLDRDTNHGPNHEAHLR	840.7614	3	20	c b8	22.4	42.4
287	IPI00153317.2	IGNPLDRDTNHGPNHEAHLR	840.7750	3	27	y++11	12.15	39.2
288	IPI00153317.2	ILPNVPEVEDSTDFFK	925.4638	2	35	c b5 P	44.5	79.5
289	IPI00153317.2	ILPNVPEVEDSTDFFK	925.9704	2	52	c b5 P	15.6	67.6
290	IPI00153317.2	ILPNVPEVEDSTDFFK	925.5202	2	64		0	64.0
291	IPI00153317.2	IQGATIPINQARPNR	550.3131	3	17		0	17.0
292	IPI00153317.2	IQGATIPINQARPNR	550.6472	3	24	P y++9	27.2	51.2
293	IPI00153317.2	KETAMINWDQPAEAIHNWIR	606.5623	4	44		0	44.0
294	IPI00153317.2	KETAMINWDQPAEAIHNWIR	606.8121	4	49		0	49.0
295	IPI00153317.2	KETAMINWDQPAEAIHNWIR	808.7374	3	56	y++12	11	67.0
296	IPI00153317.2	KETAMINWDQPAEAIHNWIR	808.7374	3	72	y4	32.3	104.3
297	IPI00153317.2	KGGFTIFWADDGLDTGDLQK	804.4147	3	20	y4	49.1	69.1
298	IPI00153317.2	KGGFTIFWADDGLDTGDLQK	804.4145	3	28	y4	44.5	72.5
299	IPI00153317.2	KLTLQMPYQLFIGGEFVDAEGAK	852.7773	3	26	y6	38.2	64.2
300	IPI00153317.2	KLTLQMPYQLFIGGEFVDAEGAK	852.7775	3	31	y7	38.2	69.2
301	IPI00153317.2	KLTLQMPYQLFIGGEFVDAEGAK	852.7776	3	32		0	32.0
302	IPI00153317.2	KLTLQMPYQLFIGGEFVDAEGAK	852.7804	3	33	y8	33.75	66.8
303	IPI00153317.2	KLTLQMPYQLFIGGEFVDAEGAK	852.7776	3	37	y6	49.6	86.6
304	IPI00153317.2	KVSLELGGK	465.7843	2	34	y7	49.6	83.6
305	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.2137	3	18	y9	21.2	39.2
306	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1052.8670	3	19		0	19.0
307	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.5453	3	21	y9	20.1	41.1
308	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.2030	3	23	y6	25.35	48.4
309	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.2096	3	39	y9	30.4	69.4
310	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.2142	3	41		0	41.0
311	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.2143	3	42	y9	12.85	54.9
312	IPI00153317.2	LADLMEQHQEELATIEALDAGAVYTLALK	1053.2141	3	44	y5	16.9	60.9
313	IPI00153317.2	LFVEDSIHQFVQK	568.9578	3	16		0	16.0
314	IPI00153317.2	LIAEGTAPR	464.2668	2	46	y5	25.35	71.4
315	IPI00153317.2	LQAGTVFVNTYNK	727.8902	2	64	y7	38.2	102.2
316	IPI00153317.2	LSDHPDVR	313.4945	3	15		0	15.0
317	IPI00153317.2	LSDHPDVR	469.7382	2	26	c b6	25.35	51.4
318	IPI00153317.2	LSDHPDVRK	533.7855	2	23	c b6	38.2	61.2
319	IPI00153317.2	LSDHPDVRK	356.1928	3	35	c b6	27.2	62.2
320	IPI00153317.2	LTFNNTLNTSGLVAQGEALPIPGAHRPGLVTK	852.7187	4	18	y++18	27	45.0
321	IPI00153317.2	LTFNNTLNTSGLVAQGEALPIPGAHRPGLVTK	852.9673	4	19		0	19.0
322	IPI00153317.2	LTFNNTLNTSGLVAQGEALPIPGAHRPGLVTK	852.7162	4	20		0	20.0
323	IPI00153317.2	LTFNNTLNTSGLVAQGEALPIPGAHRPGLVTK	852.7190	4	25		0	25.0
324	IPI00153317.2	LTFNNTLNTSGLVAQGEALPIPGAHRPGLVTK	852.9929	4	27		0	27.0
325	IPI00153317.2	LVEEVK	716.4193	1	27	y4	41	68.0

326	IPI00153317.2	NIQLEDGK	458.7405	2	22	y5	52.95	75.0
327	IPI00153317.2	NIQLEDGK	916.4962	1	46		0	46.0
328	IPI00153317.2	NLTCLK	345.2131	2	20		0	20.0
329	IPI00153317.2	NLTCLK	689.4196	1	28		0	28.0
330	IPI00153317.2	PAQVPLTALK	569.8454	2	32	y8	44.3	76.3
331	IPI00153317.2	PGFFFQPTVFTDVEDHMYIAK	830.7338	3	29	c b6 P	27.2	56.2
332	IPI00153317.2	PGFFFQPTVFTDVEDHMYIAK	830.7336	3	39	b4	9.55	48.6
333	IPI00153317.2	RPQPEEGATYEGIQK	568.2854	3	38	y6	46.75	84.8
334	IPI00153317.2	RPQPEEGATYEGIQK	915.9876	2	51	c b6	14.55	65.6
335	IPI00153317.2	RPQPEEGATYEGIQK	610.9833	3	58	c b8	31.95	90.0
336	IPI00153317.2	TDVAAPFGGFK	555.2854	2	25	P y6	61.35	86.4
337	IPI00153317.2	THVGMSIQTFR	638.8274	2	30	y8	21.2	51.2
338	IPI00153317.2	VVEEVGK	380.2165	2	18		0	18.0
339	IPI00314298.3	GTWEKPGDAAPMGYDFWYQPR	825.0409	3	28	y5	38.2	66.2
340	IPI00314298.3	HEIIQTLQMTDGLIPLEIR	1111.1098	2	81	y8	44.3	125.3
341	IPI00314298.3	LAGQIFLGGIVRGGSVQV	620.4036	3	18	y7	1.75	19.8
342	IPI00314298.3	LILPGLISSR	534.8424	2	33	P y7	35.8	68.8
343	IPI00314298.3	NAEGTWSVEK	560.7663	2	38		0	38.0
344	IPI00314298.3	PGDAAPMGYDFWYQPR	936.4154	2	46	y6	33.75	79.8
345	IPI00314298.3	PGDAAPMGYDFWYQPR	936.4156	2	55	y6	46.75	101.8
346	IPI00110042.1	DGFNPAHVEAGLYGSR	563.9383	3	43	y4	41	84.0
347	IPI00110042.1	IYVVDVGSEPR	617.3288	2	68	y5	44.5	112.5
348	IPI00110042.1	LILPGLISSR	534.8424	2	30	P y7	57.05	87.1
349	IPI00110042.1	RIPGGPQMIQLSLDGG	570.6546	3	32	y7	14.55	46.6
350	IPI00110042.1	VIEASEIQAK	544.3041	2	66	y8	73.4	139.4
351	IPI00110042.1	VIEASEIQAK	544.3040	2	66	y8	58.1	124.1
352	IPI00133456.1	DGLNAEGLLR	529.2856	2	55	y4	16.9	71.9
353	IPI00133456.1	DGLNAEGLLRQPDAGNIFK	676.6978	3	29	P y8	21.2	50.2
354	IPI00133456.1	DGLNAEGLLRQPDAGNIFK	676.6978	3	29	b5	7.1	36.1
355	IPI00133456.1	DGLNAEGLLRQPDAGNIFK	1015.0300	2	36		0	36.0
356	IPI00133456.1	DGLNAEGLLRQPDAGNIFK	677.0277	3	41	P y8	55.3	96.3
357	IPI00133456.1	DHSVKK	357.1722	2	23	y4	15.6	38.6
358	IPI00133456.1	FNDGKVDPAGR	588.2916	2	41	P y4	62.3	103.3
359	IPI00133456.1	FNDGKVDPAGR	392.5318	3	46		0	46.0
360	IPI00133456.1	GIAPYSYAG	898.4715	1	19	P y6	65.15	84.2
361	IPI00133456.1	HQGSLSLFPDHSVK	572.2897	3	27	P y6	25.35	52.4
362	IPI00133456.1	HQGSLSLFPDHSVK	572.2897	3	31	P y6	57.05	88.1
363	IPI00133456.1	HQGSLSLFPDHSVK	857.9312	2	72	y4	18.5	90.5
364	IPI00133456.1	HQGSLSLFPDHSVKK	461.4930	4	19	b5	16.9	35.9
365	IPI00133456.1	HQGSLSLFPDHSVKK	614.9879	3	26	P y7	52.95	79.0
366	IPI00133456.1	IFYIDSLSYTVDAFDYDLQTGGISNRR	1122.5356	3	26		0	26.0

367	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.5429	3	33	y++10	0.9	33.9
368	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2140	3	40		0	40.0
369	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.5439	3	44	y++13	4.7	48.7
370	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.5493	3	46		0	46.0
371	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.5443	3	49	y++14	11	60.0
372	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2162	3	54		0	54.0
373	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.4824	3	57	y++10	1.6	58.6
374	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2197	3	63	y++12	11.55	74.6
375	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2150	3	63	y++17	40.45	103.5
376	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2146	3	64		0	64.0
377	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2085	3	65	b5	16.9	81.9
378	IPI00133456.1	IFYYIDSLSYTVDAFDYDLQTGGQISNRR	1122.2098	3	71		0	71.0
379	IPI00133456.1	ITGLGVK	687.4411	1	29		0	29.0
380	IPI00133456.1	KYFDQVDISNGLDWSLDHK	761.3650	3	40	y++9	35.8	75.8
381	IPI00133456.1	KYFDQVDISNGLDWSLDHK	761.0357	3	48	c b7	12.85	60.9
382	IPI00133456.1	KYFDQVDISNGLDWSLDHK	761.0703	3	49	y6	14.55	63.6
383	IPI00133456.1	KYFDQVDISNGLDWSLDHK	761.0358	3	51	y7	11.55	62.6
384	IPI00133456.1	LPVDK	571.3446	1	28	b4	29.45	57.5
385	IPI00133456.1	NNRFNDGKVDPAGR	520.5946	3	17	P y4	32.3	49.3
386	IPI00133456.1	NNRFNDGKVDPAGR	780.3922	2	23	P y4	44.5	67.5
387	IPI00133456.1	QLGGYVATIGTK	604.3376	2	30		0	30.0
388	IPI00133456.1	RLQTVKLPVDK	432.9384	3	34	c b5	7.7	41.7
389	IPI00133456.1	VAVDAPVSSVALR	642.3700	2	55	P y8	20.1	75.1
390	IPI00133456.1	VAVDAPVSSVALR	642.3745	2	65	P y8	44.3	109.3
391	IPI00133456.1	VIRLDPETGK	376.5521	3	32		0	32.0
392	IPI00133456.1	VIRLDPETGK	564.3243	2	44	c b5 P	38.2	82.2
393	IPI00133456.1	WDTVSNQVQR	616.8053	2	60	y6	52.95	113.0
394	IPI00221890.4	DIKHDPQLPWSASYDPGSAK	767.3720	3	19	b5 P	57.05	76.1
395	IPI00221890.4	DIKHDPQLPWSASYDPGSAK	767.3720	3	30	P y5	44.5	74.5
396	IPI00221890.4	DIKHDPQLPWSASYDPGSAK	767.3694	3	48	P y5	41	89.0
397	IPI00221890.4	EPMTVSSDQMAK	662.3013	2	27	y7	49.6	76.6
398	IPI00221890.4	EPMTVSSDQMAK	662.2994	2	35	y7	65.15	100.2
399	IPI00221890.4	EWGYASHNGPDHWHELYPIAK	836.7194	3	16		0	16.0
400	IPI00221890.4	EWGYASHNGPDHWHELYPIAK	836.7224	3	26	P y4	41	67.0
401	IPI00221890.4	GDNQSPIELHTK	669.8377	2	27	P y7	61.35	88.4
402	IPI00221890.4	GEFQILLDALDK	681.3940	2	59	y5	83.9	142.9
403	IPI00221890.4	GEFQILLDALDK	681.3689	2	84	c b5	27.2	111.2
404	IPI00221890.4	GEFQILLDALDK	681.3966	2	84	y5	83.9	167.9
405	IPI00221890.4	GGPLSGPYR	903.4931	1	29		0	29.0
406	IPI00221890.4	GGPLSGPYR	452.2376	2	39	y4	49.1	88.1
407	IPI00221890.4	HDPSLQPWSASYDPGSAK	972.4520	2	31		0	31.0

408	IPI00221890.4	HDPSLQPWSASYDPGSAK	648.6378	3	40	c b6 P	22.4	62.4
409	IPI00221890.4	HDPSLQPWSASYDPGSAK	648.3068	3	46	c b6 P	27.2	73.2
410	IPI00221890.4	HDPSLQPWSASYDPGSAK	972.4517	2	46		0	46.0
411	IPI00221890.4	HDPSLQPWSASYDPGSAK	971.9525	2	50	c b6 P	27.2	77.2
412	IPI00221890.4	HDPSLQPWSASYDPGSAK	971.9486	2	52	c b6 P	29.45	81.5
413	IPI00221890.4	HDPSLQPWSASYDPGSAK	648.3021	3	58	P y5	29.45	87.5
414	IPI00221890.4	LRQFHLHWGSSDDHGSEHTVDGVK	687.0864	4	15	y++17	8.65	23.7
415	IPI00221890.4	LRQFHLHWGSSDDHGSEHTVDGVK	686.8348	4	17		0	17.0
416	IPI00221890.4	QFHLHWGSSDDHGSEHTVDGVK	826.0647	3	19	y++16	15.5	34.5
417	IPI00221890.4	QPDGIAVVGIFLK	679.4053	2	16	y8	69.75	85.8
418	IPI00221890.4	QPDGIAVVGIFLK	678.8973	2	17	y8	58.1	75.1
419	IPI00221890.4	QPDGIAVVGIFLK	678.9221	2	18	y8	44.3	62.3
420	IPI00221890.4	QPDGIAVVGIFLK	678.8974	2	20	y8	69.75	89.8
421	IPI00221890.4	QPDGIAVVGIFLK	678.8973	2	24	y8	69.75	93.8
422	IPI00221890.4	QPDGIAVVGIFLK	679.0226	2	28	y8	55.3	83.3
423	IPI00221890.4	SLFSSAENEPVPLVGNWRPPQPVK	916.1506	3	48		0	48.0
424	IPI00221890.4	SLFSSAENEPVPLVGNWRPPQPVK	916.1504	3	54	y++17	9.65	63.7
425	IPI00221890.4	SLFSSAENEPVPLVGNWRPPQPVK	916.1544	3	55	c b9 P	66.55	121.6
426	IPI00221890.4	SLFSSAENEPVPLVGNWRPPQPVK	916.1808	3	55	c b9 P	42.15	97.2
427	IPI00221890.4	SLFSSAENEPVPLVGNWRPPQPVK	916.1506	3	56	b9 P	40.2	96.2
428	IPI00221890.4	TILNNGK	380.7138	2	17		0	17.0
429	IPI00221890.4	VVFDDTYDR	565.2616	2	43	y7	33.75	76.8
430	IPI00221890.4	VVFDDTYDR	565.2616	2	47	y7	33.75	80.8
431	IPI00221890.4	YAAELHLVHWNPK	395.2113	4	16	y++9	25.35	41.4
432	IPI00221890.4	YAAELHLVHWNPK	395.2112	4	25	y++9	89	114.0
433	IPI00221890.4	YAAELHLVHWNPK	526.6124	3	25		0	25.0
434	IPI00221890.4	YAAELHLVHWNPK	526.6124	3	27	y5	75.6	102.6
435	IPI00221890.4	YAAELHLVHWNPK	526.6124	3	29	y++8	29.45	58.5
436	IPI00221890.4	YAAELHLVHWNPK	789.4360	2	64	c b8	12.15	76.2
437	IPI00221890.4	YNTFGEALK	1042.5196	1	19	y8	1.95	21.0
438	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4342	3	17	y8	31.95	49.0
439	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4367	3	25	y7	33.75	58.8
440	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4441	3	25	y8	1.75	26.8
441	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4338	3	27	y8	21.2	48.2
442	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4334	3	29	y5	49.1	78.1
443	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4343	3	32	y8	42.15	74.2
444	IPI00221890.4	YNTFGEALKQPDGIAVVGIFLK	794.4367	3	34	y5	18.5	52.5
445	IPI00380501.2	EAGFPPGVVNIYPGYGPTAGAAISSHMDVDK	1018.8392	3	17		0	17.0
446	IPI00380501.2	EEIFGPVQQIMK	709.8717	2	39	c b8	5.35	44.4
447	IPI00380501.2	EEIFGPVQQIMK	709.8844	2	39	c b8	12.15	51.2
448	IPI00380501.2	EEIFGPVQQIMK	709.8716	2	43	c b8	1.95	45.0

449	IPI00380501.2	EEIFGPVQQIMK	709.8905	2	45	c b8	5.35	50.4
450	IPI00380501.2	EEIFGPVQQIMK	709.8716	2	49	c b8	5.35	54.4
451	IPI00380501.2	ELGEHGLYEYTELK	840.9085	2	41		0	41.0
452	IPI00380501.2	GFFVQPTVFSNVTDENR	659.3224	3	28	y5	41	69.0
453	IPI00380501.2	GFFVQPTVFSNVTDENR	987.4732	2	51	b4	23.35	74.4
454	IPI00380501.2	GFFVQPTVFSNVTDENR	987.9757	2	57	c b4	9.55	66.6
455	IPI00380501.2	GFFVQPTVFSNVTDENR	987.4734	2	57	b4	9.55	66.6
456	IPI00380501.2	GFFVQPTVFSNVTDENR	987.9757	2	58		0	58.0
457	IPI00380501.2	GFFVQPTVFSNVTDENR	987.9754	2	59	y8	33.75	92.8
458	IPI00380501.2	GFFVQPTVFSNVTDENR	987.9761	2	66	c b5 P	62.3	128.3
459	IPI00380501.2	GFFVQPTVFSNVTDENR	987.9756	2	76	y8	30.4	106.4
460	IPI00380501.2	IFINNEWHNSVSGK	548.9423	3	19	y++13	81.65	100.7
461	IPI00380501.2	IFINNEWHNSVSGK	822.9264	2	72	y8	85.6	157.6
462	IPI00380501.2	IFVEESVYDEFVK	802.3995	2	35	y8	31.95	67.0
463	IPI00380501.2	IFVEESVYDEFVK	802.3996	2	62		0	62.0
464	IPI00380501.2	IHGQTIPSDGDIFTYTR	640.9880	3	50	y4	27.2	77.2
465	IPI00380501.2	IHGQTIPSDGDIFTYTR	641.3199	3	53	y5	25.35	78.4
466	IPI00380501.2	IHGQTIPSDGDIFTYTRR	693.0256	3	15	y++9	7.1	22.1
467	IPI00380501.2	KYVLGNPLTPGINQGPQIDKEQHDK	930.8273	3	44	y6	35.8	79.8
468	IPI00380501.2	LADLMER	424.2207	2	43	y5	38.2	81.2
469	IPI00380501.2	LLLATMEALNGGK	666.3660	2	42	b9	12.15	54.2
470	IPI00380501.2	PAEQTPLTALHLASLIK	601.7004	3	35	P y++12	22.4	57.4
471	IPI00380501.2	PAEQTPLTALHLASLIK	602.0340	3	45	y++13	20.1	65.1
472	IPI00380501.2	QAFQIGSPWR	595.3095	2	45		0	45.0
473	IPI00380501.2	RANNTTYGLAAGLFTK	566.6373	3	16	y6	38.2	54.2
474	IPI00380501.2	RVTLELGGK	324.8659	3	37	c b4	6.6	43.6
475	IPI00380501.2	RVTLELGGK	486.7958	2	55	c b5	25.35	80.4
476	IPI00380501.2	SVDDVIK	388.2137	2	29	y5	69.75	98.8
477	IPI00380501.2	VAFTGSTQVGK	547.7962	2	49	y7	22.4	71.4
478	IPI00380501.2	YVLGNPLTPGINQGPQIDK	1013.0473	2	38		0	38.0
479	IPI00380501.2	YVLGNPLTPGINQGPQIDK	1013.0478	2	51		0	51.0
480	IPI00285029.1	AGLYGLPK	409.7420	2	27		0	27.0
481	IPI00285029.1	ALIAEATK	408.7453	2	27	y6	82.65	109.7
482	IPI00285029.1	DGAWGAFR	440.2091	2	36	y4	18.5	54.5
483	IPI00285029.1	DNLEFFLTNLGK	705.8677	2	72	y5	52.95	125.0
484	IPI00285029.1	EDTQVADVTTSR	661.3150	2	64	y7	46.75	110.8
485	IPI00285029.1	EGGFLLVHTVLK	656.9035	2	33	y7	33.75	66.8
486	IPI00285029.1	FDASFFGVHPK	417.8766	3	38	y++10	61.35	99.4
487	IPI00285029.1	FDASFFGVHPK	626.3165	2	48	y6	25.35	73.4
488	IPI00285029.1	FLEIGKFDLSNNHPLGMAIFLK	836.1197	3	26	P y9	55.3	81.3
489	IPI00285029.1	FLEIGKFDLSNNHPLGMAIFLK	835.7855	3	37		0	37.0

490	IPI00285029.1	FPQLDDTSFANSR	749.3739	2	67	y7	13.65	80.7
491	IPI00285029.1	GGNVGINSFGGSSNVHVLQPNTR	848.4374	3	20		0	20.0
492	IPI00285029.1	GNAGQTNYGFANSTMER	909.3966	2	81	y7	13.65	94.7
493	IPI00285029.1	GYTVLGV EGR	525.7834	2	51	y6	14.55	65.6
494	IPI00285029.1	HFQLEQDKPK	423.8914	3	32	y5	15.6	47.6
495	IPI00285029.1	HFQLEQDKPK	635.3333	2	44	c b7	46.75	90.8
496	IPI00285029.1	IPALLNTQPMLQLEYTATDRHPQALK	741.6504	4	24	b8 P	13.65	37.7
497	IPI00285029.1	IPALLNTQPMLQLEYTATDRHPQALK	741.6528	4	27		0	27.0
498	IPI00285029.1	IPALLNTQPMLQLEYTATDRHPQALK	988.5324	3	28		0	28.0
499	IPI00285029.1	LDPGSPELQQVLK	712.4179	2	25	P y8	73.4	98.4
500	IPI00285029.1	LLLPEPLISGLLSQALK	1018.0975	2	23	y6	6.6	29.6
501	IPI00285029.1	LLLPEPLISGLLSQALK	679.0674	3	43	y6	62.3	105.3
502	IPI00285029.1	LLLPEPLISGLLSQALK	1018.0972	2	45	y6	29.45	74.5
503	IPI00285029.1	LPESENLQEFWANLIGGVDMVTDDRR	1041.1648	3	69	y++16	15.5	84.5
504	IPI00285029.1	LPESENLQEFWANLIGGVDMVTDDRR	1040.8347	3	70		0	70.0
505	IPI00285029.1	LQTATSR	439.2404	2	20	y6	23.75	43.8
506	IPI00285029.1	QAHTMDPQLR	399.5332	3	22		0	22.0
507	IPI00285029.1	QHSQDLAFVSMNDIAATPTAAMPFR	945.4686	3	26		0	26.0
508	IPI00285029.1	QHSQDLAFVSMNDIAATPTAAMPFR	945.4686	3	36	P y8	30.4	66.4
509	IPI00285029.1	RVYATILNAGTNTDGSK	890.9642	2	78	c b7	18.5	96.5
510	IPI00285029.1	SDEAVKPLGVK	571.8251	2	47	P y5	75.6	122.6
511	IPI00285029.1	SLGLSLEETPVVFENVSFHQATILPK	952.8474	3	24	y++10	1.25	25.3
512	IPI00285029.1	SLGLSLEETPVVFENVSFHQATILPK	952.8477	3	30		0	30.0
513	IPI00285029.1	SLGLSLEETPVVFENVSFHQATILPK	952.8441	3	35		0	35.0
514	IPI00285029.1	TGGLAFHSYFMEGIAPTLLQALK	822.7697	3	15	P y8	30.4	45.4
515	IPI00285029.1	TGTVALEVR	473.2723	2	62	y4	15.6	77.6
516	IPI00285029.1	TLEAVQDLLEQGRQHSQDLAFVSMNDIAATPTAAMPFR	1072.5152	4	24	P y8	20.1	44.1
517	IPI00285029.1	TLEGGSGLESIIIIHSSLAEPR	817.1287	3	31		0	31.0
518	IPI00285029.1	TLEGGSGLESIIIIHSSLAEPR	817.4492	3	36	b4	20.55	56.6
519	IPI00285029.1	TLEGGSGLESIIIIHSSLAEPR	817.4489	3	42	y++14	4.7	46.7
520	IPI00285029.1	TLEGGSGLESIIIIHSSLAEPR	817.4519	3	52		0	52.0
521	IPI00285029.1	VAEVLAGEGHLYSR	500.9325	3	37	y++12	66.55	103.6
522	IPI00285029.1	VAEVLAGEGHLYSR	750.9078	2	74	y8	33.75	107.8
523	IPI00285029.1	VHLTGINVPNALFPPVEFPAPR	834.1219	3	17		0	17.0
524	IPI00285029.1	VHLTGINVPNALFPPVEFPAPR	834.1219	3	25	y5	7.7	32.7
525	IPI00285029.1	VLEALLPLK	498.3286	2	46	y4	83.9	129.9
526	IPI00285029.1	VLLSLEHG V WAPNLHFHNP NPEIPALLDGR	839.9489	4	21	P y7	23.75	44.8
527	IPI00285029.1	VLVQVREEEPEAVLPGAQPTLISAISK	958.8713	3	20		0	20.0
528	IPI00285029.1	VQEVQQVSTNK	630.3330	2	57	c b7	23.75	80.8
529	IPI00285029.1	VSVHIIEGDHR	631.3360	2	27	c b9	30.4	57.4
530	IPI00285029.1	VSVHIIEGDHR	421.2263	3	46	y5	18.5	64.5

531	IPI00285029.1	WLSTSIPEAQWQSSLAR	981.0004	2	46	c b6 P	13.65	59.7
532	IPI00285029.1	YHGNTVLLR	536.7989	2	24	y7	22.4	46.4
533	IPI00111908.4	AFAISGPFNVQFLVK	819.4573	2	51	c b6 P	29.45	80.5
534	IPI00111908.4	AFAISGPFNVQFLVK	819.4574	2	55	y++12	33.75	88.8
535	IPI00111908.4	AMLSTGFK	427.7261	2	18	y6	49.6	67.6
536	IPI00111908.4	ELSEPSSTR	503.2464	2	26	P y5	38.2	64.2
537	IPI00111908.4	EPLFGISTGNIITGLAAGAK	966.0378	2	56	y9	40.2	96.2
538	IPI00111908.4	EVEMDAVGK	489.2343	2	17		0	17.0
539	IPI00111908.4	GLNSDSVTEETLRK	774.9121	2	53	y++12	55.3	108.3
540	IPI00111908.4	GQILTMANPIIGNGGAPDTTARDELGLNK	980.1773	3	42		0	42.0
541	IPI00111908.4	GQILTMANPIIGNGGAPDTTARDELGLNK	980.1776	3	53	P y++13	18.3	71.3
542	IPI00111908.4	GQNQPVLNITNR	677.3671	2	78	P y8	42.15	120.2
543	IPI00111908.4	GYSFGHPSSVAGEVVFNTGLGGYPEALTDPAYK	1130.2086	3	42	y8	33.75	75.8
544	IPI00111908.4	IALGIPLPEIK	582.3937	2	42	P y6	38.2	80.2
545	IPI00111908.4	IAPSFAVESMEDALK	804.4452	2	64	y7	33.75	97.8
546	IPI00111908.4	IEFEGQSVDFVDPNK	862.4105	2	56	y4	44.5	100.5
547	IPI00111908.4	ILESDRK	430.7455	2	25	y4	29.45	54.5
548	IPI00111908.4	ILESDRKEPLFGISTGNIITGLAAGAK	693.8886	4	17		0	17.0
549	IPI00111908.4	ILESDRKEPLFGISTGNIITGLAAGAK	693.8887	4	23		0	23.0
550	IPI00111908.4	LFATEATSDWLNANNVPATPVAVWPSQEGQNPSSLSSIRK	1025.5161	4	15		0	15.0
551	IPI00111908.4	LFATEATSDWLNANNVPATPVAVWPSQEGQNPSSLSSIRK	1025.7272	4	21		0	21.0
552	IPI00111908.4	LFATEATSDWLNANNVPATPVAVWPSQEGQNPSSLSSIRK	1025.4656	4	33		0	33.0
553	IPI00111908.4	LRDADPILR	534.8124	2	36	c b5 P	38.2	74.2
554	IPI00111908.4	PALVASR	357.2188	2	41	y5	49.6	90.6
555	IPI00111908.4	QADAVYFLPITPQFVTEVIK	1140.6245	2	25	c b8 P	5.55	30.6
556	IPI00111908.4	QADAVYFLPITPQFVTEVIK	1140.6243	2	26		0	26.0
557	IPI00111908.4	QADAVYFLPITPQFVTEVIK	1140.6241	2	27	c b8 P	12.15	39.2
558	IPI00111908.4	QNLIAEVSTK	552.3108	2	51		0	51.0
559	IPI00111908.4	RLPTLEQPIIPSDYVAIK	685.0618	3	23	P y8	58.1	81.1
560	IPI00111908.4	RLPTLEQPIIPSDYVAIK	685.3952	3	27	b5	14.55	41.6
561	IPI00111908.4	SLFHYP	411.7164	2	31	y4	62.3	93.3
562	IPI00111908.4	TAHIVLEDGTK	395.2153	3	24	y5	27.2	51.2
563	IPI00111908.4	TFEESFQK	508.2406	2	19	y6	49.6	68.6
564	IPI00111908.4	TVLMNPNIASVQTNEVGLK	677.0316	3	35	y7	31.95	67.0
565	IPI00111908.4	TVLMNPNIASVQTNEVGLK	1015.0429	2	71	y8	1.75	72.8
566	IPI00111908.4	TVLMNPNIASVQTNEVGLK	1015.0428	2	74	y8	12.15	86.2
567	IPI00111908.4	VAGLLVLNYSNDYNHWLTK	764.7337	3	16		0	16.0
568	IPI00111908.4	VAGLLVLNYSNDYNHWLTK	764.7336	3	22	b6	13.65	35.7
569	IPI00111908.4	VMIGESIDEK	560.7812	2	37	y8	69.75	106.8
570	IPI00111908.4	VPAIYGVDR	545.7983	2	39	c b8	90.2	129.2
571	IPI00111908.4	VSQEHPVVLTK	412.9030	3	15	y++9	35.8	50.8

572	IPI00111908.4	VSQEHPVVLTK	618.8519	2	52	P y6	82.65	134.7
573	IPI00336362.1	ALQYFAGWADK	635.3429	2	54	y5	69.75	123.8
574	IPI00336362.1	EAGFPPGVNIVPGYGPTAGGAISSHMDIDK	1018.8393	3	15		0	15.0
575	IPI00336362.1	EAGFPPGVNIVPGYGPTAGGAISSHMDIDK	1018.8396	3	18	P y++19	4.25	22.3
576	IPI00336362.1	EAGFPPGVNIVPGYGPTAGGAISSHMDIDK	1018.8394	3	21		0	21.0
577	IPI00336362.1	EAGFPPGVNIVPGYGPTAGGAISSHMDIDK	1018.8395	3	25		0	25.0
578	IPI00336362.1	EAGFPPGVNIVPGYGPTAGGAISSHMDIDK	1018.8394	3	31	b9	1.25	32.3
579	IPI00336362.1	ILGLIESGKK	353.2254	3	20	y6	36.1	56.1
580	IPI00336362.1	KYILGNPLNSGINQGPPQIDK	724.0600	3	48	y6	69.75	117.8
581	IPI00336362.1	RANNTTYGLAAGVFTK	561.9665	3	18	y5	29.45	47.5
582	IPI00336362.1	YILGNPLNSGINQGPPQIDK	1021.0429	2	48	y8	19.15	67.2
583	IPI00134950.1	AHMTLDYTVQVPGTGR	615.6528	3	25	P y5	41	66.0
584	IPI00134950.1	AHMTLDYTVQVPGTGR	923.4741	2	51	P y5	16.9	67.9
585	IPI00134950.1	AHMTLDYTVQVPGTGR	922.9694	2	74	c b7	29.45	103.5
586	IPI00134950.1	AWLLGLLR	471.3006	2	39	y6	69.75	108.8
587	IPI00134950.1	AWLLGLLR	471.3006	2	43	y6	52.95	96.0
588	IPI00134950.1	AWLLGLLR	471.3005	2	52	y6	65.15	117.2
589	IPI00134950.1	DGSPGFSK	794.3681	1	21	y7	33.75	54.8
590	IPI00134950.1	DITTSVLTVNNK	652.8581	2	61	y6	49.6	110.6
591	IPI00134950.1	DITTSVLTVNNK	652.8562	2	61	y5	57.05	118.1
592	IPI00134950.1	EPSFDNWWIEEANWLTLDK	1154.0550	2	52		0	52.0
593	IPI00134950.1	GFSVMSVDASDK	621.7607	2	21	c b9	4.95	26.0
594	IPI00134950.1	NIASMVRPGLLVIDHR	617.0154	3	21	y4	15.6	36.6
595	IPI00134950.1	NIASMVRPGLLVIDHR	617.0223	3	22	y4	29.45	51.5
596	IPI00134950.1	NIASMVRPGLLVIDHR	616.6809	3	31	y5	16.9	47.9
597	IPI00134950.1	NIASMVRPGLLVIDHR	616.6903	3	33		0	33.0
598	IPI00134950.1	NIYYK	700.3664	1	28		0	28.0
599	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	648.5797	4	22	y4	41	63.0
600	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	648.5814	4	25	y4	57.05	82.1
601	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	648.3298	4	27	y5	83.9	110.9
602	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	648.5796	4	27		0	27.0
603	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	648.8315	4	32	y4	41	73.0
604	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	648.5797	4	34	y4	75.6	109.6
605	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	864.4373	3	44	y7	22.4	66.4
606	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	864.4741	3	53	y7	41	94.0
607	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	864.4374	3	66		0	66.0
608	IPI00134950.1	RKEPSFDNWWIEEANWLTLDK	864.4372	3	68	y4	49.1	117.1
609	IPI00134950.1	SLGVAAEGLPDQYADGEAAR	995.4746	2	73	c b9 P	12.85	85.9
610	IPI00134950.1	SLGVAAEGLPDQYADGEAAR	995.4778	2	78	c b9 P	44.3	122.3
611	IPI00134950.1	SLGVAAEGLPDQYADGEAAR	995.5308	2	87	c b9 P	31.95	119.0
612	IPI00134950.1	VWQLYIGDTR	625.8304	2	58	y8	5.15	63.2

613	IPI00134950.1	VWQLYIGDTR	625.8304	2	67	y6	22.4	89.4
614	IPI00314788.3	AEAERDVLFPGYTHLQR	668.3486	3	18	P y8	21.2	39.2
615	IPI00314788.3	AEAERDVLFPGYTHLQR	668.0163	3	24	P y++8	62.3	86.3
616	IPI00314788.3	AEMQQILQGLDK	687.3585	2	61	y6	77.6	138.6
617	IPI00314788.3	AEMQQILQGLDK	687.3814	2	66	y6	46.75	112.8
618	IPI00314788.3	ALLQAQEP	435.2400	2	25	c b6	27.2	52.2
619	IPI00314788.3	AVFMAETK	896.5085	1	38	y6	116	154.0
620	IPI00314788.3	AVFMAETKGVALNLLS	560.9468	3	18		0	18.0
621	IPI00314788.3	EFSFVQLSDAYSTGSSLMPQK	1162.0511	2	79	y4	23.35	102.4
622	IPI00314788.3	EFSFVQLSDAYSTGSSLMPQK	1162.0512	2	85	y9	20.1	105.1
623	IPI00314788.3	EFSFVQLSDAYSTGSSLMPQK	1162.0511	2	88	y9	11	99.0
624	IPI00314788.3	FVGAVDPIMEK	603.3166	2	34	y9	55.3	89.3
625	IPI00314788.3	GLPSTYNK	879.4808	1	30	P y6	57.05	87.1
626	IPI00314788.3	HLWNVDVQGSK	641.8308	2	49	y8	44.3	93.3
627	IPI00314788.3	KNPDSLELIR	395.5597	3	31		0	31.0
628	IPI00314788.3	KNPDSLELIR	592.8356	2	43	P y8	30.4	73.4
629	IPI00314788.3	LHPNDEDIHTANER	415.9474	4	22	y++9	5.85	27.9
630	IPI00314788.3	LHPNDEDIHTANER	554.2604	3	24	c b7	14.55	38.6
631	IPI00314788.3	QALSPDMLATDLAYYLVR	1021.0311	2	49	y7	12.85	61.9
632	IPI00314788.3	QALSPDMLATDLAYYLVR	680.6883	3	55	y5	27.2	82.2
633	IPI00314788.3	QALSPDMLATDLAYYLVR	1020.5272	2	82	y6	16.9	98.9
634	IPI00314788.3	RINVLPLGSGAIAGNPLGVDR	697.4015	3	44	y8	30.4	74.4
635	IPI00314788.3	RINVLPLGSGAIAGNPLGVDRELLR	650.8812	4	20		0	20.0
636	IPI00314788.3	RINVLPLGSGAIAGNPLGVDRELLR	651.1306	4	27		0	27.0
637	IPI00314788.3	RINVLPLGSGAIAGNPLGVDRELLR	867.8375	3	33	b5 P	15.6	48.6
638	IPI00314788.3	RINVLPLGSGAIAGNPLGVDRELLR	867.8382	3	37	b5 P	25.35	62.4
639	IPI00314788.3	SRNDQVVTDLR	651.8423	2	39	y7	12.85	51.9
640	IPI00314788.3	SSVEWQIR	502.7620	2	52	y5	41	93.0
641	IPI00314788.3	VAEWAQGTFFK	633.3123	2	57	y6	97.85	154.9
642	IPI00111950.1	DIVLVAYSALGSHR	500.9437	3	29	y++9	7.1	36.1
643	IPI00111950.1	DIVLVAYSALGSHR	751.0110	2	74	y8	42.15	116.2
644	IPI00111950.1	DIVLVAYSALGSHR	751.0130	2	97	y9	4.8	101.8
645	IPI00111950.1	ENMQVFEFQLTSEDMDK	988.9413	2	71	y6	52.95	124.0
646	IPI00111950.1	ENMQVFEFQLTSEDMDK	988.4429	2	74	y6	27.2	101.2
647	IPI00111950.1	ENMQVFEFQLTSEDMDK	988.9412	2	79	y5	83.9	162.9
648	IPI00111950.1	GVVVLAK	343.2343	2	25	y4	75.6	100.6
649	IPI00111950.1	HIDSASMYQNEK	474.8828	3	21	y5	69.75	90.8
650	IPI00111950.1	HIDSASMYQNEK	711.8215	2	58	y5	41	99.0
651	IPI00111950.1	IADGTVKR	430.2536	2	40	y5	29.45	69.5
652	IPI00111950.1	IAIDAGFR	862.4956	1	16	y4	20.55	36.6
653	IPI00111950.1	KYNRTPALIALR	472.6217	3	22		0	22.0

654	IPI00111950.1	QLQLDYVDLYLIHFPAMAMK	780.0906	3	30	y7	58.1	88.1
655	IPI00111950.1	QLQLDYVDLYLIHFPAMMKPGENYLPK	1080.2218	3	29		0	29.0
656	IPI00111950.1	QLQLDYVDLYLIHFPAMMKPGENYLPK	1079.8891	3	34	P y8	21.2	55.2
657	IPI00111950.1	QWVDQSSPVLLDNPVLGSMAMK	1143.0894	2	62	y6	14.55	76.6
658	IPI00111950.1	QWVDQSSPVLLDNPVLGSMAMK	1143.0896	2	76	P y8	5.35	81.4
659	IPI00111950.1	QWVDQSSPVLLDNPVLGSMAMK	1143.0890	2	77	P y8	21.2	98.2
660	IPI00111950.1	QWVDQSSPVLLDNPVLGSMAMK	1143.0894	2	79	P y8	33.75	112.8
661	IPI00111950.1	SIGVSNFNR	497.2595	2	36	y5	29.45	65.5
662	IPI00111950.1	SIGVSNFNRR	575.3097	2	16		0	16.0
663	IPI00111950.1	SIGVSNFNRR	575.3110	2	18		0	18.0
664	IPI00111950.1	VLDDLK	408.7271	2	37	y5	52.95	90.0
665	IPI00111950.1	YISGSSF	444.7269	2	23	y6	25.35	48.4
666	IPI00230440.3	AGIPVFAWK	494.7850	2	42	P y6	69.75	111.8
667	IPI00230440.3	ALDIAENEMPGLMR	780.3818	2	21	P y5	57.05	78.1
668	IPI00230440.3	ALDIAENEMPGLMR	780.3961	2	33	P y5	41	74.0
669	IPI00230440.3	ALDIAENEMPGLMR	780.8837	2	42	P y5	27.2	69.2
670	IPI00230440.3	DGPLNMILDDGGDLTNIHTK	751.7257	3	30		0	30.0
671	IPI00230440.3	DGPLNMILDDGGDLTNIHTK	751.7151	3	30		0	30.0
672	IPI00230440.3	DGPLNMILDDGGDLTNIHTK	751.3903	3	35		0	35.0
673	IPI00230440.3	DGPLNMILDDGGDLTNIHTK	1127.0659	2	71	y8	22.4	93.4
674	IPI00230440.3	DGPLNMILDDGGDLTNIHTK	1127.0720	2	74		0	74.0
675	IPI00230440.3	DGPLNMILDDGGDLTNIHTK	1127.0716	2	81	y5	7.7	88.7
676	IPI00230440.3	EMYSASKPLK	577.2996	2	27	y7	46.75	73.8
677	IPI00230440.3	ESLIDGIK	437.7480	2	38		0	38.0
678	IPI00230440.3	ESLIDGIK	874.5137	1	39		0	39.0
679	IPI00230440.3	GISEETTTGVHNLK	824.9455	2	56	y5	57.05	113.1
680	IPI00230440.3	GISEETTTGVHNLK	824.9287	2	68	y8	35.8	103.8
681	IPI00230440.3	HFEQMK	410.1948	2	22	y4	44.5	66.5
682	IPI00230440.3	IILLAAGR	442.7822	2	49	y6	77.6	126.6
683	IPI00230440.3	KLDEAVAEHLGK	460.9209	3	47	y7	65.15	112.2
684	IPI00230440.3	KLDEAVAEHLGK	460.9209	3	58	y7	49.6	107.6
685	IPI00230440.3	MREMYSASK	368.1722	3	23	y5	41	64.0
686	IPI00230440.3	MREMYSASK	551.7551	2	44	b8	33.75	77.8
687	IPI00230440.3	MREMYSASKPLK	480.9168	3	49	c b4	29.45	78.5
688	IPI00230440.3	RATDVMIAGK	354.5309	3	32	b4	27.2	59.2
689	IPI00230440.3	SDKLPYK	446.7428	2	33		0	33.0
690	IPI00230440.3	VADIGLAAWGR	564.8123	2	52	y7	12.85	64.9
691	IPI00230440.3	VADIGLAAWGRK	419.5751	3	31		0	31.0
692	IPI00230440.3	VNIKPQVDYWLK	553.9848	3	19	y++12	10.5	29.5
693	IPI00230440.3	VPAINVNDVTK	628.8463	2	52	y6	65.15	117.2
694	IPI00230440.3	VPAINVNDVTK	628.8463	2	64	y8	58.1	122.1

695	IPI00230440.3	VPAINVNDVTK	629.3380	2	64		0	64.0
696	IPI00230440.3	WLNENAVEK	1102.5532	1	18		0	18.0
697	IPI00230440.3	YPVGVHFLPK	578.8298	2	44	c b8	31.95	76.0
698	IPI00230212.3	ADIVENQVMDTR	695.8368	2	72	y8	22.4	94.4
699	IPI00230212.3	HHLDGETEEER	676.2985	2	42	y7	46.75	88.8
700	IPI00230212.3	HHLDGETEEER	451.2006	3	54	y4	29.45	83.5
701	IPI00230212.3	HHLDGETEEERIR	540.9294	3	18	b6	6.2	24.2
702	IPI00230212.3	HHLDGETEEERIR	405.9488	4	34	y++10	7.1	41.1
703	IPI00230212.3	HHLDGETEEERIR	810.9030	2	45	y4	29.45	74.5
704	IPI00230212.3	IRADIVENQVMDTR	553.9562	3	30	y4	27.2	57.2
705	IPI00230212.3	IRADIVENQVMDTR	830.4964	2	50		0	50.0
706	IPI00230212.3	ISAYMK	356.6885	2	21	y5	62.3	83.3
707	IPI00230212.3	ISAYMK	712.3693	1	27	c b4	1.25	28.3
708	IPI00230212.3	ITQSNAILR	1015.5908	1	18		0	18.0
709	IPI00230212.3	ITQSNAILR	508.2987	2	54	y6	52.95	107.0
710	IPI00230212.3	KHHLDGETEEER	740.3457	2	33	y8	46.75	79.8
711	IPI00230212.3	KHHLDGETEEERIR	583.6273	3	24		0	24.0
712	IPI00230212.3	LGLDFPNLPYLIDGSHK	634.0061	3	32	c b5 P	18.5	50.5
713	IPI00230212.3	LGLDFPNLPYLIDGSHK	634.0078	3	33	c b5 P	15.6	48.6
714	IPI00230212.3	LGLDFPNLPYLIDGSHK	633.6770	3	35	y++15	54.8	89.8
715	IPI00230212.3	LGLDFPNLPYLIDGSHK	633.6845	3	38		0	38.0
716	IPI00230212.3	LGLDFPNLPYLIDGSHK	950.0068	2	51	y7	23.75	74.8
717	IPI00230212.3	LYSEFLGK	956.5477	1	28		0	28.0
718	IPI00230212.3	MAHWSNK	437.2055	2	31	y4	15.6	46.6
719	IPI00230212.3	MLLEYTDSSYDEK	797.3535	2	41		0	41.0
720	IPI00230212.3	PMILGYWNVN	625.3443	2	30	y6	25.35	55.4
721	IPI00230212.3	PMILGYWNVN	624.8424	2	46	y6	25.35	71.4
722	IPI00230212.3	PMILGYWNVN	624.8310	2	54	y6	27.2	81.2
723	IPI00230212.3	PMILGYWNVN	624.8324	2	59	y6	41	100.0
724	IPI00230212.3	RPWFAGDK	488.7536	2	29	c b7	12.85	41.9
725	IPI00230212.3	RYTMGDAPDFDR	481.8829	3	30	c b7 P	12.15	42.2
726	IPI00230212.3	RYTMGDAPDFDR	722.3258	2	47		0	47.0
727	IPI00230212.3	RYTMGDAPDFDRSQWLNEK	777.3612	3	22	b6	6.2	28.2
728	IPI00230212.3	RYTMGDAPDFDRSQWLNEK	777.3612	3	24	b6	13.65	37.7
729	IPI00230212.3	SQWLNEK	904.4879	1	27	y5	41	68.0
730	IPI00230212.3	VTYVDFLAYDILDQYR	997.4929	2	19	y7	13.65	32.7
731	IPI00230212.3	VTYVDFLAYDILDQYR	997.9943	2	23	y4	29.45	52.5
732	IPI00230212.3	VTYVDFLAYDILDQYR	998.0033	2	23	y7	12.85	35.9
733	IPI00230212.3	VTYVDFLAYDILDQYR	998.0036	2	25	y7	52.95	78.0
734	IPI00230212.3	VTYVDFLAYDILDQYR	998.0035	2	30	y4	44.5	74.5
735	IPI00230212.3	VTYVDFLAYDILDQYR	997.9998	2	37		0	37.0

736	IPI00230212.3	VTYVDFLAYDILDQYR	997.9988	2	39	y7	12.85	51.9
737	IPI00230212.3	VTYVDFLAYDILDQYR	998.0037	2	40	y7	46.75	86.8
738	IPI00230212.3	VTYVDFLAYDILDQYR	997.4993	2	43	y4	62.3	105.3
739	IPI00230212.3	VTYVDFLAYDILDQYR	998.0030	2	51	y7	22.4	73.4
740	IPI00230212.3	VTYVDFLAYDILDQYR	998.0032	2	56	y6	14.55	70.6
741	IPI00230212.3	VTYVDFLAYDILDQYR	665.3348	3	65	y4	62.3	127.3
742	IPI00230212.3	YIATPIFSK	1039.5833	1	27	P y5	69.75	96.8
743	IPI00126120.1	DGGQQFTEEFQTLNPMK	985.9517	2	46	y4	55.9	101.9
744	IPI00126120.1	DGGQQFTEEFQTLNPMK	985.4508	2	54	y4	44.5	98.5
745	IPI00126120.1	DGGQQFTEEFQTLNPMK	985.9513	2	74	y4	41	115.0
746	IPI00126120.1	DGGQQFTEEFQTLNPMK	985.4509	2	75	y7	1.6	76.6
747	IPI00126120.1	ELLALEVFQVSHPR	546.6388	3	34		0	34.0
748	IPI00126120.1	ELLALEVFQVSHPR	819.4569	2	74	y8	31.95	106.0
749	IPI00126120.1	ELLALEVFQVSHPR	819.4570	2	82	y7	33.75	115.8
750	IPI00126120.1	FKVDLSPYPTISHINK	620.3407	3	39	P y8	20.1	59.1
751	IPI00126120.1	FKVDLSPYPTISHINK	620.3523	3	41	P y8	22.4	63.4
752	IPI00126120.1	GIDYEIVPINLIK	743.9533	2	24	P y6	49.6	73.6
753	IPI00126120.1	IALALK	314.7234	2	31	y5	97.85	128.9
754	IPI00126120.1	IDGITIVQSLAIMEYLEETRPIPR	920.1692	3	20	y++16	8.1	28.1
755	IPI00126120.1	IDGITIVQSLAIMEYLEETRPIPR	920.1692	3	21	b6	1.25	22.3
756	IPI00126120.1	IDGITIVQSLAIMEYLEETRPIPR	920.1658	3	39		0	39.0
757	IPI00126120.1	IDGITIVQSLAIMEYLEETRPIPR	920.1690	3	43	y++14	26.5	69.5
758	IPI00126120.1	ILQSTAGK	409.2428	2	33	y5	35.8	68.8
759	IPI00126120.1	ILQSTAGK	817.4809	1	40	y5	25.35	65.4
760	IPI00126120.1	MISDLIASGIQPLQNLVSVLK	714.4094	3	44	b6	65.15	109.2
761	IPI00126120.1	MISDLIASGIQPLQNLVSVLK	714.0763	3	44	b9	6.6	50.6
762	IPI00126120.1	MISDLIASGIQPLQNLVSVLK	1079.1058	2	67	c b6	7.1	74.1
763	IPI00126120.1	MISDLIASGIQPLQNLVSVLK	1071.1083	2	84		0	84.0
764	IPI00126120.1	MISDLIASGIQPLQNLVSVLK	1071.1082	2	96		0	96.0
765	IPI00126120.1	MQAGKPILYSYFR	808.4173	2	60	y5	0.9	60.9
766	IPI00126120.1	QVGQENQMWAQK	787.8793	2	36	y4	36.1	72.1
767	IPI00126120.1	RQPDTPAELRT	642.3380	2	20	y7	46.75	66.8
768	IPI00126120.1	RQPDTPAELRT	642.3380	2	21	c b4	29.45	50.5
769	IPI00126120.1	RQPDTPAELRT	428.5622	3	26	c b5 P	25.35	51.4
770	IPI00126120.1	VITSGFNALEK	589.8252	2	52	y9	20.1	72.1
771	IPI00228630.3	AGGLATTGDK	445.7323	2	44	y6	52.95	97.0
772	IPI00228630.3	AGGLATTGDKDILDIVPTEIHQK	798.4294	3	16	P y7	46.75	62.8
773	IPI00228630.3	AGGLATTGDKDILDIVPTEIHQK	798.4642	3	16	P y7	61.35	77.4
774	IPI00228630.3	AGGLATTGDKDILDIVPTEIHQK	798.4296	3	17		0	17.0
775	IPI00228630.3	AISSAVR	703.4103	1	20		0	20.0
776	IPI00228630.3	AISSAVR	352.2086	2	38	y5	52.95	91.0

777	IPI00228630.3	ANHAPFETDISTLTR	857.9264	2	39	y6	15.6	54.6
778	IPI00228630.3	ANHAPFETDISTLTR	857.9232	2	61	y6	6.6	67.6
779	IPI00228630.3	APVVMGSEDVQEFLEIYRK	766.4134	3	15		0	15.0
780	IPI00228630.3	APVVMGSEDVQEFLEIYRK	766.4205	3	23		0	23.0
781	IPI00228630.3	APVVMGSEDVQEFLEIYRK	766.7409	3	26		0	26.0
782	IPI00228630.3	DFDPAINYLQR	740.8554	2	25	y6	38.2	63.2
783	IPI00228630.3	DFDPAINYLQRK	804.9043	2	51	y7	22.4	73.4
784	IPI00228630.3	DILDIVPTEIHQK	507.6156	3	25	P y7	33.75	58.8
785	IPI00228630.3	DILDIVPTEIHQK	760.9195	2	41	P y7	77.6	118.6
786	IPI00228630.3	FVMEQGR	433.7132	2	37	y5	49.6	86.6
787	IPI00228630.3	GNIYSLNEGYAK	664.8299	2	52	y6	69.75	121.8
788	IPI00228630.3	KFPPDGSAPYGAR	454.8985	3	22	P y5	35.8	57.8
789	IPI00228630.3	KGNIYSLNEGYAK	728.8801	2	61	y8	31.95	93.0
790	IPI00228630.3	KLDILSNDLVINMLK	577.0026	3	21	y6	89	110.0
791	IPI00228630.3	KLDILSNDLVINMLK	864.9999	2	70	y7	25.35	95.4
792	IPI00228630.3	KLDILSNDLVINMLK	864.9996	2	79	c b5	38.2	117.2
793	IPI00228630.3	KLDILSNDLVINMLK	864.9998	2	91	y5	27.2	118.2
794	IPI00228630.3	QAGIAQLYGIAGSTNVTGDQVK	1096.5700	2	71	y6	6.6	77.6
795	IPI00228630.3	QAGIAQLYGIAGSTNVTGDQVK	1096.5702	2	102	y6	25.35	127.4
796	IPI00228630.3	TLVYGGIFLYPANK	778.4283	2	27	P y4	41	68.0
797	IPI00228630.3	TLVYGGIFLYPANK	778.4285	2	29	P y4	44.5	73.5
798	IPI00228630.3	TLVYGGIFLYPANK	778.4309	2	33	P y4	41	74.0
799	IPI00228630.3	TLVYGGIFLYPANKK	561.9876	3	20		0	20.0
800	IPI00228630.3	TLVYGGIFLYPANKK	842.5001	2	53	P y5	16.9	69.9
801	IPI00228630.3	YVGSMVADIHR	416.5448	3	20		0	20.0
802	IPI00228630.3	YVGSMVADIHR	624.3150	2	49	y9	38.5	87.5
803	IPI00228630.3	YVGSMVADIHR	624.3150	2	64	y9	10.5	74.5
804	IPI00319994.4	DLADELALVDVMEDK	559.2745	3	33	y6	52.95	86.0
805	IPI00319994.4	DLADELALVDVMEDK	838.4086	2	50	c b9	30.4	80.4
806	IPI00319994.4	GEMMDLQHGSFLK	536.2705	3	16	y++10	33.75	49.8
807	IPI00319994.4	GEMMDLQHGSFLK	803.3920	2	64	c b8	1.95	66.0
808	IPI00319994.4	GYTSWAIGLSVADLAESIMK	1056.5390	2	86	y9	30.4	116.4
809	IPI00319994.4	ISGFPK	324.6895	2	23		0	23.0
810	IPI00319994.4	LKGEMMDLQHGSFLK	616.6596	3	15	c b7	5.55	20.6
811	IPI00319994.4	LKGEMMDLQHGSFLK	616.3261	3	21	c b7	1.75	22.8
812	IPI00319994.4	LLIVSNPVDILTYVAXK	973.0603	2	19		0	19.0
813	IPI00319994.4	LLIVSNPVDILTYVAXK	649.0462	3	37		0	37.0
814	IPI00319994.4	LLIVSNPVDILTYVAXK	649.0462	3	37		0	37.0
815	IPI00319994.4	LLIVSNPVDILTYVAXK	973.0692	2	71		0	71.0
816	IPI00319994.4	LLIVSNPVDILTYVAXK	973.0694	2	77		0	77.0
817	IPI00319994.4	LLIVSNPVDILTYVAXK	973.0651	2	80		0	80.0

818	IPI00319994.4	LLIVSNPVDILTYVAXK	973.0694	2	82	c b6 P	1.25	83.3
819	IPI00319994.4	LLIVSNPVDILTYVAXK	972.5659	2	92		0	92.0
820	IPI00319994.4	LNLVQR	371.7320	2	41	y4	41	82.0
821	IPI00319994.4	LVIIITAGAR	457.2954	2	46	y5	14.55	60.6
822	IPI00319994.4	LVIIITAGAR	457.2954	2	52	y5	41	93.0
823	IPI00319994.4	NVNIFK	367.7136	2	25		0	25.0
824	IPI00319994.4	NVNIFK	734.4256	1	30	c b4	62.3	92.3
825	IPI00319994.4	RVHPISTMIK	591.3449	2	37	c b8	12.15	49.2
826	IPI00319994.4	SADTLWGIQK	559.7958	2	40	y4	57.05	97.1
827	IPI00319994.4	SLNPELGTDADK	630.3091	2	59	P y9	85.6	144.6
828	IPI00319994.4	SLNPELGTDADKEQWK	915.9472	2	56		0	56.0
829	IPI00319994.4	VTLTPEEEAR	572.7959	2	38	P y6	82.65	120.7
830	IPI00319994.4	YLMGER	768.3717	1	16		0	16.0
831	IPI00387492.1	ALTVPELTQQMFDK	846.4363	2	34	y5	38.2	72.2
832	IPI00387492.1	ALTVPELTQQMFDK	846.4363	2	50	y4	25.35	75.4
833	IPI00387492.1	AVLVDLEPGTMDSVR	801.4112	2	16	P y8	21.2	37.2
834	IPI00387492.1	AVLVDLEPGTMDSVR	801.4174	2	21	P y8	30.4	51.4
835	IPI00387492.1	AVLVDLEPGTMDSVR	801.4113	2	32	P y8	30.4	62.4
836	IPI00387492.1	AVLVDLEPGTMDSVR	801.4143	2	39	P y8	58.1	97.1
837	IPI00387492.1	EVDEQMLNVQNK	723.8561	2	30	y5	25.35	55.4
838	IPI00387492.1	GHYTEGAELVDSVLDVVRK	696.3738	3	42	y4	18.5	60.5
839	IPI00387492.1	IMNTFSVVPSPK	660.3591	2	63	y5	41	104.0
840	IPI00387492.1	IREEYPDR	359.8493	3	19	c b5 P	14.55	33.6
841	IPI00387492.1	IREEYPDR	539.2700	2	31	c b7	33.75	64.8
842	IPI00387492.1	LAVNMVPFPR	572.3211	2	58	P y4	15.6	73.6
843	IPI00387492.1	LHFFMPGFAPLTSR	810.9508	2	41	P y9	40.2	81.2
844	IPI00387492.1	MSATFIGNSTAIQELFK	929.9779	2	71	y7	22.4	93.4
845	IPI00387492.1	MSATFIGNSTAIQELFK	929.9778	2	77	y5	49.1	126.1
846	IPI00387492.1	MSATFIGNSTAIQELFK	929.4757	2	82		0	82.0
847	IPI00387492.1	MSATFIGNSTAIQELFK	929.9779	2	103	y5	44.5	147.5
848	IPI00387492.1	NSSYFVEWIPNNVK	848.9181	2	50	P y5	52.95	103.0
849	IPI00387492.1	RISEQFTAMFR	693.3528	2	52	c b4	29.45	81.5
850	IPI00387492.1	SGPFGQIFRPDNFVFGQSGAGNNWAK	934.1207	3	35	y9	31.95	67.0
851	IPI00387492.1	SGPFGQIFRPDNFVFGQSGAGNNWAK	933.7876	3	59	y6	7.1	66.1
852	IPI00387492.1	SGPFGQIFRPDNFVFGQSGAGNNWAK	933.7877	3	61	y8	6.2	67.2
853	IPI00387492.1	SGPFGQIFRPDNFVFGQSGAGNNWAK	933.7873	3	68	y8	5.55	73.6
854	IPI00310669.2	AAPGDRTMLDSLWAAAQEFQAWK	855.4420	3	19		0	19.0
855	IPI00310669.2	AAPTEPPEAPEATAAGGVTSK	976.4843	2	64	c b9 P	5.35	69.4
856	IPI00310669.2	AILEVLQTQGA	571.8251	2	57	c b6	75.6	132.6
857	IPI00310669.2	ASYISSAQLDQDPGAVAAAAIFR	807.4158	3	54	y5	29.45	83.5
858	IPI00310669.2	ASYISSAQLDQDPGAVAAAAIFR	807.4519	3	55	y7	38.2	93.2

859	IPI00310669.2	ASYISSAQLDQPDPGAVAAAAIFR	1210.6153	2	73	c b9	11	84.0
860	IPI00310669.2	ASYISSAQLDQPDPGAVAAAAIFR	1210.6158	2	76	y5	29.45	105.5
861	IPI00310669.2	AVAQAGTVGTLIVK	720.9418	2	78	y7	46.75	124.8
862	IPI00310669.2	EGPSLTSPAQVLSR	721.4011	2	15		0	15.0
863	IPI00310669.2	GRVALLSGGGSGHEPAHAGFIGK	544.5413	4	22	y++12	21.2	43.2
864	IPI00310669.2	IAPVDQIVTLMLDHMTNTSNIFHVPVR	1021.8772	3	35		0	35.0
865	IPI00310669.2	LIDAETTAK	481.2636	2	43	y7	65.15	108.2
866	IPI00310669.2	LSVLLLER	471.8031	2	52	y4	27.2	79.2
867	IPI00310669.2	MGGSSGALYGLFLTAAQPLK	1027.5414	2	40	y7	14.55	54.6
868	IPI00310669.2	NYTGDRLNFLAMEQAK	643.3182	3	20		0	20.0
869	IPI00310669.2	NYTGDRLNFLAMEQAK	643.6550	3	29	y5	52.95	82.0
870	IPI00310669.2	QMALVLDR	473.2630	2	37	y4	27.2	64.2
871	IPI00310669.2	TDLPTWSAAMDAGLESMQK	1026.9814	2	33	y9	46.75	79.8
872	IPI00310669.2	TMLDSLWAAQEFQAWK	666.3281	3	33	c b8	1.95	35.0
873	IPI00310669.2	TMLDSLWAAQEFQAWK	665.9971	3	33		0	33.0
874	IPI00310669.2	VAGALAEEGMGLEEITK	859.4375	2	87	y7	82.65	169.7
875	IPI00310669.2	VALLSGGGSGHEPAHAGFIGK	654.6787	3	19	y++17	77.95	97.0
876	IPI00310669.2	VALRSDLDTLK	615.8555	2	38	c b8	31.95	70.0
877	IPI00310669.2	VSVTGRK	373.7299	2	33	y4	7.7	40.7
878	IPI00319525.1	AKPLTDQEK	536.2879	2	27	P y7	95.65	122.7
879	IPI00319525.1	APNDFNLQDFNVGDYIQAVALDR	842.0961	3	18	y4	7.1	25.1
880	IPI00319525.1	APNDFNLQDFNVGDYIQAVALDR	842.4227	3	34		0	34.0
881	IPI00319525.1	APNDFNLQDFNVGDYIQAVALDRNLAENISR	1141.5705	3	75		0	75.0
882	IPI00319525.1	APNDFNLQDFNVGDYIQAVALDRNLAENISR	1141.9024	3	80	b7	9.55	89.6
883	IPI00319525.1	AWEITKK	438.2527	2	28	y4	15.6	43.6
884	IPI00319525.1	DFSELEPKFQNK	798.9829	2	36	P y7	49.6	85.6
885	IPI00319525.1	DGMGTVFDAFPDQVAIQLNDTHPALAIPELMR	1161.9108	3	68	b9	1.75	69.8
886	IPI00319525.1	DHLVGR	348.6930	2	24	c b4	18.5	42.5
887	IPI00319525.1	DIINMLFYHDR	479.9060	3	16	c b6	29.45	45.5
888	IPI00319525.1	DIINMLFYHDR	479.5714	3	16		0	16.0
889	IPI00319525.1	DIWNMEPSDLK	674.3258	2	50	P y5	57.05	107.1
890	IPI00319525.1	DLSQLTK	402.7268	2	22	y5	69.75	91.8
891	IPI00319525.1	DYYFALAHTVR	678.3529	2	33	y5	65.15	98.2
892	IPI00319525.1	HLEIYEINQK	700.3868	2	46	y6	77.6	123.6
893	IPI00319525.1	HLHFTLVK	332.1992	3	23	c b6	1.05	24.1
894	IPI00319525.1	IFVDIEKLPWAK	486.9498	3	30	y++8	0.9	30.9
895	IPI00319525.1	IHSDIVK	406.2374	2	34	c b6	14.55	48.6
896	IPI00319525.1	INPSSMFDVHVK	458.5674	3	19		0	19.0
897	IPI00319525.1	INPSSMFDVHVK	687.3553	2	65	P y++10	65.15	130.2
898	IPI00319525.1	IREGWQVEEADDWLR	634.9769	3	35	y5	49.1	84.1
899	IPI00319525.1	IREGWQVEEADDWLR	634.9769	3	35	y5	32.3	67.3

900	IPI00319525.1	LHSFVSDIFLR	483.5897	3	20		0	20.0
901	IPI00319525.1	LITSVAEVVNDPVMVGSK	625.3303	3	42		0	42.0
902	IPI00319525.1	LITSVAEVVNDPVMVGSK	937.4902	2	61	P y6	23.75	84.8
903	IPI00319525.1	LVIDQIDNGFFSPNQDLFK	1154.5881	2	45	P y5	44.5	89.5
904	IPI00319525.1	LVIDQIDNGFFSPNQDLFK	1154.5882	2	50		0	50.0
905	IPI00319525.1	LVIDQIDNGFFSPNQDLFK	1154.5882	2	63	P y5	57.05	120.1
906	IPI00319525.1	NLAENISR	458.7458	2	23	y6	38.2	61.2
907	IPI00319525.1	RIHEYKR	334.5264	3	28		0	28.0
908	IPI00319525.1	TFAYTNHTVLPEALERWPVELVEK	948.5002	3	27		0	27.0
909	IPI00319525.1	VFADYEAYVK	602.8123	2	47	y7	90.2	137.2
910	IPI00319525.1	VIPATDLSEQISTAGTEASGTGNMK	827.0738	3	21	y6	16.9	37.9
911	IPI00319525.1	VIPATDLSEQISTAGTEASGTGNMK	827.0738	3	27	y6	1.4	28.4
912	IPI00319525.1	VSQLYMNQK	555.7834	2	50	y5	69.75	119.8
913	IPI00319525.1	WPVELVEK	500.2797	2	37	y6	65.15	102.2
914	IPI00319525.1	WVDTQVVLALPYDTPVPGYMNNTVNTMR	1066.1959	3	28	b8	6.6	34.6
915	IPI00319525.1	WVDTQVVLALPYDTPVPGYMNNTVNTMR	1065.8645	3	37	b8	13.65	50.7
916	IPI00319525.1	YEYGIFNQK	581.2857	2	34	y7	61.35	95.4
917	IPI00323357.1	ARFEELNADLFR	494.2572	3	19		0	19.0
918	IPI00323357.1	ARFEELNADLFR	740.9011	2	41	y7	12.85	53.9
919	IPI00323357.1	EIAEAYLGK	497.2668	2	34		0	34.0
920	IPI00323357.1	GTLDPVEK	429.7327	2	18	y6	41	59.0
921	IPI00323357.1	HWPFMVVNDAGRPK	551.9489	3	29	y++13	27.7	56.7
922	IPI00323357.1	HWPFMVVNDAGRPK	551.9489	3	34	P y++12	81.65	115.7
923	IPI00323357.1	IINEPTAAAIAYGLDK	553.9699	3	35	y5	89	124.0
924	IPI00323357.1	IINEPTAAAIAYGLDK	830.5170	2	49	y6	102.45	151.5
925	IPI00323357.1	ITNDKGR	402.7268	2	20		0	20.0
926	IPI00323357.1	LLQDFFNGK	541.2877	2	50	y6	57.05	107.1
927	IPI00323357.1	MVNHFAIEFK	412.5466	3	23	y4	18.5	41.5
928	IPI00323357.1	NQTAEKEEFEHQK	582.6077	3	34		0	34.0
929	IPI00323357.1	NQTAEKEEFEHQK	873.4166	2	46	y4	29.45	75.5
930	IPI00323357.1	NQVAMNPTNTVFDAK	825.4202	2	62	P y9	66.55	128.6
931	IPI00323357.1	NSLESYAFNMK	652.3136	2	55	y8	44.3	99.3
932	IPI00323357.1	QTQTFTTYSNPGVLIQVYEGER	925.7805	3	37	y5	25.35	62.4
933	IPI00323357.1	QTQTFTTYSNPGVLIQVYEGER	925.7839	3	43	y5	14.55	57.6
934	IPI00323357.1	RFDDAVVQSDMK	470.8946	3	38	c b6	35.8	73.8
935	IPI00323357.1	RFDDAVVQSDMK	705.8405	2	56	c b4	15.6	71.6
936	IPI00323357.1	RTLSSSTQASIEIDSLYEGIDFYTSITR	1052.1968	3	17		0	17.0
937	IPI00323357.1	RTLSSSTQASIEIDSLYEGIDFYTSITR	1052.1954	3	18	b4	1.25	19.3
938	IPI00323357.1	SFYPEEVSSMVLTK	808.8966	2	53	y++13	18.3	71.3
939	IPI00323357.1	SFYPEEVSSMVLTK	808.8965	2	55	y++13	4.7	59.7
940	IPI00323357.1	SFYPEEVSSMVLTK	808.8964	2	57	y++13	4.8	61.8

941	IPI00323357.1	SINPDEAVAYGAAVQAAILSGDK	754.3949	3	30	y4	7.1	37.1
942	IPI00323357.1	SINPDEAVAYGAAVQAAILSGDK	1131.0760	2	74		0	74.0
943	IPI00323357.1	SQIHDIVLVGGSTR	741.4166	2	71	y5	15.6	86.6
944	IPI00323357.1	STAGDTHLGGEDFDNR	846.3665	2	56	c b8	11.55	67.6
945	IPI00323357.1	TTPSYVAFTDTER	744.3655	2	28	y6	25.35	53.4
946	IPI00323357.1	TVTNAVVTVPAYFNDSQR	661.6704	3	24	y++12	40.2	64.2
947	IPI00323357.1	TVTNAVVTVPAYFNDSQR	992.0062	2	28		0	28.0
948	IPI00323357.1	TVTNAVVTVPAYFNDSQR	991.5020	2	37		0	37.0
949	IPI00110851.1	AGFAGDDAPR	488.7276	2	61	y7	25.35	86.4
950	IPI00110851.1	AVFPSIVGRPR	599.8570	2	29	P y8	5.55	34.6
951	IPI00110851.1	AVFPSIVGRPR	599.8570	2	34	P y8	0.9	34.9
952	IPI00110851.1	DLTDYLMK	998.4878	1	23	y7	61.35	84.4
953	IPI00110851.1	DLYANTVLSSGTTMYPGIADR	1108.5428	2	62	P y6	52.95	115.0
954	IPI00110851.1	DLYANTVLSSGTTMYPGIADR	1108.5427	2	66	P y6	25.35	91.4
955	IPI00110851.1	DLYANTVLSSGTTMYPGIADR	1108.5427	2	73	P y6	52.95	126.0
956	IPI00110851.1	DLYANTVLSSGTTMYPGIADR	1108.5427	2	83		0	83.0
957	IPI00110851.1	EITALAPSTMK	581.3128	2	30	P y5	41	71.0
958	IPI00110851.1	GYSFTTTAER	566.7675	2	54	y8	2.15	56.2
959	IPI00110851.1	GYSFTTTAEREIVR	815.4540	2	18	y5	20.55	38.6
960	IPI00110851.1	GYSFTTTAEREIVR	543.9458	3	21		0	21.0
961	IPI00110851.1	HQGVMVGMGQK	391.1951	3	39	c b5	16.9	55.9
962	IPI00110851.1	HQGVMVGMGQK	586.2891	2	49	y9	66.55	115.6
963	IPI00110851.1	IIAPPERK	462.2877	2	30	y6	38.2	68.2
964	IPI00110851.1	IWHHTFYNELR	505.9213	3	24		0	24.0
965	IPI00110851.1	IWHHTFYNELR	758.3917	2	32	y7	5.85	37.9
966	IPI00110851.1	IWHHTFYNELR	505.9213	3	47	y4	41	88.0
967	IPI00110851.1	LDLAGR	322.6900	2	30	y4	32.3	62.3
968	IPI00110851.1	LDLAGRDLTDYLMK	541.9524	3	18		0	18.0
969	IPI00110851.1	QEYDESGPSIVHR	758.8584	2	23		0	23.0
970	IPI00110851.1	QEYDESGPSIVHR	506.2393	3	43		0	43.0
971	IPI00110851.1	QEYDESGPSIVHRK	548.9382	3	17	y4	16.9	33.9
972	IPI00110851.1	QEYDESGPSIVHRK	548.9382	3	25		0	25.0
973	IPI00110851.1	QEYDESGPSIVHRK	822.9300	2	30	y++12	27.7	57.7
974	IPI00110851.1	SYELPDGQVITIGNER	896.4515	2	34	y4	16.9	50.9
975	IPI00110851.1	SYELPDGQVITIGNER	895.9501	2	47	y4	16.9	63.9
976	IPI00110851.1	SYELPDGQVITIGNER	895.9501	2	78	y4	29.45	107.5
977	IPI00110851.1	VAPEEHPVLLTEAPLNPK	978.0397	2	27	c b6 P	25.35	52.4
978	IPI00110851.1	VAPEEHPVLLTEAPLNPK	978.0397	2	35		0	35.0
979	IPI00128370.3	DINAYNGETPTEKLPFPIIDDK	831.0853	3	23	P y8	58.1	81.1
980	IPI00128370.3	FHDFLGDSWGILFSHR	508.5023	4	23	b5	14.55	37.6
981	IPI00128370.3	FHDFLGDSWGILFSHR	677.6676	3	24	y5	15.6	39.6

982	IPI00128370.3	GESVMVPTLSEEEAK	852.9664	2	36	c b7 P	13.65	49.7
983	IPI00128370.3	GRDLAILLGMLDPVEK	580.6625	3	24	P y4	69.9	93.9
984	IPI00128370.3	GRDLAILLGMLDPVEK	870.4882	2	69		0	69.0
985	IPI00128370.3	GRDLAILLGMLDPVEK	870.4879	2	73		0	73.0
986	IPI00128370.3	IRFHDFLGD SWGILF SHPR	575.7990	4	46	y5	25.35	71.4
987	IPI00128370.3	KGESVMVPTLSEEEAK	611.6489	3	20	c b8 P	33.75	53.8
988	IPI00128370.3	LIALSIDSVEDHLAWSK	949.0082	2	36		0	36.0
989	IPI00128370.3	LPFPIIDDK	529.3040	2	33	P y6	82.65	115.7
990	IPI00128370.3	LSILYPATTGR	596.3415	2	30	y7	33.75	63.8
991	IPI00128370.3	NFDEILR	453.7379	2	21	y5	89	110.0
992	IPI00128370.3	NFDEILR	906.5299	1	33	y4	41	74.0
993	IPI00128370.3	PGGLLLGDEAPNFEANTTIGR	714.7102	3	46	c b10 P	31.95	78.0
994	IPI00128370.3	PGGLLLGDEAPNFEANTTIGR	1072.0474	2	60	c b8	38.2	98.2
995	IPI00128370.3	PGGLLLGDEAPNFEANTTIGR	1072.0475	2	73	b8	49.6	122.6
996	IPI00128370.3	PGGLLLGDEAPNFEANTTIGR	1072.0472	2	75	c b8	38.2	113.2
997	IPI00128370.3	PGGLLLGDEAPNFEANTTIGR	1072.0470	2	77	y7	5.85	82.9
998	IPI00128370.3	VVDSLQLTGTKPVATPVDWK	718.7687	3	24	b7	14.55	38.6
999	IPI00128370.3	VVDSLQLTGTKPVATPVDWK	719.0818	3	27		0	27.0
1000	IPI00128370.3	VVDSLQLTGTKPVATPVDWK	1078.0965	2	79	P y5	32.3	111.3
1001	IPI00128370.3	VVDSLQLTGTKPVATPVDWKK	571.3247	4	16	P y6	32.3	48.3
1002	IPI00128370.3	VVDSLQLTGTKPVATPVDWKK	761.7650	3	16	P y6	38.2	54.2
1003	IPI00128370.3	VVDSLQLTGTKPVATPVDWKK	761.7902	3	48	y++15	4.6	52.6
1004	IPI00128370.3	VVFIFGPKD	511.2899	2	49	y4	44.5	93.5
1005	IPI00128370.3	VVFIFGPKDK	383.8936	3	35	y6	20.55	55.6
1006	IPI00230002.3	AAVPSIK	343.2159	2	29	P y4	44.5	73.5
1007	IPI00230002.3	AGGFLMK	362.1969	2	36	y6	69.75	105.8
1008	IPI00230002.3	AGGFLMCK	426.2447	2	27	y4	44.5	71.5
1009	IPI00230002.3	AHSSMVG VNL P Q K	456.5748	3	30	y5	14.55	44.6
1010	IPI00230002.3	AHSSMVG VNL P Q K	684.3602	2	37		0	37.0
1011	IPI00230002.3	ALESERPFLAILGGAK	590.3363	3	26		0	26.0
1012	IPI00230002.3	ALESERPFLAILGGAK	590.3362	3	34	y7	31.95	66.0
1013	IPI00230002.3	ALESERPFLAILGGAK	885.1211	2	42	P y10	50.5	92.5
1014	IPI00230002.3	CVGPEVENACANPAAGTVILLENLR	889.7688	3	34	y4	27.2	61.2
1015	IPI00230002.3	CVGPEVENACANPAAGTVILLENLR	889.7690	3	37	y7	13.65	50.7
1016	IPI00230002.3	ELNYFAK	442.7298	2	19		0	19.0
1017	IPI00230002.3	IDAFR	311.1713	2	23		0	23.0
1018	IPI00230002.3	IQLINMLDK	601.3362	2	51	y7	95.65	146.7
1019	IPI00230002.3	ITLPVDFVTADK	659.8684	2	47	P y9	135.2	182.2
1020	IPI00230002.3	ITLPVDFVTADKFDENAK	675.0349	3	40		0	40.0
1021	IPI00230002.3	ITLPVDFVTADKFDENAK	1012.5260	2	48		0	48.0
1022	IPI00230002.3	KYAEAVGR	447.2455	2	36	y6	44.3	80.3

1023	IPI00230002.3	LGDVYVNDAFGTAHR	545.6031	3	39	y6	1.25	40.3
1024	IPI00230002.3	LGDVYVNDAFGTAHR	545.9370	3	50	y++9	52.95	103.0
1025	IPI00230002.3	LGDVYVNDAFGTAHR	817.9270	2	109	y7	23.75	132.8
1026	IPI00230002.3	QIVWNGPVGVFWEAFAR	1053.5377	2	51	y7	32.3	83.3
1027	IPI00230002.3	QIVWNGPVGVFWEAFAR	1053.5379	2	65	y6	22.4	87.4
1028	IPI00230002.3	QIVWNGPVGVFWEAFAR	1053.5382	2	82	y5	8.5	90.5
1029	IPI00230002.3	SVVLMShLGRPDGVPMPDK	679.0252	3	24	b6	1.6	25.6
1030	IPI00230002.3	VLNNMEIGTSLYDEEGAK	992.4723	2	48		0	48.0
1031	IPI00230002.3	VLNNMEIGTSLYDEEGAK	991.9718	2	60	y7	65.15	125.2
1032	IPI00230002.3	VLPGVDALSNV	1083.6041	1	24	P y9	52.75	76.8
1033	IPI00230002.3	VLPGVDALSNV	542.3065	2	42	y6	52.95	95.0
1034	IPI00230002.3	VSHVSTGGGASLELLEGGK	580.9769	3	25		0	25.0
1035	IPI00230002.3	WNTEDK	396.6798	2	17		0	17.0
1036	IPI00230002.3	YSLEPVAANELK	610.3326	2	26	P y7	61.35	87.4
1037	IPI00135231.1	DAAEAIKK	423.2404	2	47	y5	57.05	104.1
1038	IPI00135231.1	DIFQEYDK	585.7935	2	30	y7	125.8	155.8
1039	IPI00135231.1	GLPNVQR	392.2270	2	24	P y5	52.95	77.0
1040	IPI00135231.1	GQETSTNPIASIFAWSR	932.9641	2	63	y5	15.6	78.6
1041	IPI00135231.1	GQETSTNPIASIFAWSR	933.4651	2	78	y7	1.6	79.6
1042	IPI00135231.1	GQETSTNPIASIFAWSR	932.9644	2	97	y7	33.75	130.8
1043	IPI00135231.1	GWPLYLSTK	532.7928	2	42	P y7	102.45	144.5
1044	IPI00135231.1	IIWELIK	457.7890	2	33	y5	69.75	102.8
1045	IPI00135231.1	IQGGSVVEMQGDDEMTR	868.9386	2	106	y6	14.55	120.6
1046	IPI00135231.1	LDNNTLSFFAK	699.8492	2	66	y5	52.95	119.0
1047	IPI00135231.1	LGENLK	337.1974	2	38	y4	62.3	100.3
1048	IPI00135231.1	LIDDMVAQAMK	617.8214	2	66	y6	69.75	135.8
1049	IPI00135231.1	LVTGWVKPIIIGR	484.6419	3	33	P y6	23.75	56.8
1050	IPI00135231.1	LVTGWVKPIIIGR	726.4588	2	63	P y6	49.6	112.6
1051	IPI00135231.1	NILGGTVFR	488.7825	2	42	y7	23.75	65.8
1052	IPI00135231.1	SIEDFAHSSFQM	699.8045	2	29		0	29.0
1053	IPI00135231.1	SIEDFAHSSFQMALSK	599.9639	3	34	y5	25.35	59.4
1054	IPI00135231.1	SIEDFAHSSFQMALSK	899.4305	2	44	y9	38.5	82.5
1055	IPI00135231.1	SIEDFAHSSFQMALSK	899.4304	2	46	y9	10.5	56.5
1056	IPI00135231.1	TVEAEAAHGTVTR	447.8970	3	20		0	20.0
1057	IPI00135231.1	TVEAEAAHGTVTR	671.3421	2	68	y5	16.9	84.9
1058	IPI00135231.1	VEITYTPK	475.7633	2	43	y6	52.95	96.0
1059	IPI00135231.1	VTYMVHDFEEGGGVAMGMYNQDK	860.3737	3	17	y5	62.3	79.3
1060	IPI00338039.1	AILVDLEPGTMDSVR	808.4212	2	57	P y8	42.15	99.2
1061	IPI00310035.3	ASLQNLLSASQAR	679.8841	2	60	y6	14.55	74.6
1062	IPI00310035.3	ASLQNLLSASQAR	679.8730	2	63	y6	14.55	77.6
1063	IPI00310035.3	ASSIVVSGTPIR	593.8442	2	53	y5	38.2	91.2

1064	IPI00310035.3	DIQQWEYVPLGPFLGK	945.9953	2	34	P y8	44.3	78.3
1065	IPI00310035.3	DIQQWEYVPLGPFLGK	945.9955	2	41	P y8	44.3	85.3
1066	IPI00310035.3	DIQQWEYVPLGPFLGK	945.9952	2	44	P y8	31.95	76.0
1067	IPI00310035.3	FGPEPIPISK	494.2787	2	30	P y4	44.5	74.5
1068	IPI00310035.3	HLFTGPALSK	535.8037	2	38	y8	11.55	49.6
1069	IPI00310035.3	HQHVFDETTLNNFMGLGQAAWK	637.0576	4	15	y6	62.3	77.3
1070	IPI00310035.3	HQHVFDETTLNNFMGLGQAAWK	636.8237	4	22	y6	27.2	49.2
1071	IPI00310035.3	HQHVFDETTLNNFMGLGQAAWK	849.0749	3	54		0	54.0
1072	IPI00310035.3	HQHVFDETTLNNFMGLGQAAWK	849.0749	3	62	y6	25.35	87.4
1073	IPI00310035.3	IGVAIGDQILDLSVIK	828.0704	2	71	y6	77.6	148.6
1074	IPI00310035.3	IGVAIGDQILDLSVIK	827.5680	2	84	y6	49.6	133.6
1075	IPI00310035.3	SFGTTISPWVVPMDALMPFVVPNPK	911.1390	3	25	P y8	90.2	115.2
1076	IPI00310035.3	SFIPVAEDSDFPIQNLPGYGVFSTQSNPK	1047.5192	3	26	P y++12	35.45	61.5
1077	IPI00310035.3	SFIPVAEDSDFPIQNLPGYGVFSTQSNPK	1047.8524	3	36	y++15	4.5	40.5
1078	IPI00310035.3	SFIPVAEDSDFPIQNLPGYGVFSTQSNPKPR	1131.8264	3	59		0	59.0
1079	IPI00310035.3	SFIPVAEDSDFPIQNLPGYGVFSTQSNPKPR	1132.2366	3	65		0	65.0
1080	IPI00355888.2	DATNVGDEGGFAPNILENK	654.6476	3	35	P y7	61.35	96.4
1081	IPI00355888.2	DATNVGDEGGFAPNILENK	981.4667	2	55	P y7	22.4	77.4
1082	IPI00355888.2	HIADLAGNPEVILPVPFNVINGGSHAGNK	756.8999	4	30	b8 P	1.75	31.8
1083	IPI00355888.2	HIADLAGNPEVILPVPFNVINGGSHAGNK	1008.1987	3	67	b8 P	20.1	87.1
1084	IPI00355888.2	IGAEVYHNLK	381.8767	3	33		0	33.0
1085	IPI00355888.2	IGAEVYHNLK	572.3113	2	45	y6	46.75	91.8
1086	IPI00355888.2	KVNVVEQEK	358.2048	3	28	c b4	57.05	85.1
1087	IPI00355888.2	KVNVVEQEK	536.8040	2	42	y7	95.65	137.7
1088	IPI00355888.2	LAMQEFMILPVGASSFR	632.9987	3	24	P y8	20.1	44.1
1089	IPI00355888.2	LAMQEFMILPVGASSFR	949.4929	2	66	P y8	30.4	96.4
1090	IPI00355888.2	LAQSNGWGVMVSHR	514.5930	3	32		0	32.0
1091	IPI00355888.2	LAQSNGWGVMVSHR	771.8970	2	89	y7	12.85	101.9
1092	IPI00355888.2	LMIEMDG TENK	640.7968	2	41	y8	61.35	102.4
1093	IPI00355888.2	LMIEMDG TENK	640.7988	2	45	y8	73.4	118.4
1094	IPI00355888.2	SFVQNYPVVSIEDPFDDWGAWQK	991.1218	3	45		0	45.0
1095	IPI00355888.2	SFVQNYPVVSIEDPFDDWGAWQK	991.1253	3	49		0	49.0
1096	IPI00355888.2	SPDDPSRYITPDQLADLYK	732.3610	3	21	b4 P	44.5	65.5
1097	IPI00355888.2	SPDDPSRYITPDQLADLYK	732.3609	3	21		0	21.0
1098	IPI00355888.2	VNVVEQEK	472.7559	2	29	y5	15.6	44.6
1099	IPI00355888.2	YITPDQLADLYK	720.3744	2	30		0	30.0
1100	IPI00321617.1	AKPNEVVFLDDFGSNLKPAP	555.3022	4	16	y++14	19.15	35.2
1101	IPI00321617.1	AKPNEVVFLDDFGSNLKPAP	555.0467	4	16	y++9	23.75	39.8
1102	IPI00321617.1	AKPNEVVFLDDFGSNLKPAP	740.0608	3	34		0	34.0
1103	IPI00321617.1	ASDETGFI AVHK	637.8227	2	59	y++10	49.6	108.6
1104	IPI00321617.1	ATEIGGILVNTPEDPNLSK	984.5164	2	54	P y5	52.95	107.0

1105	IPI00321617.1	ATEIGGILVNTPEDPNLSK	985.0207	2	57	c b10	27.7	84.7
1106	IPI00321617.1	AVASLNTPFMPPDPDVSPMK	1058.0221	2	30		0	30.0
1107	IPI00321617.1	AVASLNTPFMPPDPDVSPMK	1058.0218	2	41		0	41.0
1108	IPI00321617.1	AVASLNTPFMPPDPDVSPMK	1058.0218	2	43		0	43.0
1109	IPI00321617.1	AVASLNTPFMPPDPDVSPMK	1058.0225	2	60		0	60.0
1110	IPI00321617.1	DFLLGAYQTEFPEGTEQLMK	805.7255	3	28		0	28.0
1111	IPI00321617.1	DFLLGAYQTEFPEGTEQLMK	805.7254	3	32	y++15	21.9	53.9
1112	IPI00321617.1	DFLLGAYQTEFPEGTEQLMK	1208.0812	2	47	c b7	5.55	52.6
1113	IPI00321617.1	DIVLRPEMSK	594.3274	2	29	c b7	23.75	52.8
1114	IPI00321617.1	DMGMVT	335.2020	2	18	y5	7.1	25.1
1115	IPI00321617.1	DMGMVTILVHNTASALR	610.3329	3	31	b4	32.3	63.3
1116	IPI00321617.1	DMGMVTILVHNTASALR	915.4749	2	58	y8	55.3	113.3
1117	IPI00321617.1	DMGMVTILVHNTASALRELEK	777.0864	3	26	y++16	41.85	67.9
1118	IPI00321617.1	DMGMVTILVHNTASALRELEK	776.7573	3	34		0	34.0
1119	IPI00321617.1	EMVTFLDK	491.7498	2	48	y4	29.45	77.5
1120	IPI00321617.1	ILVPALMVTAEK	642.8833	2	42	P y9	66.55	108.6
1121	IPI00321617.1	ILVPALMVTAEK	642.8833	2	50	P y9	98	148.0
1122	IPI00321617.1	ITFSQWVPLMDESYRK	667.3362	3	20		0	20.0
1123	IPI00321617.1	ITFSQWVPLMDESYRK	667.6708	3	22		0	22.0
1124	IPI00321617.1	ITFSQWVPLMDESYRK	667.6708	3	28	y++13	61.2	89.2
1125	IPI00321617.1	ITFSQWVPLMDESYRK	1001.0012	2	35	y5	49.1	84.1
1126	IPI00321617.1	ITFSQWVPLMDESYRK	1001.0055	2	38		0	38.0
1127	IPI00321617.1	SEEALALPR	493.2696	2	34	c b6	14.55	48.6
1128	IPI00321617.1	TGFRGPLNWYR	456.2388	3	21	y++9	22.4	43.4
1129	IPI00321617.1	VLAIDMK	395.2311	2	34	y5	57.05	91.1
1130	IPI00321617.1	WLQTEVQNPSVTSK	808.9319	2	72	P y6	52.95	125.0
1131	IPI00321617.1	WLQTEVQNPSVTSKI	865.9613	2	68	y4	27.2	95.2
1132	IPI00321617.1	YQIPALAQAGFR	667.8650	2	36	P y9	110.5	146.5
1133	IPI00321617.1	YQIPALAQAGFR	667.8733	2	41	P y9	38.5	79.5
1134	IPI00229080.4	ADHGEPGR	476.2364	2	36	P y4	27.2	63.2
1135	IPI00229080.4	ADLNNLGTIAK	621.8572	2	53	y9	19.15	72.2
1136	IPI00229080.4	ALLFIPR	415.2683	2	24	y4	41	65.0
1137	IPI00229080.4	DNSTMGYMMAK	624.7589	2	53	y6	29.45	82.5
1138	IPI00229080.4	EDQTEYLEER	656.2916	2	36	y5	25.35	61.4
1139	IPI00229080.4	ELISNASDALDK	638.8276	2	51	y9	58.1	109.1
1140	IPI00229080.4	EQVANSAFVER	625.3132	2	57	y6	14.55	71.6
1141	IPI00229080.4	GEPGXGTKVILHLK	809.4085	2	17		0	17.0
1142	IPI00229080.4	GVVDSIDLPLNISR	757.3965	2	28	P y6	35.8	63.8
1143	IPI00229080.4	GVVDSIDLPLNISR	757.8977	2	59	P y6	49.6	108.6
1144	IPI00229080.4	HLEINPDHPIVETLR	892.4777	2	44	P y7	82.65	126.7
1145	IPI00229080.4	HSQFIGYPITLYLEK	603.6653	3	16	c b7 P	13.65	29.7

1146	IPI00229080.4	HSQFIGYPITLYLEK	603.9887	3	19	P y8	58.1	77.1
1147	IPI00229080.4	HSQFIGYPITLYLEK	604.0035	3	34	P y8	58.1	92.1
1148	IPI00229080.4	HSQFIGYPITLYLEK	905.4850	2	46	P y8	31.95	78.0
1149	IPI00229080.4	HSQFIGYPITLYLEK	904.9797	2	47	c b7 P	6.6	53.6
1150	IPI00229080.4	HSQFIGYPITLYLEK	905.4852	2	50	P y8	61.35	111.4
1151	IPI00229080.4	IDIIPNPQER	597.8320	2	40	P y6	25.35	65.4
1152	IPI00229080.4	IRYESLTDPSK	654.8429	2	22	c b8 P	31.95	54.0
1153	IPI00229080.4	IRYESLTDPSKLDSGK	603.6521	3	16	c b8 P	31.95	48.0
1154	IPI00229080.4	LGIHEDSTNR	381.1914	3	23	y5	9.55	32.6
1155	IPI00229080.4	LGIHEDSTNR	571.2835	2	39	y6	22.4	61.4
1156	IPI00229080.4	SIYYITGESK	580.7953	2	31	y8	81.65	112.7
1157	IPI00229080.4	SLTNDWEDHLAVK	764.3903	2	67	y++10	14.55	81.6
1158	IPI00229080.4	SLVSVTK	367.2262	2	26	y5	57.05	83.1
1159	IPI00229080.4	SLVSVTK	733.4473	1	28		0	28.0
1160	IPI00229080.4	TKPIWTRNPDDITQEEYGEFYK	683.5813	4	18	y6	38.2	56.2
1161	IPI00229080.4	TKPIWTRNPDDITQEEYGEFYK	911.1081	3	38		0	38.0
1162	IPI00229080.4	VILHLK	361.7500	2	31	y4	44.5	75.5
1163	IPI00229080.4	VVVITK	329.7285	2	24	y5	44.5	68.5
1164	IPI00229080.4	YIDQEELNK	576.2834	2	38	y7	77.6	115.6
1165	IPI00131695.3	ALVSSVR	731.4420	1	19		0	19.0
1166	IPI00131695.3	ALVSSVR	366.2241	2	37	y5	65.15	102.2
1167	IPI00131695.3	APQVSTPTLVEAAR	480.6004	3	34	y4	44.5	78.5
1168	IPI00131695.3	APQVSTPTLVEAAR	720.4088	2	40	P y8	21.2	61.2
1169	IPI00131695.3	APQVSTPTLVEAAR	720.3994	2	40	P y8	58.1	98.1
1170	IPI00131695.3	AWAVAR	337.1925	2	26	y4	44.5	70.5
1171	IPI00131695.3	DVFLGTFLYEYSR	805.4067	2	44	y6	7.1	51.1
1172	IPI00131695.3	DVFLGTFLYEYSR	805.3989	2	62		0	62.0
1173	IPI00131695.3	ENPTTFMGHYLHEVAR	634.6466	3	21	y++9	77.6	98.6
1174	IPI00131695.3	ENPTTFMGHYLHEVAR	634.6465	3	23	P y++14	38.5	61.5
1175	IPI00131695.3	ENPTTFMGHYLHEVAR	634.9834	3	24	y5	49.6	73.6
1176	IPI00131695.3	ENPTTFMGHYLHEVAR	951.9530	2	51	y7	52.95	104.0
1177	IPI00131695.3	GLVLIAFSQYLQK	740.4452	2	26		0	26.0
1178	IPI00131695.3	GLVLIAFSQYLQK	740.9341	2	32		0	32.0
1179	IPI00131695.3	GLVLIAFSQYLQK	740.9342	2	35	y7	77.6	112.6
1180	IPI00131695.3	GLVLIAFSQYLQK	740.4452	2	37	y7	49.6	86.6
1181	IPI00131695.3	GLVLIAFSQYLQK	740.9341	2	41		0	41.0
1182	IPI00131695.3	GLVLIAFSQYLQK	494.2918	3	43	c b6	0.7	43.7
1183	IPI00131695.3	GLVLIAFSQYLQK	493.9574	3	49	c b6	1.05	50.1
1184	IPI00131695.3	KQTALAELVK	550.8379	2	23	y9	31.95	55.0
1185	IPI00131695.3	KQTALAELVK	367.5606	3	59	c b4	9.55	68.6
1186	IPI00131695.3	KYEATLEK	491.2668	2	37	y7	102.9	139.9

1187	IPI00131695.3	LGEYGFQNAILVR	741.4136	2	30	y7	23.75	53.8
1188	IPI00131695.3	LGEYGFQNAILVR	740.4259	2	44	y7	33.75	77.8
1189	IPI00131695.3	LGEYGFQNAILVR	740.3997	2	58	y7	31.95	90.0
1190	IPI00131695.3	LGEYGFQNAILVR	740.3998	2	64	y6	38.2	102.2
1191	IPI00131695.3	LSQTFPNADFAEITK	841.4228	2	20	c b5 P	15.6	35.6
1192	IPI00131695.3	LSQTFPNADFAEITK	841.4436	2	26	c b5 P	16.9	42.9
1193	IPI00131695.3	LSQTFPNADFAEITK	841.4436	2	41		0	41.0
1194	IPI00131695.3	LVQEVTDFAK	575.3114	2	39	y8	44.3	83.3
1195	IPI00131695.3	LVQEVTDFAK	575.3113	2	55	y8	33.75	88.8
1196	IPI00131695.3	QTALAEVLK	486.7901	2	54	y5	69.75	123.8
1197	IPI00131695.3	RHPDYSVSLLLR	728.4241	2	31	y8	21.2	52.2
1198	IPI00131695.3	RHPDYSVSLLLR	485.9404	3	50	y5	57.05	107.1
1199	IPI00131695.3	RHPDYSVSLLLR	485.9404	3	58	y5	69.75	127.8
1200	IPI00131695.3	SEIAHRYNDLGEQHFK	648.6508	3	30	y6	25.35	55.4
1201	IPI00131695.3	SLHTLFGDK	509.2724	2	31	y6	89	120.0
1202	IPI00131695.3	SLHTLFGDK	509.2724	2	38	y7	61.35	99.4
1203	IPI00131695.3	TPVSEHVTK	333.1821	3	22	y6	29.45	51.5
1204	IPI00131695.3	TPVSEHVTK	499.2691	2	48	y6	49.6	97.6
1205	IPI00131695.3	YNDLGEQHFK	417.5319	3	17	y++8	41	58.0
1206	IPI00131695.3	YNDLGEQHFK	625.7944	2	55	y6	57.05	112.1
1207	IPI00113325.1	ASKPGLLASVA AVAAQK	527.9848	3	18	y7	61.35	79.4
1208	IPI00113325.1	AVDEFNQQR	553.7652	2	53	y4	27.2	80.2
1209	IPI00113325.1	EDTNTITDLGILYGG	528.2588	3	16	y++10	5.85	21.9
1210	IPI00113325.1	EFQPLDPTQELIFPPELMR	1151.0863	2	27		0	27.0
1211	IPI00113325.1	EFQPLDPTQELIFPPELMR	1151.0858	2	28	P y6	75.6	103.6
1212	IPI00113325.1	EFQPLDPTQELIFPPELMR	1151.0917	2	29	P y6	89	118.0
1213	IPI00113325.1	FSVGFPK	391.2162	2	26	y4	29.45	55.5
1214	IPI00113325.1	FTDVSYPPIISPAR	789.9617	2	40	P y8	58.1	98.1
1215	IPI00113325.1	GLSPIWAINSPATAEVIR	948.5233	2	54	c b7	57.05	111.1
1216	IPI00113325.1	GLSPIWAINSPATAEVIR	948.5235	2	67	P y8	69.75	136.8
1217	IPI00113325.1	HPSAPLVIGNTYLGLHMK	650.3577	3	34	y++11	1.75	35.8
1218	IPI00113325.1	IASVTDIPEEFHVSLLTPTPNPK	836.1121	3	16	P y6	8.5	24.5
1219	IPI00113325.1	IASVTDIPEEFHVSLLTPTPNPK	836.1124	3	24	P y6	25.35	49.4
1220	IPI00113325.1	IVYQDIEPMIVTVQDALQYESFIGPER	1052.5315	3	25	y5	16.9	41.9
1221	IPI00113325.1	IVYQDIEPMIVTVQDALQYESFIGPER	1052.2014	3	47	y6	5.85	52.9
1222	IPI00113325.1	MAEESQNTVLTFRGER	623.3081	3	18		0	18.0
1223	IPI00113325.1	MAEESQNTVLTFRGER	623.6401	3	23		0	23.0
1224	IPI00113325.1	MIQVASR	402.7238	2	42	y4	7.1	49.1
1225	IPI00113325.1	NADPEVNLLFYLRK	846.4613	2	35	y4	16.9	51.9
1226	IPI00113325.1	NVASLGGHIISR	612.3460	2	65	y7	82.65	147.7
1227	IPI00113325.1	PWSIPVA	769.4250	1	41	c b4 P	29.45	70.5

1228	IPI00113325.1	QNPSGTWEEWVK	730.8560	2	31	y6	25.35	56.4
1229	IPI00113325.1	QQNAFATVNAGMK	690.3452	2	46	y8	30.4	76.4
1230	IPI00113325.1	RDDMLITGGRHPLLK	593.6610	3	28	c b6	0.9	28.9
1231	IPI00113325.1	TRIHPVQER	568.3207	2	27	P y5	27.2	54.2
1232	IPI00113325.1	TTWIAPGTLNDLLELK	892.9935	2	31	c b5 P	8.5	39.5
1233	IPI00113325.1	TTWIAPGTLNDLLELK	893.4924	2	44	y++14	23.55	67.6
1234	IPI00113325.1	VRELNMYR	360.8588	3	19	c b5	41	60.0
1235	IPI00113325.1	VRELNMYR	540.7844	2	36	y6	25.35	61.4
1236	IPI00113325.1	WEFVSAFR	521.2609	2	42	y6	14.55	56.6
1237	IPI00113325.1	YSPEGVLYTR	592.8014	2	51	P y8	20.1	71.1
1238	IPI00403810.1	AVFVDLEPTVIDEVR	851.4570	2	45	y5	44.5	89.5
1239	IPI00403810.1	AVFVDLEPTVIDEVR	851.4570	2	65	P y8	55.3	120.3
1240	IPI00403810.1	DVNAAIATIK	508.2926	2	57	y8	55.3	112.3
1241	IPI00403810.1	EIIDLVLDR	543.3137	2	65		0	65.0
1242	IPI00403810.1	IHFPLATYAPVISA EK	878.9880	2	36	y8	61.35	97.4
1243	IPI00403810.1	LDHKFDLMYAK	460.9042	3	21		0	21.0
1244	IPI00403810.1	LDHKFDLMYAK	690.8563	2	33	y++9	52.95	86.0
1245	IPI00403810.1	LISQIVSSITASLR	744.4433	2	65	y8	11.55	76.6
1246	IPI00403810.1	LSVDYGKK	455.2560	2	20		0	20.0
1247	IPI00403810.1	NLDIERPTYTNLNR	859.9437	2	28	P y8	31.95	60.0
1248	IPI00403810.1	QLFHPEQLITGK	705.8918	2	16	P y8	73.4	89.4
1249	IPI00403810.1	QLFHPEQLITGKEDAANNYAR	806.0753	3	49	y7	25.35	74.4
1250	IPI00403810.1	TIGGGDDSFNTFFSETGAGK	1004.9546	2	55	y7	30.4	85.4
1251	IPI00403810.1	TIGGGDDSFNTFFSETGAGK	1004.9508	2	71	y7	33.75	104.8
1252	IPI00403810.1	VGINYQPPTVVPGGDLAK	913.4984	2	48	P y7	22.4	70.4
1253	IPI00230084.3	AWN IWADIPAPK	691.3745	2	72	P y4	41	113.0
1254	IPI00230084.3	DYEETIGK	477.7242	2	21	y6	49.6	70.6
1255	IPI00230084.3	EVALMVQER	537.7851	2	49	y5	25.35	74.4
1256	IPI00230084.3	FQDEEEVFEWNNEVK	971.9347	2	81	y6	12.85	93.9
1257	IPI00230084.3	GAPTTSLVSVAVTK	665.8874	2	67	y6	49.6	116.6
1258	IPI00230084.3	LVSLEM GK	438.7466	2	28	y6	65.15	93.2
1259	IPI00230084.3	QGLSSSIFTK	534.2900	2	37	y5	44.5	81.5
1260	IPI00230084.3	STLLIHHPQYAWLQDLGLREDNEG VYNGSWGGR	957.2240	4	55	y++18	8.35	63.4
1261	IPI00230084.3	STLLIHHPQYAWLQDLGLREDNEG VYNGSWGGR	957.2197	4	67	y8	11.55	78.6
1262	IPI00230084.3	VGNP WDPN ILYGPLHTK	641.3391	3	18		0	18.0
1263	IPI00230084.3	VGNP WDPN ILYGPLHTK	641.0035	3	19	P y++11	55.3	74.3
1264	IPI00230084.3	VGNP WDPN ILYGPLHTK	641.3374	3	27	y7	25.35	52.4
1265	IPI00230084.3	VMDHPGNYVEPTIVTGLAHDAPIVHQETFAPILYVFK	1030.9869	4	32		0	32.0
1266	IPI00230084.3	VNLLSFTGSTQVGK	725.8972	2	51	y8	5.55	56.6
1267	IPI00230084.3	VNLLSFTGSTQVGK	726.4011	2	57	y7	22.4	79.4
1268	IPI00127417.1	ASEEHLK	407.2087	2	45	y5	52.95	98.0

1269	IPI00127417.1	DRPFFPGLVK	588.3327	2	22	c b8	22.4	44.4
1270	IPI00127417.1	DRPFFPGLVK	392.5571	3	22	c b5 P	25.35	47.4
1271	IPI00127417.1	VMLGETNPADSKPGTIR	595.9762	3	24		0	24.0
1272	IPI00127417.1	VMLGETNPADSKPGTIR	893.4624	2	69	P y5	52.95	122.0
1273	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	698.6912	3	42		0	42.0
1274	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	698.3569	3	46	y6	41	87.0
1275	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	698.3569	3	51	y6	27.2	78.2
1276	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	1047.5341	2	57	y8	30.4	87.4
1277	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	1047.5342	2	75	y8	28.95	104.0
1278	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	1047.5343	2	76	y8	28.95	105.0
1279	IPI00127417.1	YMNSGPVVAMVWEGLNVVK	1047.0305	2	85	y8	12.15	97.2
1280	IPI00122342.6	AHVIVMAATNRPNSIDPALRR	768.1039	3	16	y++18	4.3	20.3
1281	IPI00122342.6	AHVIVMAATNRPNSIDPALRR	768.4400	3	24	b5	18.5	42.5
1282	IPI00122342.6	ASGADSKGDDLSTAILK	845.9282	2	66	y7	33.75	99.8
1283	IPI00122342.6	ELQELVQYPVEHPDK	912.4628	2	62	y8	58.1	120.1
1284	IPI00122342.6	ESIESEIRR	559.7956	2	16	c b8	1.95	18.0
1285	IPI00122342.6	GILLYGPPGTGK	586.8374	2	33	y7	33.75	66.8
1286	IPI00122342.6	IVSQLLTLMDGLK	716.4195	2	70	y7	33.75	103.8
1287	IPI00122342.6	KGDIFLVR	474.2879	2	32	y5	41	73.0
1288	IPI00122342.6	KYEMFAQTLQQSR	543.9403	3	31	y4	15.6	46.6
1289	IPI00122342.6	KYEMFAQTLQQSR	815.4579	2	94	y8	12.15	106.2
1290	IPI00122342.6	LAGESESNLRK	602.3199	2	50	y7	33.75	83.8
1291	IPI00122342.6	LDQLIYIPLPEK	778.9314	2	42	P y6	57.05	99.1
1292	IPI00122342.6	LIVDEAINEDNSVVSLSQPK	1086.0644	2	87	y4	27.2	114.2
1293	IPI00122342.6	MDELQLFRGDTVLLK	593.6566	3	18		0	18.0
1294	IPI00122342.6	NAPAIIFIDELDAIAPK	906.0919	2	23		0	23.0
1295	IPI00122342.6	NVFIIGA	367.7260	2	18		0	18.0
1296	IPI00122342.6	VINQILTEMDGMSTK	840.9244	2	52	y9	30.4	82.4
1297	IPI00122342.6	WALSQSNPSALR	665.3559	2	58	y9	20.1	78.1
1298	IPI00381603.1	DATNVGDEGGFAPNILENK	980.9690	2	64	c b5	8.5	72.5
1299	IPI00381603.1	GNPTVEVDLYTAK	703.8658	2	40	y8	58.1	98.1
1300	IPI00381603.1	GVSQAVEHINK	591.3173	2	51	y7	46.75	97.8
1301	IPI00381603.1	LAMQEFMILPVGASSFR	949.4931	2	59	P y8	22.4	81.4
1302	IPI00381603.1	SGKYDLDFK	536.7693	2	38	c b7	49.6	87.6
1303	IPI00381603.1	TIAPALVSK	450.2820	2	16	y7	125.8	141.8
1304	IPI00381603.1	TIAPALVSK	899.5834	1	17	P y6	52.95	70.0
1305	IPI00380348.1	ADNFEYSDPVDGSISK	872.3913	2	60	P y8	90.2	150.2
1306	IPI00380348.1	AIGGIILTASHNPPGGPNGDFGIK	736.3950	3	36	P y8	46.75	82.8
1307	IPI00380348.1	DLEALMLDR	538.2764	2	40	y7	12.85	52.9
1308	IPI00380348.1	FNISNGGPAPEAITDK	815.9377	2	93	P y7	58.1	151.1
1309	IPI00380348.1	HGFFVNPDSVAVIAANIFSIPYFQQTGVR	1095.2306	3	17	y6	1.4	18.4

1310	IPI00380348.1	HGFFVNPSDSVAVIAANIFSIPYFQQTGVR	1095.2306	3	29		0	29.0
1311	IPI00380348.1	HGFFVNPSDSVAVIAANIFSIPYFQQTGVR	1094.8963	3	37	y6	23.35	60.4
1312	IPI00380348.1	IALYETPTGWK	639.8502	2	28	y7	22.4	50.4
1313	IPI00380348.1	IFQISK	368.2238	2	31	y5	57.05	88.1
1314	IPI00380348.1	INQDPQVMLAPLISIALK	655.7140	3	35	P y8	44.3	79.3
1315	IPI00380348.1	INQDPQVMLAPLISIALK	983.0677	2	40	P y8	73.4	113.4
1316	IPI00380348.1	INQDPQVMLAPLISIALK	655.7140	3	40	y++9	27.2	67.2
1317	IPI00380348.1	INQDPQVMLAPLISIALK	983.0674	2	60	c b8	5.35	65.4
1318	IPI00380348.1	NIFDFNALK	541.2878	2	32	y7	46.75	78.8
1319	IPI00380348.1	QQFDLENK	511.2508	2	28	y6	33.75	61.8
1320	IPI00380348.1	QSVEDILK	466.2589	2	24		0	24.0
1321	IPI00380348.1	SGEHDFGAAFDGGDRNMILGK	770.6819	3	29		0	29.0
1322	IPI00380348.1	TQAYPDQKPGTSGLR	540.2780	3	19	c b4 P	6.6	25.6
1323	IPI00380348.1	TQAYPDQKPGTSGLRK	582.9759	3	24	b4 P	27.2	51.2
1324	IPI00380348.1	VDLGVLGK	400.7477	2	43	y5	29.45	72.5
1325	IPI00380348.1	VFQSNANYAENFIQSIVSTVEPALRQEATLVVGGDGR	996.2638	4	22	y5	16.9	38.9
1326	IPI00380348.1	VFQSNANYAENFIQSIVSTVEPALRQEATLVVGGDGR	995.9512	4	26	y6	5.85	31.9
1327	IPI00117352.1	MAVTFIGNSTAIQELFK	936.0963	2	52	y5	14.55	66.6
1328	IPI00117352.1	NSSYFVEWIPNNVK	849.0437	2	31	P y5	62.3	93.3
1329	IPI00129011.1	AGEYEALPEK	553.7713	2	50	y4	62.3	112.3
1330	IPI00129011.1	DHLDSTMRR	573.7899	2	15	y5	7.7	22.7
1331	IPI00129011.1	DMTDDVFK	485.7131	2	26	y6	69.75	95.8
1332	IPI00129011.1	EAQELNLPVVGSQLVGLVPLK	1102.6404	2	42		0	42.0
1333	IPI00129011.1	EAQELNLPVVGSQLVGLVPLK	1102.6415	2	43	c b7 P	5.85	48.9
1334	IPI00129011.1	ERIIEYLPDSGPEQSLLDTSR	877.4612	3	31	y++16	77.95	109.0
1335	IPI00129011.1	ERIIEYLPDSGPEQSLLDTSR	877.7929	3	41	y++16	30.65	71.7
1336	IPI00129011.1	ERIIEYLPDSGPEQSLLDTSR	877.7933	3	44	y5	13.65	57.7
1337	IPI00129011.1	IALNLR	350.2291	2	28	y4	41	69.0
1338	IPI00129011.1	LGLDSLAPFDPK	636.8478	2	61	y6	38.2	99.2
1339	IPI00129011.1	LIPPFHAASAQLTSLVDADAR	732.0615	3	17	y6	23.75	40.8
1340	IPI00129011.1	NLAQVSTNLLDFEVTALHTVFEEARR	992.1826	3	46		0	46.0
1341	IPI00129011.1	SAAPGGGSVAAAVAALGAALASMVGQMTYGR	922.1345	3	41		0	41.0
1342	IPI00129011.1	SAAPGGGSVAAAVAALGAALASMVGQMTYGR	922.1342	3	53	y6	1.25	54.3
1343	IPI00129011.1	SAAPGGGSVAAAVAALGAALASMVGQMTYGRR	974.1724	3	25		0	25.0
1344	IPI00129011.1	SAAPGGGSVAAAVAALGAALASMVGQMTYGRR	974.1726	3	29		0	29.0
1345	IPI00129011.1	TASQLIDMSK	547.2821	2	61	y8	73.4	134.4
1346	IPI00129011.1	TQAALVLSLEAR	664.8925	2	86	y6	14.55	100.6
1347	IPI00267407.1	AGVPPGVINIVFGTGPR	550.9926	3	21	y5	38.2	59.2
1348	IPI00267407.1	AGVPPGVINIVFGTGPR	551.3218	3	33	y5	14.55	47.6
1349	IPI00267407.1	AGVPPGVINIVFGTGPR	826.0650	2	43	c b7	15.6	58.6
1350	IPI00267407.1	DSYDFFTEIK	632.7905	2	20	y7	49.6	69.6

1351	IPI00267407.1	DSYDFFTEIK	632.7905	2	37	y7	35.8	72.8
1352	IPI00267407.1	ELLMLENFIGGK	682.3707	2	64	y7	46.75	110.8
1353	IPI00267407.1	ELNLPFGGMK	553.2886	2	34	P y6	95.65	129.7
1354	IPI00267407.1	IAPAIAGNTVIAK	655.3984	2	55	y7	35.8	90.8
1355	IPI00267407.1	KRFVEATR	503.7934	2	23		0	23.0
1356	IPI00267407.1	LADVLEQSLEELAQAESK	987.0069	2	63	y6	65.15	128.2
1357	IPI00267407.1	LADVLEQSLEELAQAESK	987.0067	2	105	y4	15.6	120.6
1358	IPI00267407.1	SLVLNR	351.2187	2	20	y4	16.9	36.9
1359	IPI00267407.1	TPVGIAGLISPWNLPYLLTWK	818.1621	3	26		0	26.0
1360	IPI00267407.1	VGEALVSHPEVPLISFTGSQPTAER	874.7914	3	24	y8	5.15	29.2
1361	IPI00267407.1	VGEALVSHPEVPLISFTGSQPTAER	874.7918	3	26	P y5	38.2	64.2
1362	IPI00267407.1	VGVPSPSANMGALISK	821.9268	2	32	y6	29.45	61.5
1363	IPI00267407.1	VGVPSPSANMGALISK	821.9268	2	56	c b6 P	27.2	83.2
1364	IPI00267407.1	VPNSGKEEIEAAVEAAR	590.6399	3	34	y4	15.6	49.6
1365	IPI00267407.1	YGLAATVWSK	548.2951	2	57	y7	46.75	103.8
1366	IPI00404116.1	FNLGLDFPNLPYLIDGSHK	721.0447	3	27		0	27.0
1367	IPI00404116.1	GLTHSIR	392.2270	2	23	y5	25.35	48.4
1368	IPI00404116.1	PMTLGYWNTR	619.8030	2	43	y6	1.4	44.4
1369	IPI00404116.1	VTYVDFLAYDILDQYR	997.9991	2	26	y7	35.8	61.8
1370	IPI00134475.2	AMGAAQVVVTDLSASR	525.9443	3	63	y4	27.2	90.2
1371	IPI00134475.2	AMGAAQVVVTDLSASR	788.4448	2	70	y9	20.1	90.1
1372	IPI00134475.2	AMGAAQVVVTDLSASR	788.4111	2	80	y9	52.75	132.8
1373	IPI00134475.2	AVEAFETAK	483.2503	2	30	y7	65.15	95.2
1374	IPI00134475.2	AVEAFETAK	965.5399	1	32	y6	52.95	85.0
1375	IPI00134475.2	AVEAFETAKK	547.2983	2	35	y8	58.1	93.1
1376	IPI00134475.2	ETPQEIASK	501.7594	2	30		0	30.0
1377	IPI00134475.2	GENLSLVVHGPDIR	781.9193	2	39	c b9	4.95	44.0
1378	IPI00134475.2	GENLSLVVHGPDIRLENYPIPELGPNDVLLK	1156.9592	3	35	b9	4.95	40.0
1379	IPI00134475.2	GENLSLVVHGPDIRLENYPIPELGPNDVLLK	1156.9586	3	40	y8	12.85	52.9
1380	IPI00134475.2	GENLSLVVHGPDIRLENYPIPELGPNDVLLK	1156.9585	3	46		0	46.0
1381	IPI00134475.2	GSVSLGNK	381.2115	2	42	y5	38.2	80.2
1382	IPI00134475.2	HLKPGDR	822.4588	1	22		0	22.0
1383	IPI00134475.2	IGDFVVK	777.4671	1	21		0	21.0
1384	IPI00134475.2	IGDFVVK	389.2291	2	54	y5	89	143.0
1385	IPI00134475.2	KPMVLGHEAAGTVTK	513.6176	3	20		0	20.0
1386	IPI00134475.2	KPMVLGHEAAGTVTK	769.9273	2	82	y10	72.15	154.2
1387	IPI00134475.2	LENYPIPELGPNDVLLK	963.0271	2	22	y8	33.75	55.8
1388	IPI00134475.2	LENYPIPELGPNDVLLK	963.0272	2	31	c b4 P	18.5	49.5
1389	IPI00134475.2	LENYPIPELGPNDVLLK	963.0270	2	35	y8	46.75	81.8
1390	IPI00134475.2	PLVTHRFPLEK	668.8908	2	29	c b7 P	14.55	43.6
1391	IPI00134475.2	RGSVSLGNK	459.2615	2	29	c b7	1.75	30.8

1392	IPI00134475.2	TLNVKPLVTHR	426.5943	3	30		0	30.0
1393	IPI00134475.2	TLNVKPLVTHRFPLEK	631.3768	3	18		0	18.0
1394	IPI00134475.2	VAIEPGVPR	469.2773	2	46	P y5	69.75	115.8
1395	IPI00134475.2	VGELVK	322.7026	2	49	y5	62.3	111.3
1396	IPI00127206.4	AHRFPALTPEQKK	391.9706	4	39		0	39.0
1397	IPI00127206.4	AHRFPALTPEQKK	522.2915	3	42	P y5	52.95	95.0
1398	IPI00127206.4	ALQASALAAWGGK	622.3449	2	88	y6	89	177.0
1399	IPI00127206.4	ATQEAFMK	463.2260	2	37	y5	69.9	106.9
1400	IPI00127206.4	DGVDFGK	737.3521	1	34	y6	69.75	103.8
1401	IPI00127206.4	DGVDFGK	369.1768	2	49	y5	38.2	87.2
1402	IPI00127206.4	DSQGNLFR	468.7308	2	43		0	43.0
1403	IPI00127206.4	ELLFSVDNSISQSIGGVILFHETLYQK	1013.5343	3	20		0	20.0
1404	IPI00127206.4	ELLFSVDNSISQSIGGVILFHETLYQK	1013.5344	3	22		0	22.0
1405	IPI00127206.4	ELLFSVDNSISQSIGGVILFHETLYQK	1013.5389	3	25		0	25.0
1406	IPI00127206.4	ELSEIAQR	473.2535	2	37		0	37.0
1407	IPI00127206.4	ELSEIAQR	945.5180	1	37	y7	22.4	59.4
1408	IPI00127206.4	ETTIQGLDGLSER	709.8688	2	60	y8	22.4	82.4
1409	IPI00127206.4	GILADESVGTMGNR	745.8829	2	54	y4	16.9	70.9
1410	IPI00127206.4	GIVVGIK	343.2338	2	38	y4	57.05	95.1
1411	IPI00127206.4	IKVENTEENRR	694.3678	2	25		0	25.0
1412	IPI00127206.4	IKVENTEENRR	463.5824	3	27		0	27.0
1413	IPI00127206.4	KATQEAFMK	527.7756	2	32	y7	61.35	93.4
1414	IPI00127206.4	KYTPEQVAMATVTALHR	639.6764	3	34	y5	15.6	49.6
1415	IPI00127206.4	KYTPEQVAMATVTALHR	639.3415	3	51	y5	15.6	66.6
1416	IPI00127206.4	KYTPEQVAMATVTALHR	639.3416	3	56	y5	27.2	83.2
1417	IPI00127206.4	LSFSYGR	829.4436	1	18		0	18.0
1418	IPI00127206.4	LSFSYGR	415.2139	2	23	y5	25.35	48.4
1419	IPI00127206.4	VLAAYK	382.2392	2	41	y6	57.05	98.1
1420	IPI00404801.1	AFDSGIIPMEFVNK	784.3948	2	62	P y7	95.65	157.7
1421	IPI00404801.1	AFDSGIIPMEFVNK	784.3949	2	66	P y7	95.65	161.7
1422	IPI00404801.1	EKHPEG	348.6517	2	20		0	20.0
1423	IPI00404801.1	IGNTGGMLDNILASK	752.9121	2	44		0	44.0
1424	IPI00404801.1	IGNTGGMLDNILASK	752.8954	2	53		0	53.0
1425	IPI00404801.1	LGLVGVNLSLDGVK	692.4134	2	54	y8	21.2	75.2
1426	IPI00404801.1	SFDELGEIISVYEDLVAK	1078.5423	2	76	c b8	5.35	81.4
1427	IPI00404801.1	SFDELGEIISVYEDLVAK	1078.5425	2	77		0	77.0
1428	IPI00404801.1	SGGMSNELNIIISR	746.4020	2	76	y7	46.75	122.8
1429	IPI00353727.3	GLGTDNTLIR	587.8084	2	63	y7	23.75	86.8
1430	IPI00353727.3	SELSSNFEQVILGLMTPVLYDVQELRR	1080.5668	3	65	b7	0.55	65.6
1431	IPI00353727.3	SELSSNFEQVILGLMTPVLYDVQELRR	1080.2344	3	75		0	75.0
1432	IPI00353727.3	SELSSNFEQVILGLMTPVLYDVQELRR	1080.5725	3	78	y++14	54.8	132.8

1433	IPI00353727.3	SELSSNFEQVILGLMTPTVLYDVQELRR	1080.5679	3	81	y6	8.5	89.5
1434	IPI00319652.1	AHPLFTFLR	367.8784	3	21		0	21.0
1435	IPI00319652.1	AHPLFTFLR	551.3145	2	44	P y7	61.35	105.4
1436	IPI00319652.1	FLVGPDPVPRR	656.3812	2	24	y6	25.35	49.4
1437	IPI00319652.1	FRTIDIEPIETLLSQSGNS	1182.5902	2	56	c b7 P	22.4	78.4
1438	IPI00319652.1	LSAAAQSTVYAFSARPLTGGEVSLGSLR	969.8515	3	41	y++19	7.85	48.9
1439	IPI00319652.1	LSAAAQSTVYAFSARPLTGGEVSLGSLR	969.8519	3	60	P y8	11.55	71.6
1440	IPI00319652.1	PLTGGEVSLGSLR	691.8960	2	42	P y8	20.1	62.1
1441	IPI00319652.1	TIDIEPIETLLSQSGNS	1031.0064	2	41	c b5 P	44.5	85.5
1442	IPI00319652.1	TIDIEPIETLLSQSGNS	687.6735	3	42		0	42.0
1443	IPI00319652.1	TIDIEPIETLLSQSGNS	1030.5043	2	54	y7	58.1	112.1
1444	IPI00319652.1	TIDIEPIETLLSQSGNS	687.6735	3	54		0	54.0
1445	IPI00319652.1	YVRPGGGFEPNFTLFEK	653.3316	3	24	c b9 P	55.3	79.3
1446	IPI00319652.1	YVRPGGGFEPNFTLFEK	653.3363	3	25		0	25.0
1447	IPI00319652.1	YVRPGGGFEPNFTLFEK	653.6726	3	29	c b9 P	28.95	58.0
1448	IPI00122565.1	KFDLGQDVIDFTGHSLALYR	766.0675	3	55	y6	14.55	69.6
1449	IPI00122565.1	KFDLGQDVIDFTGHSLALYR	766.0648	3	55	y++17	36.85	91.9
1450	IPI00122565.1	LPGQPPASMG	555.7902	2	30	P y7	52.95	83.0
1451	IPI00122565.1	LSAIYGGTYMLNKPIEEIIVQNGK	884.8081	3	41		0	41.0
1452	IPI00122565.1	LSAIYGGTYMLNKPIEEIIVQNGK	884.8120	3	44	y6	16.9	60.9
1453	IPI00122565.1	SPYLYPLYGLGELPQGFAR	1071.5600	2	68	P y6	13.65	81.7
1454	IPI00122565.1	VLHMDQNPYYGGESASITPLEDLKY	947.7877	3	29	P y7	61.35	90.4
1455	IPI00122565.1	VPSTEAEALASSMLGLFEK	660.6715	3	41		0	41.0
1456	IPI00122565.1	VPSTEAEALASSMLGLFEK	990.5018	2	105	y8	31.95	137.0
1457	IPI00118625.1	DIITTELNSATDNPMVFASR	1098.5391	2	55	P y7	33.75	88.8
1458	IPI00118625.1	DIITTELNSATDNPMVFASR	1098.5386	2	61	P y7	33.75	94.8
1459	IPI00118625.1	DRFMAPDIEAAHR	510.2488	3	45	c b7	46.75	91.8
1460	IPI00118625.1	GQIEVAFR	460.2537	2	44	y6	35.8	79.8
1461	IPI00118625.1	LTVGWLGR	451.2668	2	37	y6	44.5	81.5
1462	IPI00118625.1	SHSSGVGKPLSPER	479.9200	3	24	P y6	5.85	29.9
1463	IPI00118625.1	SHSSGVGKPLSPER	719.3760	2	69	P y6	25.35	94.4
1464	IPI00118625.1	SLLSDHHPSEIAESHR	643.9721	3	39	y++14	9.3	48.3
1465	IPI00118625.1	YIALDGDSLSTEDLVNLGK	1012.5148	2	55	c b9	20.1	75.1
1466	IPI00118625.1	YIALDGDSLSTEDLVNLGK	1012.5148	2	72	y9	42.15	114.2
1467	IPI00121267.1	AAAAIMHMIMNLDPAVAQFPQELVTYGGNGQVFSNWAQF	1128.0363	4	34		0	34.0
1468	IPI00121267.1	APVVLSR	371.2349	2	46	y4	15.6	61.6
1469	IPI00121267.1	EVLSLGYHGNVVDLWER	662.6725	3	18	y5	29.45	47.5
1470	IPI00121267.1	EVLSLGYHGNVVDLWER	663.0075	3	21	y5	27.2	48.2
1471	IPI00121267.1	HLVQESLRR	569.3283	2	19	c b8	21.2	40.2
1472	IPI00121267.1	HLVQESLRR	379.8877	3	20	c b5	6.6	26.6
1473	IPI00121267.1	HQLVVG SQAR	365.5408	3	28		0	28.0

1474	IPI00121267.1	HQLVVGSQLR	547.8071	2	36	y8	30.4	66.4
1475	IPI00121267.1	HVAAINR	390.7274	2	18	y5	41	59.0
1476	IPI00121267.1	ILYSDQK	433.7348	2	25	y5	52.95	78.0
1477	IPI00121267.1	LLALEFAQELR	651.8740	2	57	y6	52.95	110.0
1478	IPI00121267.1	LQYMDNIR	526.7636	2	26	y6	38.2	64.2
1479	IPI00121267.1	LTMSYLSK	471.7520	2	22	y5	69.75	91.8
1480	IPI00121267.1	LVITNGMVIPNYSSR	832.9472	2	50	P y6	38.2	88.2
1481	IPI00121267.1	MMLSWDVSNQVAR	733.3759	2	58	y6	23.75	81.8
1482	IPI00121267.1	MTEEQTLVMYSGHPLGLFPSSPR	860.0904	3	50	P y5	6.6	56.6
1483	IPI00121267.1	MTEEQTLVMYSGHPLGLFPSSPR	860.0903	3	63	P y5	27.2	90.2
1484	IPI00121267.1	QFGHIYMYR	405.5308	3	15		0	15.0
1485	IPI00121267.1	QFGHIYMYR	607.7930	2	15		0	15.0
1486	IPI00121267.1	TPNLSPEEEQLALR	799.4160	2	39	c b5 P	18.5	57.5
1487	IPI00121267.1	WAGVPHAPVR	363.8699	3	16	y4	16.9	32.9
1488	IPI00121267.1	YLGIEFLAGK	539.3002	2	34	y6	33.75	67.8
1489	IPI00121267.1	YPSYVQHIMGDIQSQGFPPFR	816.3938	3	38	y6	6.2	44.2
1490	IPI00121267.1	YPSYVQHIMGDIQSQGFPPFR	816.0749	3	50	y4	16.9	66.9
1491	gij1346343	DVDGAYMTK	500.2267	2	17	y7	65.15	82.2
1492	gij1346343	EDLAR	603.3899	1	20		0	20.0
1493	gij1346343	FLEQQNQVLQTK	738.4012	2	39		0	39.0
1494	gij1346343	LLRDYQELMNTK	508.6010	3	17	y4	41	58.0
1495	gij1346343	LNDLEDALQQAQK	679.3571	2	75	y7	49.6	124.6
1496	gij1346343	LRSEIDNVK	537.3020	2	35	c b6	52.95	88.0
1497	gij1346343	NMQDMVEDYRNKYEDEINK	812.3599	3	26	y4	16.9	42.9
1498	gij1346343	QISNLQQSISDAEQRGENALK	777.3978	3	16		0	16.0
1499	gij1346343	QISNLQQSISDAEQRGENALK	777.3975	3	30		0	30.0
1500	gij1346343	SKAEAESLYQSK	670.8397	2	59	y6	38.2	97.2
1501	gij1346343	SLDLDSIIAEVK	651.8608	2	87	y8	58.1	145.1
1502	gij1346343	SLDLDSIIAEVK	651.8838	2	97	y8	77.6	174.6
1503	gij1346343	THNLEPYFESFINNLR	665.6808	3	21		0	21.0
1504	gij1346343	THNLEPYFESFINNLR	665.3297	3	35	y4	41	76.0
1505	gij1346343	TNAENEFVTIKK	697.3714	2	35	y8	44.3	79.3
1506	gij1346343	WELLQQVDTSTR	738.3787	2	49	y8	23.75	72.8
1507	gij1346343	YEELQITAGR	590.3041	2	70	y8	44.3	114.3
1508	IPI00126208.1	AAVSGLWQK	444.7508	2	30	y6	89	119.0
1509	IPI00126208.1	DFTPAAQAQAFQK	647.8333	2	48	P y9	102.9	150.9
1510	IPI00126208.1	KVITAFNDGLNHLDSLK	629.0164	3	38	y7	75.6	113.6
1511	IPI00126208.1	KVITAFNDGLNHLDSLK	629.3469	3	40	y++14	48.5	88.5
1512	IPI00126208.1	LHVDPENFR	376.1931	3	20	c b4 P	49.1	69.1
1513	IPI00126208.1	LHVDPENFR	563.7861	2	29	P y5	18.5	47.5
1514	IPI00126208.1	LLGNMIVIVLGHHLGK	429.5114	4	21	y++9	29.45	50.5

1515	IPI00126208.1	LLGNMIVIVLGHHLGK	572.0152	3	25		0	25.0
1516	IPI00126208.1	LLGNMIVIVLGHHLGK	429.2603	4	31	b6	1.05	32.1
1517	IPI00126208.1	LLVVYPWTQR	637.8819	2	31	P y5	14.55	45.6
1518	IPI00126208.1	VHLTDAEK	456.7427	2	25	y6	65.15	90.2
1519	IPI00126208.1	VITAFNDGLNHLDSLK	586.6473	3	22		0	22.0
1520	IPI00126208.1	VITAFNDGLNHLDSLK	879.4669	2	68	y7	49.6	117.6
1521	IPI00126208.1	VNADEVGGEALGR	643.8209	2	91	y7	22.4	113.4
1522	IPI00126208.1	VVAGVAAALAHK	369.5611	3	28		0	28.0
1523	IPI00126208.1	VVAGVAAALAHK	553.8378	2	62	y7	52.95	115.0
1524	IPI00126208.1	YFDSFGDLSSASAIMGNAK	991.4583	2	61	c b8	12.15	73.2
1525	IPI00126208.1	YFDSFGDLSSASAIMGNAK	991.4579	2	74	y10	27.7	101.7
1526	IPI00343354.2	EITALAPSTMK	581.3128	2	29	y6	57.05	86.1
1527	IPI00343354.2	IIAPPER	398.2398	2	18	P y4	29.45	47.5
1528	IPI00343354.2	IIAPPERK	308.5272	3	21	c b6	1.25	22.3
1529	IPI00230707.4	ATVVESSEK	475.2536	2	29	y5	29.45	58.5
1530	IPI00230707.4	AYSEAHEISK	567.7754	2	64	y8	58.1	122.1
1531	IPI00230707.4	LAEQAERYDDMAAMK	604.9482	3	37	y5	38.2	75.2
1532	IPI00230707.4	NLLSVAYK	454.2662	2	25	y5	75.6	100.6
1533	IPI00230707.4	NLLSVAYK	907.5667	1	37		0	37.0
1534	IPI00230707.4	NVTELNEPLSNEER	822.4180	2	69	P y7	33.75	102.8
1535	IPI00230707.4	TAFDDAIAELDTLNEDSYK	1066.4920	2	65	y6	82.65	147.7
1536	IPI00230707.4	TAFDDAIAELDTLNEDSYK	1066.4918	2	68	y6	52.95	121.0
1537	IPI00230707.4	TAFDDAIAELDTLNEDSYKDSTLIMQLLR	1101.8817	3	59	y6	14.55	73.6
1538	IPI00230707.4	VISSIEQK	452.2611	2	35	y6	52.95	88.0
1539	IPI00323661.1	GAAQNIIPASTGAAK	685.3775	2	20	P y8	44.3	64.3
1540	IPI00323661.1	GAAQNIIPASTGAAK	686.3805	2	21	y9	66.55	87.6
1541	IPI00323661.1	LISWYDNEYGYSNR	890.9060	2	43	y6	6.2	49.2
1542	IPI00323661.1	LISWYDNEYGYSNR	890.9058	2	63	y5	25.35	88.4
1543	IPI00323661.1	LISWYDNEYGYSNR	890.4024	2	64	y5	14.55	78.6
1544	IPI00323661.1	PAKYDDIKK	539.3002	2	53	c b6	44.5	97.5
1545	IPI00323661.1	QASEGPLK	829.4434	1	24		0	24.0
1546	IPI00323661.1	RVIISAPSADAPMFVMGVNHEK	593.0589	4	18	b5	1.4	19.4
1547	IPI00323661.1	RVIISAPSADAPMFVMGVNHEK	593.0590	4	19		0	19.0
1548	IPI00323661.1	RVIISAPSADAPMFVMGVNHEK	593.0634	4	26		0	26.0
1549	IPI00323661.1	RVIISAPSADAPMFVMGVNHEK	790.7418	3	43	y6	27.2	70.2
1550	IPI00323661.1	RVIISAPSADAPMFVMGVNHEK	790.4308	3	48	y4	18.5	66.5
1551	IPI00323661.1	RVIISAPSADAPMFVMGVNHEK	790.7676	3	49	y6	27.2	76.2
1552	IPI00323661.1	VEIVAINDPFIDLNYMVYMFQYDSTHGK	1108.5299	3	19		0	19.0
1553	IPI00323661.1	VEIVAINDPFIDLNYMVYMFQYDSTHGK	1108.8191	3	21	b8 P	25.35	46.4
1554	IPI00323661.1	VEIVAINDPFIDLNYMVYMFQYDSTHGK	1108.4617	3	25		0	25.0
1555	IPI00323661.1	VGVNGFGR	403.7117	2	44	y4	7.1	51.1

1556	IPI00323661.1	VVDLMAYMASKE	678.8319	2	24		0	24.0
1557	IPI00323661.1	VVDLMAYMASKE	678.8302	2	36	c b7	6.6	42.6
1558	IPI00323661.1	WGEAGAEEYVVESTGVFTTMEK	1146.0278	2	71	y6	14.55	85.6
1559	IPI00130640.1	AAQVAALPR	530.3008	2	30	c b8	5.55	35.6
1560	IPI00130640.1	AAQVAALPR	530.3008	2	51	c b7	1.4	52.4
1561	IPI00130640.1	APAAIGPYSQAVQVDR	821.9675	2	57	c b5	57.05	114.1
1562	IPI00130640.1	APAAIGPYSQAVQVDR	821.9511	2	73	y4	16.9	89.9
1563	IPI00130640.1	GSRVEIEAIAVQGPFIKA	629.3572	3	20		0	20.0
1564	IPI00130640.1	TTVLLADMNDFGTVNEIYK	1073.0314	2	59	y5	75.6	134.6
1565	IPI00130640.1	TTVLLADMNDFGTVNEIYK	1073.0362	2	65	y5	52.95	118.0
1566	IPI00130640.1	TTVLLADMNDFGTVNEIYK	1073.0359	2	65	y5	75.6	140.6
1567	IPI00130640.1	TYFQGS LPAR	570.2962	2	46	y8	30.4	76.4
1568	IPI00130640.1	VEIEAIAVQGPFIKA	793.4551	2	25	P y5	97.85	122.9
1569	IPI00330804.1	ALLFVPR	408.2603	2	27	y4	27.2	54.2
1570	IPI00330804.1	DNSTMGYMAAK	594.7558	2	55	y6	35.8	90.8
1571	IPI00330804.1	DQVANS AFVER	618.3049	2	50	y8	12.15	62.2
1572	IPI00330804.1	ELISNSSDALDK	646.3344	2	53	y9	52.75	105.8
1573	IPI00330804.1	FYEQFSK	474.7272	2	36	y5	52.95	89.0
1574	IPI00330804.1	HIYFITGETK	604.8200	2	24	y8	85.6	109.6
1575	IPI00330804.1	HLEINPDHSIETLR	596.3203	3	51	y7	5.55	56.6
1576	IPI00330804.1	LGIHEDSQNR	390.1952	3	41	y4	6.6	47.6
1577	IPI00330804.1	LGIHEDSQNRK	432.8932	3	21	c b6	41	62.0
1578	IPI00330804.1	TLTIVDTGIGMTK	675.3717	2	42	y9	28.95	71.0
1579	IPI00330804.1	TLTIVDTGIGMTK	675.3717	2	64	y8	58.1	122.1
1580	IPI00330804.1	TLTIVDTGIGMTK	675.3715	2	70	y8	61.35	131.4
1581	IPI00123313.1	AAVASLLQSVQVPEFTPK	943.5246	2	22	P y6	82.65	104.7
1582	IPI00123313.1	AAVASLLQSVQVPEFTPK	943.5281	2	33	c b7	0.9	33.9
1583	IPI00123313.1	KLAYVAAG	396.6843	2	25		0	25.0
1584	IPI00123313.1	LAGTQPLEVLEAVQR	812.4954	2	87	y4	27.2	114.2
1585	IPI00123313.1	LAYVAAGDLAPINAFIGGLAAQEVMK	868.8014	3	21	b10 P	19.15	40.2
1586	IPI00123313.1	NGFLNLALPFFGFSEPLAAPR	1140.6011	2	41		0	41.0
1587	IPI00123313.1	VGP DTERIYDDDFQNLGDGVANALDNIDAR	1124.2007	3	47	y6	29.45	76.5
1588	IPI00123313.1	VGP DTERIYDDDFQNLGDGVANALDNIDAR	1124.2010	3	48	y7	22.4	70.4
1589	IPI00123313.1	VGP DTERIYDDDFQNLGDGVANALDNIDAR	1123.8650	3	62	y7	49.6	111.6
1590	IPI00221400.3	AAVLWELHK	356.2065	3	37		0	37.0
1591	IPI00221400.3	AAVLWELHKPFTIEDIEVAPPK	626.5974	4	21	y5	41	62.0
1592	IPI00221400.3	GAIFGGFK	796.4570	1	19	y5	89	108.0
1593	IPI00221400.3	GAIFGGFK	398.7216	2	34	y6	75.6	109.6
1594	IPI00221400.3	GAIFGGFK	398.7216	2	37	y6	69.75	106.8
1595	IPI00221400.3	GTLREGTSR	488.7622	2	26		0	26.0
1596	IPI00221400.3	IDGASPLDK	458.2427	2	29	y5	41	70.0

1597	IPI00221400.3	IIAVDINK	885.5399	1	27	y6	75.6	102.6
1598	IPI00221400.3	IIAVDINK	443.2736	2	44	y6	69.75	113.8
1599	IPI00221400.3	INEAFDLLR	1090.5906	1	34		0	34.0
1600	IPI00221400.3	INEAFDLLR	545.7983	2	61	y5	38.2	99.2
1601	IPI00221400.3	INEAFDLLR	545.7983	2	61	y7	61.35	122.4
1602	IPI00221400.3	KFPLDPLITHVLPFEK	474.2770	4	19	y++8	15.6	34.6
1603	IPI00221400.3	KFPLDPLITHVLPFEK	632.0339	3	19	c b5 P	14.55	33.6
1604	IPI00221400.3	KFPLDPLITHVLPFEK	474.2770	4	22	b5 P	27.2	49.2
1605	IPI00221400.3	KFPLDPLITHVLPFEK	632.0368	3	24	c b7	13.65	37.7
1606	IPI00221400.3	KFPLDPLITHVLPFEK	632.0368	3	26	P y4	44.5	70.5
1607	IPI00221400.3	KFPLDPLITHVLPFEK	632.0539	3	28	P y++11	69.75	97.8
1608	IPI00221400.3	LVADFMAK	447.7415	2	38	y6	69.75	107.8
1609	IPI00221400.3	LVADFMAK	894.5079	1	43	y6	27.2	70.2
1610	IPI00221400.3	PFTIEDIEVAPPK	728.3891	2	62	y8	46.75	108.8
1611	IPI00221400.3	PFTIEDIEVAPPK	728.3892	2	62	y8	33.75	95.8
1612	IPI00221400.3	PFTIEDIEVAPPK	728.3892	2	64	y9	28.95	93.0
1613	IPI00221400.3	PFTIEDIEVAPPK	728.3891	2	79		0	79.0
1614	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7906	3	17		0	17.0
1615	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7909	3	21		0	21.0
1616	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7906	3	24	y7	44.3	68.3
1617	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7906	3	28	y8	61.35	89.4
1618	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7906	3	30	y7	25.35	55.4
1619	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7905	3	34	y8	61.35	95.4
1620	IPI00221400.3	QIHNFIISTFSQYTVVDDIAVAK	895.7905	3	42	y7	83.9	125.9
1621	IPI00221400.3	SDLLMPR	831.4659	1	24	y5	38.2	62.2
1622	IPI00221400.3	SDLLMPR	416.2233	2	52	y4	29.45	81.5
1623	IPI00139788.2	ASDTSITWNNLK	675.3467	2	55	y6	77.6	132.6
1624	IPI00139788.2	DFQLFSSPLGK	619.8490	2	56	y7	13.65	69.7
1625	IPI00139788.2	DGGGDVAFVK	482.7401	2	77		0	77.0
1626	IPI00139788.2	DLLFRDDTK	561.7928	2	42	c b7	35.8	77.8
1627	IPI00139788.2	HQTVLDNTEGK	621.3099	2	62	y9	40.2	102.2
1628	IPI00139788.2	HQTVLDNTEGKNPAEWA	680.0070	3	30	y7	35.8	65.8
1629	IPI00139788.2	HTTIFEVLPEK	657.3641	2	20		0	20.0
1630	IPI00139788.2	IPSHAVVAR	475.2826	2	43	y7	61.35	104.4
1631	IPI00139788.2	KGTFQLNQLEGKK	535.9587	3	24		0	24.0
1632	IPI00139788.2	LPEGTTPEK	486.2555	2	36		0	36.0
1633	IPI00139788.2	LYLGHNYVTAIR	710.9056	2	19	y++10	69.75	88.8
1634	IPI00139788.2	NNGKEDIWEILK	786.4270	2	43	y5	38.2	81.2
1635	IPI00139788.2	TAGWNIPMGMLYNR	812.4117	2	44	P y8	58.1	102.1
1636	IPI00139788.2	TAGWNIPMGMLYNR	812.3918	2	45	P y8	42.15	87.2
1637	IPI00139788.2	VAQEHFGK	458.2376	2	40		0	40.0

1638	IPI00400148.1	IILLAEGR	884.5945	1	21		0	21.0
1639	IPI00400148.1	MMSNGILK	447.2332	2	21	y6	38.2	59.2
1640	IPI00400148.1	VAVVAGYGDVGK	567.8122	2	57	y7	65.15	122.2
1641	IPI00400148.1	WLNENAVEK	552.2815	2	47	y7	95.65	142.7
1642	IPI00122862.2	ASQAPSSFQLLYDLK	834.9364	2	44		0	44.0
1643	IPI00122862.2	ASQAPSSFQLLYDLK	834.9363	2	47	y4	29.45	76.5
1644	IPI00122862.2	AYTEEDLDLVEK	712.8548	2	17		0	17.0
1645	IPI00122862.2	ERASFITPVPGGVGPMTVAMLMQSTVESQAQR	1083.5470	3	40	y4	7.7	47.7
1646	IPI00122862.2	ERASFITPVPGGVGPMTVAMLMQSTVESQAQR	1083.5477	3	47	y4	29.45	76.5
1647	IPI00122862.2	FSDIQIR	439.7401	2	22	y5	75.6	97.6
1648	IPI00122862.2	IFHELTQTDK	411.2157	3	18	y++9	25.35	43.4
1649	IPI00122862.2	IFHELTQTDK	616.3196	2	29	y7	23.75	52.8
1650	IPI00122862.2	LIGNLAR	378.7398	2	21	y5	38.2	59.2
1651	IPI00122862.2	MFGVPVVAVNVFK	753.9332	2	40		0	40.0
1652	IPI00122862.2	QIENARMFGVP	639.8700	2	17		0	17.0
1653	IPI00122862.2	THLSLSHNPEQK	464.2408	3	21	P y4	20.55	41.6
1654	IPI00122862.2	TPVPSDIAISR	578.3227	2	53	P y8	69.75	122.8
1655	IPI00122862.2	VVGDVAYDEAK	583.2908	2	50	y9	81.65	131.7
1656	IPI00122862.2	YVVVTGITPTPLGEGK	816.0669	2	49	y9	28.95	78.0
1657	IPI00122862.2	YVVVTGITPTPLGEGK	815.9573	2	71	P y8	21.2	92.2
1658	IPI00114593.1	DLTDYLMK	499.7468	2	41	y5	83.9	124.9
1659	IPI00114593.1	EITALAPSTMK	1161.6229	1	57	P y5	44.5	101.5
1660	IPI00114593.1	LDLAGR	644.3736	1	22	y4	32.3	54.3
1661	IPI00114593.1	LDLAGRDLTDYLMK	812.4754	2	24	y4	69.9	93.9
1662	IPI00114593.1	YPIEHGIITNWDDMEK	654.3151	3	19	y6	33.75	52.8
1663	IPI00114593.1	YPIEHGIITNWDDMEK	980.9587	2	30		0	30.0
1664	IPI00114593.1	YPIEHGIITNWDDMEK	980.9586	2	36	c b8	44.3	80.3
1665	IPI00230204.5	APPSVFAQVPQAPPVLVFK	997.0749	2	35		0	35.0
1666	IPI00230204.5	APPSVFAQVPQAPPVLVFK	997.0710	2	36	c b9 P	19.15	55.2
1667	IPI00230204.5	FLFPFFDSAYQGFASGDLEK	1144.0415	2	58	y6	29.45	87.5
1668	IPI00230204.5	FLFPFFDSAYQGFASGDLEK	1144.0414	2	85	y7	23.75	108.8
1669	IPI00230204.5	HIYLLPSGR	528.3032	2	40	y7	31.95	72.0
1670	IPI00230204.5	IANDNSLNHEYLPILGLAEFR	800.7501	3	23	y6	6.2	29.2
1671	IPI00230204.5	IANDNSLNHEYLPILGLAEFR	800.7501	3	29	y6	6.2	35.2
1672	IPI00230204.5	IANDNSLNHEYLPILGLAEFR	800.7503	3	35	y4	16.9	51.9
1673	IPI00230204.5	IGADFLGR	424.7354	2	53	y7	46.75	99.8
1674	IPI00230204.5	IVAATLSDPELFK	702.4047	2	60	y6	69.75	129.8
1675	IPI00230204.5	LTADFRDDDPDRK	515.9266	3	19	y++11	22.4	41.4
1676	IPI00230204.5	NTPIYVSSPTWENHNAVFSAGFK	880.0956	3	20		0	20.0
1677	IPI00230204.5	QVEYLVNEK	561.2959	2	35	y5	52.95	88.0
1678	IPI00230204.5	TDESQPWWLPVVR	763.4358	2	27	P y8	115.75	142.8

1679	IPI00230204.5	VGGVQSLGGTGALR	636.3588	2	32	y9	4.8	36.8
1680	IPI00230204.5	VNLGVGAYRTDESQPWWLPVVR	819.4418	3	26	P y8	85.6	111.6
1681	IPI00331436.1	ANKPGDVVR	478.2695	2	28	P y6	69.75	97.8
1682	IPI00331436.1	ANKPGDVVR	319.1824	3	30	P y6	14.55	44.6
1683	IPI00331436.1	ASANMDLMR	504.7344	2	46	y7	22.4	68.4
1684	IPI00331436.1	GITFDSSGGISIK	597.8218	2	57	y8	42.15	99.2
1685	IPI00331436.1	GMSGRPTR	431.2216	2	16		0	16.0
1686	IPI00331436.1	GSEPPVFLEIHVMGSPNATEAPLVFVGK	1039.5240	3	19	P y7	52.95	72.0
1687	IPI00331436.1	GSEPPVFLEIHVMGSPNATEAPLVFVGK	1039.5191	3	30		0	30.0
1688	IPI00331436.1	GSEPPVFLEIHVMGSPNATEAPLVFVGK	1039.5242	3	32	P y++13	27.7	59.7
1689	IPI00331436.1	GVLFASGQNLAR	616.8405	2	65	y7	22.4	87.4
1690	IPI00331436.1	HLMESPANEMTPTR	538.5855	3	22	y4	41	63.0
1691	IPI00331436.1	LREMLNISGPPLK	489.9503	3	20	y6	38.2	58.2
1692	IPI00331436.1	MPLFEHYTR	597.2917	2	34	y6	38.2	72.2
1693	IPI00331436.1	TFYGLHQDFPSVVVVGLGK	688.7264	3	29	y6	23.75	52.8
1694	IPI00331436.1	TFYGLHQDFPSVVVVGLGK	688.3932	3	30	P y++10	16.9	46.9
1695	IPI00331436.1	TIQVDNTDAEGR	659.8157	2	63	y9	28.95	92.0
1696	IPI00123927.1	DQSPASHEIATNLGDFAISLYR	802.7315	3	34		0	34.0
1697	IPI00123927.1	DQSPASHEIATNLGDFAISLYR	802.7314	3	36	y4	15.6	51.6
1698	IPI00123927.1	ELISKFLLNR	616.8539	2	60	y7	33.75	93.8
1699	IPI00123927.1	FLEEAK	736.3887	1	21	c b4	62.3	83.3
1700	IPI00123927.1	IFNSGADLSGITEENAPLK	989.0045	2	88	y8	61.35	149.4
1701	IPI00123927.1	IFNSGADLSGITEENAPLK	989.0044	2	109	y++16	15.5	124.5
1702	IPI00123927.1	IVEAVK	329.7107	2	24	y5	69.75	93.8
1703	IPI00123927.1	KVINDFVEK	546.3091	2	42	y7	22.4	64.4
1704	IPI00123927.1	MQHLEQTLNK	414.5486	3	22		0	22.0
1705	IPI00123927.1	SFQHLLQTLNRPDSELQLSTGNGLFVNNDLK	875.7061	4	17	y5	52.95	70.0
1706	IPI00123927.1	SFQHLLQTLNRPDSELQLSTGNGLFVNNDLK	875.9571	4	21	y7	35.8	56.8
1707	IPI00123927.1	VINDFVEK	482.2605	2	24	y6	89	113.0
1708	IPI00123927.1	VVDPTHK	398.2222	2	23	y5	25.35	48.4
1709	IPI00341107.2	VGVNGFGR	403.2197	2	53	y5	27.2	80.2
1710	IPI00344499.2	ANYLASPPLVIAYAIAGTVR	1031.0829	2	28	c b6 P	0.7	28.7
1711	IPI00344499.2	ANYLASPPLVIAYAIAGTVR	1031.0830	2	37	c b6 P	6.6	43.6
1712	IPI00344499.2	AVLAESYER	519.2667	2	46	y7	33.75	79.8
1713	IPI00344499.2	EPLGVNAQGR	520.7784	2	28	y5	38.2	66.2
1714	IPI00344499.2	FVEFFGPGVAQLSIADR	927.4822	2	51	y5	14.55	65.6
1715	IPI00344499.2	FVEFFGPGVAQLSIADR	927.4855	2	61	c b9	30.4	91.4
1716	IPI00344499.2	GPFLLGK	422.7687	2	41		0	41.0
1717	IPI00344499.2	GTFANIR	389.7143	2	37	y5	52.95	90.0
1718	IPI00344499.2	KLGGNPEK	421.7405	2	38	y7	46.75	84.8
1719	IPI00344499.2	KNDIENILNWNVMQHK	666.3465	3	31	y6	14.55	45.6

1720	IPI00344499.2	KNDIENILNWNVMQHK	666.0162	3	41	y++15	98.15	139.2
1721	IPI00344499.2	LYAWNPK	446.2403	2	18	y5	52.95	71.0
1722	IPI00344499.2	NQDLEFER	525.7468	2	32	y6	52.95	85.0
1723	IPI00344499.2	RGNDAIMAR	502.2588	2	27	y5	41	68.0
1724	IPI00344499.2	SNLVGMGVIPLEYLPGETADSLGLTGR	920.8162	3	33	y5	6.2	39.2
1725	IPI00344499.2	SNLVGMGVIPLEYLPGETADSLGLTGR	920.8164	3	34	y5	6.2	40.2
1726	IPI00344499.2	SNLVGMGVIPLEYLPGETADSLGLTGR	920.8163	3	34	y8	7.1	41.1
1727	IPI00344499.2	SPPFFESLTLDLQPPK	908.4725	2	29		0	29.0
1728	IPI00344499.2	SPPFFESLTLDLQPPK	908.9805	2	31		0	31.0
1729	IPI00344499.2	TFQAVMR	426.7235	2	35	y4	16.9	51.9
1730	IPI00344499.2	VILQDFTGVPVVDFAAMR	1025.5481	2	68	c b9 P	2.15	70.2
1731	IPI00344499.2	YQQAGLPLIVLAGK	735.9487	2	25	P y8	73.4	98.4
1732	IPI00344499.2	YQQAGLPLIVLAGK	736.4386	2	27		0	27.0
1733	IPI00330760.4	ELASQPDVDGFLVGGASLKPEFVDIINAK	1011.1994	3	25	b5 P	18.5	43.5
1734	IPI00330760.4	ELASQPDVDGFLVGGASLKPEFVDIINAK	1010.8698	3	28		0	28.0
1735	IPI00330760.4	ELASQPDVDGFLVGGASLKPEFVDIINAK	1011.1997	3	38	b5 P	6.2	44.2
1736	IPI00330760.4	ELASQPDVDGFLVGGASLKPEFVDIINAKQ	1053.5526	3	25	b5 P	20.55	45.6
1737	IPI00330760.4	ELASQPDVDGFLVGGASLKPEFVDIINAKQ	1053.5531	3	31		0	31.0
1738	IPI00330760.4	FFVGGNWK	477.7460	2	23	y5	44.5	67.5
1739	IPI00330760.4	HVFGESDELIGQK	486.9123	3	39	y4	15.6	54.6
1740	IPI00330760.4	HVFGESDELIGQK	729.8763	2	53	y8	73.4	126.4
1741	IPI00330760.4	LDEREAGITEK	420.8864	3	22	y5	32.3	54.3
1742	IPI00330760.4	RHVFGESDELIGQK	538.9461	3	57	y4	49.1	106.1
1743	IPI00330760.4	SNVNDGVAQSTR	624.3032	2	67	y5	38.2	105.2
1744	IPI00330760.4	TATPQQAQEVHEK	733.8650	2	37	y++11	31.95	69.0
1745	IPI00330760.4	VTNGAFTGEISPGMIK	811.4145	2	56	P y5	49.1	105.1
1746	IPI00330760.4	VVFEQTK	425.7371	2	22	y5	69.75	91.8
1747	IPI00330760.4	VVLAYEPVWAIGTGK	534.9720	3	45		0	45.0
1748	IPI00337024.1	ALDLDPSK	429.7507	2	29	y6	46.75	75.8
1749	IPI00337024.1	DMDLIDVNEAFAPQFLSVQK	1141.0666	2	70	P y8	58.1	128.1
1750	IPI00337024.1	LPMGMTAENLAAK	673.8554	2	68	y8	44.3	112.3
1751	IPI00337024.1	VGVP TETGALTLNR	714.4315	2	76	y4	29.45	105.5
1752	IPI00121126.2	AQGSVALSVTQDPAR	750.3989	2	48	y8	12.15	60.2
1753	IPI00121126.2	AWLDGHSR	314.4913	3	20		0	20.0
1754	IPI00121126.2	AWLDGHSR	471.2334	2	21	y5	44.5	65.5
1755	IPI00121126.2	AWLDGHSR	471.2333	2	30	y6	22.4	52.4
1756	IPI00121126.2	DLGTQLAPIIQEFFHSEQYR	1197.1074	2	48	y6	14.55	62.6
1757	IPI00121126.2	DVPIRQGEIFLLPAR	575.3414	3	17		0	17.0
1758	IPI00121126.2	DVPIRQGEIFLLPAR	575.6724	3	19		0	19.0
1759	IPI00121126.2	QDVDVWLWQQEGSSK	903.4293	2	80	y8	40.2	120.2
1760	IPI00121126.2	QDVDVWLWQQEGSSK	902.9294	2	81	y8	55.3	136.3

1761	IPI00121126.2	TGKPNPDQLLK	404.2316	3	26	y4	18.5	44.5
1762	IPI00121126.2	VLEQQQHR	483.7597	2	45	y6	22.4	67.4
1763	IPI00121126.2	VPHSPQR	411.2271	2	25	y5	6.6	31.6
1764	IPI00121126.2	YYVGDTEVDLFEK	789.3723	2	26		0	26.0
1765	IPI00121126.2	YYVGDTEVDLFEK	789.4177	2	51	y4	55.9	106.9
1766	IPI00120382.3	DDPVTNLNNAFEVAEK	888.4237	2	56	c b8	5.35	61.4
1767	IPI00120382.3	GYEEWLLNEIR	711.8589	2	48	y4	41	89.0
1768	IPI00120382.3	KPER	529.3822	1	18		0	18.0
1769	IPI00120382.3	MAPYQGPDAAPGALDYK	882.9765	2	41	y8	61.35	102.4
1770	IPI00120382.3	QHQLIQEALIFDNK	849.4810	2	17		0	17.0
1771	IPI00120382.3	TINEVENQILTR	715.4070	2	59	y7	69.75	128.8
1772	IPI00117350.1	AVFVDLEPTVIDEIR	858.4636	2	65	P y8	69.75	134.8
1773	IPI00117350.1	DVNAAIAAIK	493.2874	2	65	y6	69.75	134.8
1774	IPI00117350.1	EIIDPVLDR	535.2983	2	25		0	25.0
1775	IPI00117350.1	FDLMYAK	444.2204	2	39	y5	97.85	136.9
1776	IPI00117350.1	LISQIVSSITASLR	744.4433	2	66	y9	20.1	86.1
1777	IPI00133549.1	AAVVLENGVLSR	635.3607	2	61		0	61.0
1778	IPI00133549.1	DFLGGLAFR	498.2696	2	48	y6	25.35	73.4
1779	IPI00133549.1	FANQILSYGAELDADHPGFKDPVYR	706.8502	4	30	y++15	10.05	40.1
1780	IPI00133549.1	HGQPIPR	402.7277	2	39	y6	25.35	64.4
1781	IPI00133549.1	LFEENEINLTHIESR	615.6477	3	44	y++11	30.4	74.4
1782	IPI00133549.1	LFEENEINLTHIESRPSR	728.7292	3	36		0	36.0
1783	IPI00133549.1	LFEENEINLTHIESRPSR	729.0547	3	41		0	41.0
1784	IPI00133549.1	LNKDEYEFFTYLDK	609.2963	3	31	y5	52.95	84.0
1785	IPI00133549.1	LRPVAGLLSSR	390.2433	3	24	y4	16.9	40.9
1786	IPI00133549.1	LRPVAGLLSSR	584.8619	2	35	P y9	52.75	87.8
1787	IPI00133549.1	NDIGATVHELDR	656.3388	2	55	y9	52.75	107.8
1788	IPI00133549.1	RSKPVLGSIK	599.3870	2	36	c b9	2.15	38.2
1789	IPI00133549.1	TFAATIPRPFSVR	488.2776	3	18	y++12	4.95	23.0
1790	IPI00133549.1	TFAATIPRPFSVR	731.9255	2	46	c b6 P	1.4	47.4
1791	IPI00133549.1	TIQELDRFANQILSYGAELDADHPGFKDPVYR	920.9613	4	23	P y4	18.5	41.5
1792	IPI00133549.1	TWGTVFR	433.7301	2	25	y5	29.45	54.5
1793	IPI00133549.1	VEYTEEERK	394.8596	3	20		0	20.0
1794	IPI00133549.1	YDPYTQRVEVLDNTQQLK	737.7222	3	21	y7	13.65	34.7
1795	IPI00130589.2	DGVANVSIEDR	587.7882	2	50	y5	14.55	64.6
1796	IPI00130589.2	DGVANVSIEDR	587.7882	2	58	y5	27.2	85.2
1797	IPI00130589.2	DGVANVSIEDRVISLSGEHSIIGR	842.1128	3	41	y9	42.15	83.2
1798	IPI00130589.2	DGVANVSIEDRVISLSGEHSIIGR	842.1067	3	41	y8	23.75	64.8
1799	IPI00130589.2	GDGPVQGTIHFEQK	504.9198	3	17		0	17.0
1800	IPI00130589.2	GDGPVQGTIHFEQK	756.8855	2	47	y8	58.1	105.1
1801	IPI00130589.2	GDGPVQGTIHFEQK	756.8855	2	50	y5	52.95	103.0

1802	IPI00130589.2	HGGPADEERHVGDLGNVTAGK	530.0099	4	18		0	18.0
1803	IPI00130589.2	HGGPADEERHVGDLGNVTAGK	706.3479	3	23	y++15	29.45	52.5
1804	IPI00130589.2	HGGPADEERHVGDLGNVTAGK	706.0187	3	23	y10	30.4	53.4
1805	IPI00130589.2	HGGPADEERHVGDLGNVTAGK	1059.0746	2	24	y8	22.4	46.4
1806	IPI00130589.2	HGGPADEERHVGDLGNVTAGK	529.7595	4	28		0	28.0
1807	IPI00130589.2	HVGDLGNVTAGK	584.3092	2	42	y10	36.9	78.9
1808	IPI00130589.2	HVGDLGNVTAGK	389.8755	3	44	c b7	33.75	77.8
1809	IPI00130589.2	KHGGPADEER	365.8441	3	58	y4	29.45	87.5
1810	IPI00130589.2	TMVVHEK	422.2237	2	39	y4	29.45	68.5
1811	IPI00130589.2	VISLSGEHSIIGR	456.5933	3	21	y++11	102.9	123.9
1812	IPI00130589.2	VISLSGEHSIIGR	684.3884	2	62	y9	42.15	104.2
1813	IPI00131438.1	AINPENGGVAPGTSVK	902.9646	2	34	y7	23.75	57.8
1814	IPI00131438.1	AINPENGGVAPGTSVK	903.4642	2	50	P y6	14.55	64.6
1815	IPI00131438.1	EIISFGSGYGGNSLLGK	849.9398	2	62		0	62.0
1816	IPI00131438.1	EIISFGSGYGGNSLLGK	849.9397	2	75	y8	12.85	87.9
1817	IPI00131438.1	EVEIDRYLEDQVNTDLPYEIER	956.7921	3	52	P y6	49.6	101.6
1818	IPI00131438.1	FLWPGFGENS	655.3204	2	29	P y8	55.3	84.3
1819	IPI00131438.1	GLGGVNVVEELFGISK	760.4120	2	36	y5	6.2	42.2
1820	IPI00131438.1	TMYVIPFSMGPLGSPLAK	955.0032	2	38		0	38.0
1821	IPI00131438.1	TNLAMMNPSLPGWK	780.3869	2	20	P y4	20.55	40.6
1822	IPI00131438.1	VLEWMFGR	519.2664	2	37	y6	49.6	86.6
1823	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2151	3	18		0	18.0
1824	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2103	3	19		0	19.0
1825	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2153	3	21		0	21.0
1826	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2141	3	29	y6	29.45	58.5
1827	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2106	3	31	y8	21.2	52.2
1828	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2104	3	35	P y4	49.1	84.1
1829	IPI00331241.5	ADIALVELLYHVEELDPGVVDNFPLLK	1008.2102	3	41	y8	33.75	74.8
1830	IPI00331241.5	AGKPVLYHFDGR	467.9139	3	25	y5	38.2	63.2
1831	IPI00331241.5	AGKPVLYHFDGR	467.9139	3	36	y4	15.6	51.6
1832	IPI00331241.5	AGKPVLYHFDGR	701.3747	2	42	y6	49.6	91.6
1833	IPI00331241.5	AILNYIASK	496.7926	2	22	y7	49.6	71.6
1834	IPI00331241.5	AILNYIASK	992.5791	1	23		0	23.0
1835	IPI00331241.5	AILNYIASK	496.7926	2	38	y7	65.15	103.2
1836	IPI00331241.5	FLQPGSQR	466.7510	2	36	P y5	15.6	51.6
1837	IPI00331241.5	KPFDDAK	410.7136	2	29	c b5	38.2	67.2
1838	IPI00331241.5	LRSDGSLMFQQVPMVEIDGMK	794.7252	3	22	b8	1.4	23.4
1839	IPI00331241.5	LRSDGSLMFQQVPMVEIDGMK	794.7276	3	25		0	25.0
1840	IPI00331241.5	LRSDGSLMFQQVPMVEIDGMK	1191.5881	2	35	y5	23.35	58.4
1841	IPI00331241.5	LRSDGSLMFQQVPMVEIDGMK	1191.5940	2	40	c b8	5.85	45.9
1842	IPI00331241.5	SDGSLMFQQVPMVEIDGMK	1056.9937	2	54	c b9	21.2	75.2

1843	IPI00331241.5	SDGSLMFQQVPMVEIDGMK	1056.9938	2	54	y7	15.6	69.6
1844	IPI00331241.5	SHGQDYLVGNR	623.3019	2	48	y6	22.4	70.4
1845	IPI00331241.5	VSNLPTVK	857.5307	1	17	P y4	27.2	44.2
1846	IPI00331241.5	VSNLPTVKK	493.3063	2	42	y7	38.2	80.2
1847	IPI00331241.5	VSNLPTVKK	493.3063	2	44		0	44.0
1848	IPI00331241.5	WLLAAAGVEFEEK	731.8830	2	57	y7	46.75	103.8
1849	IPI00331241.5	YFPAFEK	451.2263	2	17	P y5	57.05	74.1
1850	IPI00331241.5	YNLYGK	757.3915	1	20		0	20.0
1851	IPI00331241.5	YNLYGK	379.1975	2	32	y5	38.2	70.2
1852	IPI00380995.1	RVIISAPSADAPMFVMGVNHEK	790.4341	3	55	y8	21.2	76.2
1853	IPI00380995.1	VVDLMAYMASK	614.3101	2	72	y6	75.6	147.6
1854	IPI00272431.2	RVIISAPSADAPMFVMGVNHEK	790.7565	3	57	b6 P	15.6	72.6
1855	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.6027	4	17	b8	31.95	49.0
1856	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.8463	4	20	y5	18.5	38.5
1857	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.8463	4	25		0	25.0
1858	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.5972	4	26	y++11	61.35	87.4
1859	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	871.4569	3	28		0	28.0
1860	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	650.0987	4	28	b8	12.85	40.9
1861	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.8480	4	30	b8	49.6	79.6
1862	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.8460	4	31		0	31.0
1863	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	866.1250	3	33		0	33.0
1864	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.8479	4	34	b8	44.3	78.3
1865	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	866.1255	3	39	y9	42.15	81.2
1866	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	866.1525	3	42	y++16	43.3	85.3
1867	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	649.8463	4	43	b8	61.35	104.4
1868	IPI00272431.2	VIHDNFGIVEGLMAMVHAITATQK	866.1255	3	51	y7	22.4	73.4
1869	IPI00122344.1	AVAALDGAK	408.2349	2	27	y7	33.75	60.8
1870	IPI00122344.1	AVVLPISLATTFK	680.4334	2	49	P y9	78.1	127.1
1871	IPI00122344.1	AVVLPISLATTFKQDFPGQSSGFEYSR	982.8394	3	39	y++12	18.3	57.3
1872	IPI00122344.1	AVVLPISLATTFKQDFPGQSSGFEYSR	983.1737	3	40	y7	12.85	52.9
1873	IPI00122344.1	DASLSGFLPSFQHFATQAIHVGQEPEQWNSR	872.1713	4	15	b8 P	30.4	45.4
1874	IPI00122344.1	DASLSGFLPSFQHFATQAIHVGQEPEQWNSR	1162.9001	3	29		0	29.0
1875	IPI00122344.1	DASLSGFLPSFQHFATQAIHVGQEPEQWNSR	1162.8999	3	35	P y7	35.8	70.8
1876	IPI00122344.1	DRATLGINDTLIR	729.4220	2	29	c b9	19.15	48.2
1877	IPI00122344.1	DRATLGINDTLIR	486.6078	3	35	c b7	7.7	42.7
1878	IPI00122344.1	EFGLK	593.3298	1	16		0	16.0
1879	IPI00122344.1	FLETNPR	438.7324	2	43	y5	38.2	81.2
1880	IPI00122344.1	GALQHAK	362.7088	2	26	y5	38.2	64.2
1881	IPI00122344.1	LLEAAITPQTK	592.8483	2	54	P y4	62.3	116.3
1882	IPI00122344.1	LSVGLEDEQDLLEDLDR	979.9807	2	44	y6	27.2	71.2
1883	IPI00122344.1	LSVGLEDEQDLLEDLDR	980.4813	2	47	y5	25.35	72.4

1884	IPI00122344.1	LSVGLEDEQDLLEDLDR	980.4812	2	55	y5	15.6	70.6
1885	IPI00122344.1	LVWIETPTNPTLK	756.4278	2	25	P y7	33.75	58.8
1886	IPI00122344.1	QDFPGQSSGFEYSR	803.3535	2	67	y7	35.8	102.8
1887	IPI00122344.1	RVASEFGLK	503.7875	2	35	b5	25.35	60.4
1888	IPI00122344.1	VASEFGLK	425.7371	2	23	y6	49.6	72.6
1889	IPI00379778.1	MRLSLEQGGAEKMEK	840.4413	2	16	y7	22.4	38.4
1890	IPI00379778.1	RVIISAPSADAPMFVMGVNHEK	593.3088	4	26	b6 P	38.2	64.2
1891	IPI00131828.1	IFNNGADLSGITEENAPLK	668.6747	3	35	y8	20.1	55.1
1892	IPI00131828.1	IFNNGADLSGITEENAPLK	1002.5085	2	84	y8	58.1	142.1
1893	IPI00131828.1	KLDQDTV FALANYILFK	667.0343	3	26	y7	12.85	38.9
1894	IPI00131828.1	MQHLEQTLK	607.8136	2	47	y7	65.15	112.2
1895	IPI00131828.1	RLAQIHFP	379.8929	3	38	c b5	9.55	47.6
1896	IPI00403260.1	TPAGLQVLNDYLADK	809.4278	2	74	y8	31.95	106.0
1897	IPI00403260.1	TPAGLQVLNDYLADK	809.9318	2	76	y7	102.45	178.5
1898	IPI00403260.1	TPAGLQVLNDYLADK	809.4276	2	92	y8	58.1	150.1
1899	IPI00126940.1	AGHYAASVIIR	386.5522	3	42	c b5	1.05	43.1
1900	IPI00126940.1	AGHYAASVIIR	579.3255	2	66	y7	5.55	71.6
1901	IPI00126940.1	DFLDK	637.3183	1	24		0	24.0
1902	IPI00126940.1	FGEILK	706.4177	1	25	c b4	41	66.0
1903	IPI00126940.1	FGEILK	353.7105	2	40	y4	44.5	84.5
1904	IPI00126940.1	HLDLER	391.7119	2	28	y4	41	69.0
1905	IPI00126940.1	KAQALPK	378.2424	2	34	c b5	25.35	59.4
1906	IPI00126940.1	LKVEAPQALSENVLFGMGNPLLDISAVVDK	1056.9103	3	51	y6	41	92.0
1907	IPI00126940.1	VAQWLIQEPHK	450.5856	3	22		0	22.0
1908	IPI00126940.1	VAQWLIQEPHK	450.2513	3	23		0	23.0
1909	IPI00126940.1	VAQWLIQEPHK	674.8774	2	48	y6	49.6	97.6
1910	IPI00126940.1	VEAPQALSENVLFGMGNPLLDISAVVDK	976.5131	3	41		0	41.0
1911	IPI00126940.1	VEAPQALSENVLFGMGNPLLDISAVVDK	976.5134	3	43	b7	5.55	48.6
1912	IPI00126940.1	VEYHAGGSTQNSMK	503.5655	3	21	y5	25.35	46.4
1913	IPI00126940.1	VEYHAGGSTQNSMK	754.8436	2	38	y9	28.95	67.0
1914	IPI00126940.1	VFTLNLSAPFISQFFK	620.3410	3	34	y5	62.3	96.3
1915	IPI00126940.1	VFTLNLSAPFISQFFK	930.5124	2	39	y5	57.05	96.1
1916	IPI00126940.1	VFTLNLSAPFISQFFK	930.5127	2	67		0	67.0
1917	IPI00126940.1	YSLKPNDQILAEDK	817.4409	2	46		0	46.0
1918	IPI00112719.1	AGADIITYFAPQLLK	867.4953	2	58	y6	38.2	96.2
1919	IPI00112719.1	DAAQSSPAFGDRR	689.3281	2	29		0	29.0
1920	IPI00112719.1	DEQGSAAEDSPTSIEAVR	989.5209	2	51	y4	41	92.0
1921	IPI00112719.1	DEQGSAAEDSPTSIEAVR	988.9393	2	77	P y7	46.75	123.8
1922	IPI00112719.1	LAEVALAYAK	524.8057	2	43	y8	44.3	87.3
1923	IPI00112719.1	MHHQSVLHSGYFHPLLR	421.0167	5	21		0	21.0
1924	IPI00112719.1	RAGADIITYFAPQLLK	630.7111	3	33	P y5	38.2	71.2

1925	IPI00112719.1	VSVMSYSAK	486.2468	2	31	y6	57.05	88.1
1926	IPI00112719.1	YGVNQLEEMLRPLVEAGLR	729.7226	3	17		0	17.0
1927	IPI00112719.1	YGVNQLEEMLRPLVEAGLR	730.0580	3	46		0	46.0
1928	IPI00112719.1	YGVNQLEEMLRPLVEAGLR	730.0605	3	47	P y8	30.4	77.4
1929	IPI00406478.1	ATLELTHNWGTEDDETQSYHNGNSDPR	1030.1178	3	20		0	20.0
1930	IPI00406478.1	DFLLQQTMLR	632.8410	2	55	y7	23.75	78.8
1931	IPI00406478.1	FSLYFLAYEDKNDIPK	655.3542	3	25	y++12	78.1	103.1
1932	IPI00406478.1	GLAFIQDPDGYWIEILNPNK	1152.5891	2	65	y7	35.8	100.8
1933	IPI00406478.1	GLAFIQDPDGYWIEILNPNK	1152.5889	2	68		0	68.0
1934	IPI00406478.1	GLAFIQDPDGYWIEILNPNK	1152.5894	2	71		0	71.0
1935	IPI00406478.1	LDFPAMK	411.2149	2	29	y6	49.6	78.6
1936	IPI00406478.1	SLDFYTR	451.2248	2	20	y5	69.75	89.8
1937	IPI00406478.1	TAWTFSR	434.7194	2	16	y5	38.2	54.2
1938	IPI00396707.1	ELDQDTV FALANYILFK	667.3687	3	21		0	21.0
1939	IPI00396707.1	ELDQDTV FALANYILFK	1001.0250	2	46	y8	5.35	51.4
1940	IPI00396707.1	ELDQDTV FALANYILFK	1001.0297	2	47	y6	89	136.0
1941	IPI00396707.1	ELDQDTV FALANYILFK	1000.5517	2	68	y8	31.95	100.0
1942	IPI00396707.1	ELDQDTV FALANYILFK	1000.5480	2	89		0	89.0
1943	IPI00396707.1	LSKAVHK	391.7297	2	20	y5	44.5	64.5
1944	IPI00123924.1	ATVLQVATYSMPPIVR	881.4481	2	15		0	15.0
1945	IPI00137409.2	DAIVQAVK	422.2508	2	26		0	26.0
1946	IPI00137409.2	GHAAPILYAVWAEAGFLPEAELNLRK	738.4083	4	17		0	17.0
1947	IPI00137409.2	HQPTAIIAK	489.7904	2	20	P y7	49.6	69.6
1948	IPI00137409.2	IIALDGDTK	473.2668	2	29	y7	61.35	90.4
1949	IPI00137409.2	LDNLVAIFDINR	701.8881	2	54	y7	22.4	76.4
1950	IPI00137409.2	LGQSDPAPLQH QVDIYQK	680.0266	3	15	b5 P	15.6	30.6
1951	IPI00137409.2	NMAEQIIQEIYSQVQSK	671.3886	3	17	y7	65.15	82.2
1952	IPI00137409.2	NMAEQIIQEIYSQVQSK	670.6717	3	37	y7	49.6	86.6
1953	IPI00137409.2	NMAEQIIQEIYSQVQSK	670.3388	3	52	y7	52.95	105.0
1954	IPI00137409.2	NMAEQIIQEIYSQVQSK	1005.0048	2	54	y6	49.6	103.6
1955	IPI00137409.2	NMAEQIIQEIYSQVQSK	1005.5067	2	58	y6	52.95	111.0
1956	IPI00137409.2	NMAEQIIQEIYSQVQSK	1005.5064	2	68	y7	49.6	117.6
1957	IPI00137409.2	TSRPENAIYSNNEDFQVVGQAK	827.7671	3	29		0	29.0
1958	IPI00128434.1	AFEEEEQALR	546.7694	2	56	y6	13.65	69.7
1959	IPI00128434.1	EMGDHLVK	464.7320	2	16		0	16.0
1960	IPI00128434.1	EVVSHVIK	455.7715	2	18		0	18.0
1961	IPI00128434.1	FAVLQTYGDTTHTLVEK	641.6680	3	22	y++10	6.6	28.6
1962	IPI00128434.1	FAVLQTYGDTTHTLVEK	642.0049	3	29	y++14	56.75	85.8
1963	IPI00128434.1	FLHFHSVTFWVGNAK	597.3258	3	32	y6	23.75	55.8
1964	IPI00128434.1	FLPGFEAPTYK	635.3431	2	17	c b7 P	5.85	22.9
1965	IPI00128434.1	GTEFLAAPSSYYK	717.3629	2	29	P y6	52.95	82.0

1966	IPI00128434.1	HNHQGFGAGNFNSLFK	592.2850	3	49		0	49.0
1967	IPI00128434.1	HNHQGFGAGNFNSLFK	888.4270	2	58	c b4	7.7	65.7
1968	IPI00128434.1	IVREPWVEQDK	467.2534	3	18	y5	52.95	71.0
1969	IPI00128434.1	IVREPWVEQDK	466.9174	3	19	y5	25.35	44.4
1970	IPI00128434.1	IVREPWVEQDK	699.8783	2	40		0	40.0
1971	IPI00128434.1	MGFEPLAYR	542.2728	2	45	P y5	89	134.0
1972	IPI00128434.1	NLQFHR	407.7196	2	26		0	26.0
1973	IPI00128434.1	SIVVTNYEESIK	691.3659	2	73	y7	102.45	175.5
1974	IPI00128434.1	SQIQEYVDYNGGAGVQHIALK	764.3872	3	28		0	28.0
1975	IPI00128434.1	TEDIITAIR	516.2909	2	51	y7	77.6	128.6
1976	IPI00118384.1	AAFDDAIAELDTLSEESYKDSTLIMQLLR	1087.2085	3	59	y5	38.2	97.2
1977	IPI00118384.1	DNLTLWTSDMQGDGEEQNK	1091.4776	2	67	y8	21.2	88.2
1978	IPI00118384.1	EAAENSLVAYK	597.8040	2	43	y7	61.35	104.4
1979	IPI00118384.1	LAEQAERYDEMVESMKK	686.6658	3	18	y5	29.45	47.5
1980	IPI00118384.1	LAEQAERYDEMVESMKK	686.3377	3	42	y7	23.75	65.8
1981	IPI00118384.1	MDDREDLVYQAK	762.8537	2	41	y6	38.2	79.2
1982	IPI00118384.1	MKGDYHR	453.7167	2	35	y5	16.9	51.9
1983	IPI00118384.1	YLAEFATGNDRK	692.8483	2	38	y7	23.75	61.8
1984	IPI00111218.1	TFVQENVYDEFVER	888.4220	2	76	c b7	29.45	105.5
1985	IPI00111218.1	VAEQTPLTALYVANLIK	923.0312	2	58	y7	33.75	91.8
1986	IPI00111218.1	VAEQTPLTALYVANLIK	922.5341	2	64		0	64.0
1987	IPI00230034.3	FFPLEAWQIGK	668.8663	2	17	y7	65.15	82.2
1988	IPI00230034.3	FFPLEAWQIGK	668.3627	2	27	y5	57.05	84.1
1989	IPI00230034.3	FFPLEAWQIGK	668.3627	2	42	y7	23.75	65.8
1990	IPI00230034.3	FFPLEAWQIGK	668.3578	2	53	y5	38.2	91.2
1991	IPI00230034.3	FLTEELSLDQDRIVIR	974.5306	2	21	y7	41	62.0
1992	IPI00230034.3	FLTEELSLDQDRIVIR	650.0268	3	22		0	22.0
1993	IPI00230034.3	FLTEELSLDQDRIVIR	974.5310	2	23	y7	27.2	50.2
1994	IPI00230034.3	FLTEELSLDQDRIVIR	649.6948	3	48		0	48.0
1995	IPI00230034.3	IPAGLENR	435.2457	2	48	y5	16.9	64.9
1996	IPI00230034.3	IPAGLENR	435.2457	2	48	y6	25.35	73.4
1997	IPI00230034.3	KGTVMTFL	896.5345	1	25	b7	5.55	30.6
1998	IPI00230034.3	KGTVMTFL	448.7493	2	38	b6	15.6	53.6
1999	IPI00230034.3	VSVTIRPGMTLLMNK	554.3157	3	18		0	18.0
2000	IPI00230034.3	VSVTIRPGMTLLMNK	553.9810	3	18		0	18.0
2001	IPI00400050.1	QGWLMEVTDLSLDR	775.3700	2	47	y6	5.85	52.9
2002	IPI00227822.4	ALEVLVAK	842.5604	1	35	b6	7.1	42.1
2003	IPI00227822.4	ALEVLVAK	421.7709	2	40	y6	116	156.0
2004	IPI00227822.4	ALGLSNFNSR	539.7865	2	33	y6	27.2	60.2
2005	IPI00227822.4	AVPREELFVTSK	688.3874	2	30	c b8	46.75	76.8
2006	IPI00227822.4	AWRHPDEPVLLEEPVVLALAEK	628.5953	4	40	P y++9	75.6	115.6

2007	IPI00227822.4	HALSAGYR	437.7306	2	29	y6	23.75	52.8
2008	IPI00227822.4	HPEDVEPALRK	476.5847	3	18	P y5	16.9	34.9
2009	IPI00227822.4	ILQNIQVDFDFTFSPEEMK	1094.0525	2	20		0	20.0
2010	IPI00227822.4	ILQNIQVDFDFTFSPEEMK	1094.0471	2	60	y6	69.75	129.8
2011	IPI00227822.4	ILQNIQVDFDFTFSPEEMK	1094.0468	2	66	P y5	69.75	135.8
2012	IPI00227822.4	MPLIGLGTWK	558.3174	2	34	y6	57.05	91.1
2013	IPI00227822.4	SPAQILLR	449.2796	2	60		0	60.0
2014	IPI00227822.4	TASSVLLHTGQK	642.3523	2	56	y5	57.05	113.1
2015	IPI00227822.4	TLADLQLEYLDLYLMHWPYAFER	967.8204	3	24		0	24.0
2016	IPI00227822.4	TLADLQLEYLDLYLMHWPYAFER	967.8203	3	25	y++14	9.65	34.7
2017	IPI00121280.2	DFIAR	621.3355	1	22	y4	57.05	79.1
2018	IPI00121280.2	FKLGLDFPNLPYLIDGSHK	725.7274	3	41	y6	15.6	56.6
2019	IPI00121280.2	GLAHAIR	369.2247	2	30	y4	62.3	92.3
2020	IPI00121280.2	LGLDFPNLPYLIDGSHK	950.5054	2	38	c b5 P	7.7	45.7
2021	IPI00121280.2	SQWLNEK	452.7299	2	21	y5	75.6	96.6
2022	IPI00120457.1	ELGHPEIGDAIAR	689.3594	2	30	P y9	52.75	82.8
2023	IPI00120457.1	EVLEYNALGGK	596.8143	2	49	y7	77.6	126.6
2024	IPI00120457.1	GLTVVQAFQELVEPK	829.9644	2	35	y4	15.6	50.6
2025	IPI00120457.1	GLTVVQAFQELVEPK	829.4610	2	53	y4	15.6	68.6
2026	IPI00120457.1	PGIGLDAINDALLLEASIYR	1058.0777	2	102	c b9	11.55	113.6
2027	IPI00120457.1	QILEENYGQKDPEK	564.2815	3	21		0	21.0
2028	IPI00120457.1	QILEENYGQKDPEK	845.9458	2	34	y7	46.75	80.8
2029	IPI00120457.1	SIVKYK	369.2132	2	19	y4	7.1	26.1
2030	IPI00317902.1	DAYS GGAVNLYHVR	761.3892	2	67	y4	41	108.0
2031	IPI00317902.1	GMGLSMGTMI	515.2577	2	22		0	22.0
2032	IPI00317902.1	LLANMVYQYK	621.8362	2	72	y5	75.6	147.6
2033	IPI00135857.2	SMARKAVCMLKGDGPVQGT	689.0278	3	15		0	15.0
2034	IPI00230185.3	ANTIGISLIK	515.3191	2	44	y4	57.05	101.1
2035	IPI00230185.3	DLMQTPNFR	561.2746	2	31	P y4	41	72.0
2036	IPI00230185.3	DPAQGQLLK	485.2718	2	24	y5	57.05	81.1
2037	IPI00230185.3	ELHSILQHK	552.8120	2	36		0	36.0
2038	IPI00230185.3	GLVDKFPLFTAVYK	533.3045	3	26		0	26.0
2039	IPI00230185.3	ILQHK	320.1949	2	23		0	23.0
2040	IPI00230185.3	IVGSNAGR	387.2168	2	43	y6	25.35	68.4
2041	IPI00230185.3	KLTEIINTQHENVK	556.3080	3	28	y5	49.1	77.1
2042	IPI00230185.3	LGIPMSVLMGANIASEVAEEK	1080.5596	2	50	c b9	11	61.0
2043	IPI00230185.3	LGLMEMIAFAK	612.3301	2	80	y7	65.15	145.2
2044	IPI00230185.3	LISEVIGER	508.2926	2	42	y7	46.75	88.8
2045	IPI00230185.3	LPPNVVAIPDVVQAATGADILVFVVPHQFIGK	1109.2958	3	26	P y7	65.15	91.2
2046	IPI00230185.3	LTEIINTQHENVK	513.6112	3	18		0	18.0
2047	IPI00230185.3	LTEIINTQHENVK	769.9201	2	76	y8	58.1	134.1

2048	IPI00126636.2	FNGTVK	333.1844	2	24	y5	44.5	68.5
2049	IPI00126636.2	VEIVAINDPFIDLNYMVFYQDSTHGK	1108.8645	3	25	b6	16.9	41.9
2050	IPI00134746.2	APNSPDVLEIEFKK	793.9439	2	55	y++12	12.15	67.2
2051	IPI00134746.2	EFVEEFIWPAVQSSALYEDR	806.0560	3	15	b7	35.8	50.8
2052	IPI00134746.2	EQGYDVIAYLANIGQK	891.9565	2	40	y9	50.5	90.5
2053	IPI00134746.2	EQGYDVIAYLANIGQK	594.6511	3	43	y6	49.6	92.6
2054	IPI00134746.2	EQGYDVIAYLANIGQK	594.6405	3	47	y6	65.15	112.2
2055	IPI00134746.2	EQGYDVIAYLANIGQK	891.9573	2	64	y8	44.3	108.3
2056	IPI00134746.2	GQVYILGR	453.2643	2	26	y6	46.75	72.8
2057	IPI00134746.2	GQVYILGR	905.5650	1	27		0	27.0
2058	IPI00134746.2	GRNDLMEYAK	399.5294	3	31	y5	69.75	100.8
2059	IPI00134746.2	GRNDLMEYAK	598.7907	2	34	c b7	35.8	69.8
2060	IPI00134746.2	IDIVENR	429.7381	2	46	y4	27.2	73.2
2061	IPI00134746.2	KVFIEDVSK	355.5376	3	30	c b4	16.9	46.9
2062	IPI00134746.2	KVFIEDVSK	532.8033	2	31	y7	61.35	92.4
2063	IPI00134746.2	MPEFYNR	478.7188	2	34	P y6	57.05	91.1
2064	IPI00134746.2	NQAPPLYTK	544.7910	2	37	P y7	69.75	106.8
2065	IPI00134746.2	QGLGLK	308.1948	2	33		0	33.0
2066	IPI00134746.2	SPWSMDENLMHISYEAGILENPK	888.0831	3	25	y7	46.75	71.8
2067	IPI00134746.2	SPWSMDENLMHISYEAGILENPK	888.0837	3	34	y7	61.35	95.4
2068	IPI00134746.2	VFIEDVSK	468.7562	2	27	y6	95.65	122.7
2069	IPI00134746.2	VQVSVFK	403.7424	2	25	y5	75.6	100.6
2070	IPI00134746.2	VQVSVFK	806.4850	1	27	y4	57.05	84.1
2071	IPI00315429.2	ALMDEVVK	920.4771	1	28		0	28.0
2072	IPI00315429.2	SLELLEGKILPGVEALSNM	508.2801	4	17		0	17.0
2073	IPI00128857.1	AIVVTDGER	480.2620	2	28	y6	25.35	53.4
2074	IPI00128857.1	GHIASVLNAWPEDEVVK	867.9586	2	54	P y6	82.65	136.7
2075	IPI00128857.1	GHIASVLNAWPEDEVVK	867.9612	2	58	P y6	125.8	183.8
2076	IPI00128857.1	LFYSVLMSDVEK	715.8757	2	76	y7	95.65	171.7
2077	IPI00128857.1	LSDQTVLFQGAGEAALGIAHLVVMAMEK	967.5046	3	26	b6	13.65	39.7
2078	IPI00128857.1	LSDQTVLFQGAGEAALGIAHLVVMAMEK	967.5090	3	45		0	45.0
2079	IPI00341613.2	PAKXDDIKK	531.2924	2	20		0	20.0
2080	IPI00341613.2	RVISAPSANAPMFVMGVNHXX	593.3089	4	20	b6 P	25.35	45.4
2081	IPI00228820.3	KKPEYLEGLPEK	477.6012	3	19	y5	29.45	48.5
2082	IPI00228820.3	KKPEYLEGLPEK	715.9035	2	22		0	22.0
2083	IPI00228820.3	KPIFAKMAFWNPK	789.4438	2	15	y7	49.6	64.6
2084	IPI00228820.3	KPIFAKMAFWNPK	789.4328	2	21		0	21.0
2085	IPI00228633.3	EFGIDPQNMFEFWDVVGGR	1166.0231	2	62	y6	13.65	75.7
2086	IPI00228633.3	EVMQMLVELAK	645.8439	2	58	y4	57.05	115.1
2087	IPI00228633.3	GKLPEEARK	343.2015	3	33	c b5	7.7	40.7
2088	IPI00228633.3	HFVALSTNTAK	594.8225	2	39	y9	40.2	79.2

2089	IPI00228633.3	ILLANFLAQTEALMK	559.6538	3	27		0	27.0
2090	IPI00228633.3	ILLANFLAQTEALMK	838.4768	2	64	y8	30.4	94.4
2091	IPI00228633.3	LTPFILGALIAMYEHK	606.3397	3	19	y++13	11	30.0
2092	IPI00228633.3	TLASLSPETSLFIIASK	889.5005	2	60		0	60.0
2093	IPI00228633.3	VFEGNRPTNSIVFTK	570.6410	3	17		0	17.0
2094	IPI00126194.1	AINY LISGYQR	649.3544	2	55	y4	57.05	112.1
2095	IPI00126194.1	APFALQVNTLPLNFDK	894.9888	2	49	P y6	69.75	118.8
2096	IPI00126194.1	GGGNTPGNTWLTAFVLK	867.0169	2	52		0	52.0
2097	IPI00126194.1	GGGNTPGNTWLTAFVLK	866.9573	2	57		0	57.0
2098	IPI00126194.1	LLTDQAVDK	501.7765	2	50	y7	82.65	132.7
2099	IPI00126194.1	LNETQQLTEAIKSK	802.4504	2	16	c b8	1.95	18.0
2100	IPI00126194.1	QQNSDGGLLLTQDVTVALQALSK	802.0691	3	19	y8	73.4	92.4
2101	IPI00126194.1	SVIVEPEGIEK	600.3302	2	29	P y6	61.35	90.4
2102	IPI00126194.1	TFHVNSGNR	516.2553	2	18	y6	25.35	43.4
2103	IPI00126194.1	TVQGAFFGVPVYK	707.3837	2	40	P y4	75.6	115.6
2104	IPI00126194.1	VNTNYRPLPFSGQVLLVDEK	783.0879	3	20		0	20.0
2105	IPI00126194.1	VNTNYRPLPFSGQVLLVDEK	783.0882	3	23		0	23.0
2106	IPI00221528.1	VAPDEHPILLTEAPLNPK	652.0258	3	22	P y5	97.85	119.9
2107	IPI00221528.1	VAPDEHPILLTEAPLNPK	652.0353	3	32	P y5	89	121.0
2108	IPI00221528.1	VDELTA LVV	537.2954	2	21		0	21.0
2109	IPI00118676.3	ATQALVLAPTR	570.8407	2	42	y4	16.9	58.9
2110	IPI00118676.3	GIYAYGFEK	524.2608	2	20	y7	46.75	66.8
2111	IPI00118676.3	GYDVIAQAQSGTGK	697.8578	2	91	y9	66.55	157.6
2112	IPI00118676.3	LNSNTQVVLLSATMPSDVLEVTKK	863.4742	3	40		0	40.0
2113	IPI00118676.3	MFVLDEADEMLSR	778.3611	2	47	y6	65.15	112.2
2114	IPI00118676.3	PSAIQQR	400.2250	2	35	y5	15.6	50.6
2115	IPI00118676.3	TLRDIETFYNTSIEEMPLNVADLI	933.8080	3	29		0	29.0
2116	IPI00118676.3	TLRDIETFYNTSIEEMPLNVADLI	933.4709	3	43	c b8	12.15	55.2
2117	IPI00110684.1	AAPFTLEYR	534.2796	2	16		0	16.0
2118	IPI00110684.1	DFAVDI IK	460.7585	2	25	y6	69.75	94.8
2119	IPI00110684.1	DVFH MVVEVPR	443.2327	3	46	y4	29.45	75.5
2120	IPI00110684.1	SGFSSEER	940.4219	1	40		0	40.0
2121	IPI00110684.1	STHDYWK	468.7139	2	28	y5	41	69.0
2122	IPI00110684.1	VLGILAMIDEGETDWK	895.4588	2	96	y8	61.35	157.4
2123	IPI00221797.1	ISGIGSGF	737.4214	1	17		0	17.0
2124	IPI00131803.1	FKVETFR	463.7583	2	28	y4	29.45	57.5
2125	IPI00131803.1	FREWHHFLVVNMK	436.4794	4	18	y4	62.3	80.3
2126	IPI00131803.1	FREWHHFLVVNMK	581.9743	3	18	c b5	25.35	43.4
2127	IPI00131803.1	FREWHHFLVVNMK	436.7300	4	20	y4	62.3	82.3
2128	IPI00131803.1	FREWHHFLVVNMK	581.6365	3	23	c b5	25.35	48.4
2129	IPI00131803.1	FREWHHFLVVNMK	871.9503	2	48	c b5	14.55	62.6

2130	IPI00131803.1	GNDISSGTVLSDYVVGSGPPSGTGLHR	844.4102	3	37		0	37.0
2131	IPI00131803.1	GNDISSGTVLSDYVVGSGPPSGTGLHR	844.4100	3	45	y10	26.5	71.5
2132	IPI00131803.1	LYEQLSGK	469.2533	2	45	y6	49.6	94.6
2133	IPI00131803.1	LYEQLSGK	937.5422	1	46		0	46.0
2134	IPI00131803.1	LYTLVLTPNAPSR	780.9468	2	42		0	42.0
2135	IPI00131803.1	LYTLVLTPNAPSRKDPK	677.0475	3	19		0	19.0
2136	IPI00131803.1	VDYAGVTVDELGK	683.3489	2	54	y7	49.6	103.6
2137	IPI00131803.1	VDYAGVTVDELGK	683.3489	2	61	y7	82.65	143.7
2138	IPI00131803.1	VLTPQVMNRPSSISWDGLDPGK	833.7634	3	15	c b9	13.65	28.7
2139	IPI00131803.1	VLTPQVMNRPSSISWDGLDPGK	833.7631	3	16	y9	41	57.0
2140	IPI00131803.1	VLTPQVMNRPSSISWDGLDPGK	833.7601	3	19		0	19.0
2141	IPI00131803.1	VLTPQVMNRPSSISWDGLDPGK	833.7632	3	21		0	21.0
2142	IPI00114818.1	AGEMTEVLPNQR	672.8382	2	54	P y4	41	95.0
2143	IPI00114818.1	FDNTYSFIHAK	448.2194	3	19		0	19.0
2144	IPI00114818.1	FDNTYSFIHAK	671.8276	2	58	y6	35.8	93.8
2145	IPI00114818.1	FRENVQDVLPTLPNDDYFLLR	888.1272	3	18		0	18.0
2146	IPI00114818.1	IISWQPPEVIQQYLSGGR	691.3716	3	34	y5	13.65	47.7
2147	IPI00114818.1	IISWQPPEVIQQYLSGGR	1036.5540	2	40	c b5 P	62.3	102.3
2148	IPI00114818.1	IISWQPPEVIQQYLSGGR	1036.5546	2	46		0	46.0
2149	IPI00114818.1	IISWQPPEVIQQYLSGGR	1036.5542	2	53	y8	0.35	53.4
2150	IPI00114818.1	IMVLGANWK	516.2893	2	36	y7	46.75	82.8
2151	IPI00114818.1	INYGGDIPK	488.7590	2	37	y7	95.65	132.7
2152	IPI00114818.1	LFPVAYNLIK	589.3554	2	22	P y8	44.3	66.3
2153	IPI00114818.1	PFLSEDTR	482.7401	2	21	y6	14.55	35.6
2154	IPI00114818.1	QQYEHTVQVSR	687.8424	2	24	y4	7.1	31.1
2155	IPI00114818.1	VGDLSPKQEEALAK	495.6037	3	20		0	20.0
2156	IPI00311818.1	ANQVIR	742.4265	1	23		0	23.0
2157	IPI00311818.1	IIGIDINK	443.2736	2	48	y6	75.6	123.6
2158	IPI00311818.1	IKVDEFVTGNLSFDQINQAFDLMHSGDSIR	850.1683	4	46		0	46.0
2159	IPI00311818.1	LATAVCHTDAYTLGADPEGCFPVILGHEGAGIVESVGEGV	1096.9914	4	19	y8	30.4	49.4
2160	IPI00311818.1	LATAVCHTDAYTLGADPEGCFPVILGHEGAGIVESVGEGV	1097.0215	4	21	y9	28.95	50.0
2161	IPI00311818.1	LVSEYMSK	478.7421	2	16	y6	111.85	127.9
2162	IPI00311818.1	SALEAAHK	413.7246	2	42	y5	41	83.0
2163	IPI00311818.1	VDEFVTGNLSFDQINQAFDLMHSGDSIR	1053.1635	3	43		0	43.0
2164	IPI00311818.1	VDEFVTGNLSFDQINQAFDLMHSGDSIR	1052.8278	3	52	y++16	8.95	61.0
2165	IPI00311818.1	VDEFVTGNLSFDQINQAFDLMHSGDSIR	1052.8325	3	56	b4	49.1	105.1
2166	IPI00169670.1	VLWTPQVLTNGVQFFR	953.5249	2	57	c b4 P	16.9	73.9
2167	IPI00169670.1	VLWTPQVLTNGVQFFR	954.0160	2	70		0	70.0
2168	IPI00169670.1	VLWTPQVLTNGVQFFR	953.5247	2	73	y8	12.15	85.2
2169	IPI00169670.1	VSPDGEEGYPGELK	738.8545	2	39	P y5	57.05	96.1
2170	IPI00408525.1	AGEYSVTYDGFNTFTIPK	1005.9834	2	43	c b6	16.9	59.9

2171	IPI00408525.1	AGEYSVTYDGFNTFTIPK	1005.9834	2	48		0	48.0
2172	IPI00408525.1	DGETFQLMGLYGREPDLSSDIK	824.7314	3	36	y++15	16.75	52.8
2173	IPI00408525.1	DGETFQLMGLYGREPDLSSDIK	824.7313	3	39	y++16	31.7	70.7
2174	IPI00408525.1	ENIIDLNSNANR	629.8231	2	59	y5	25.35	84.4
2175	IPI00408525.1	LFLEQIHVLENSLVLK	632.7057	3	22		0	22.0
2176	IPI00408525.1	TDYDNFLMAHLINEK	912.9369	2	43	y6	89	132.0
2177	IPI00230682.4	AVTEQGHLSNEER	799.8802	2	75	y6	38.2	113.2
2178	IPI00230682.4	EMQPTHPIR	554.7819	2	27	y4	44.5	71.5
2179	IPI00230682.4	TAFDEAIAELDTLNEESYK	1080.5090	2	57	c b9	1.95	59.0
2180	IPI00222430.3	AKWDSWNK	345.5064	3	23	y++7	16.9	39.9
2181	IPI00222430.3	AKWDSWNK	517.7566	2	25	y6	65.15	90.2
2182	IPI00222430.3	QATVGDVNTDRPGLLDLK	638.3433	3	19		0	19.0
2183	IPI00222430.3	QATVGDVNTDRPGLLDLK	638.0125	3	24		0	24.0
2184	IPI00222430.3	QATVGDVNTDRPGLLDLK	638.0081	3	33		0	33.0
2185	IPI00222430.3	QATVGDVNTDRPGLLDLK	957.0133	2	37	y++14	4.7	41.7
2186	IPI00222430.3	TQPTDEEMLFYSHFK	993.9675	2	37		0	37.0
2187	IPI00222430.3	TQPTDEEMLFYSHFK	993.9678	2	55	y7	46.75	101.8
2188	IPI00222430.3	TQPTDEEMLFYSHFK	993.4746	2	78	y5	38.2	116.2
2189	IPI00222430.3	WDSWNK	418.1900	2	15	y5	36.1	51.1
2190	IPI00321203.1	AADFPQELFSWE	720.3276	2	37	c b8	46.75	83.8
2191	IPI00321203.1	DVLVSGYHYFNALK	813.4527	2	55	y7	31.95	87.0
2192	IPI00321203.1	EQVPWK	393.7108	2	15	y4	44.5	59.5
2193	IPI00321203.1	GDPTWVQSTIANER	787.4177	2	41	y4	15.6	56.6
2194	IPI00321203.1	HYFNALKQGKEQVPWK	658.3399	3	19	c b5	1.4	20.4
2195	IPI00321203.1	LMASLLPIQLFPK	735.9657	2	22	P y7	77.6	99.6
2196	IPI00321203.1	LMASLLPIQLFPK	736.4421	2	30	P y7	33.75	63.8
2197	IPI00321203.1	NHFTVAQAEAFDK	493.2413	3	40	y6	49.6	89.6
2198	IPI00321203.1	NHFTVAQAEAFDK	739.3643	2	52	y8	69.75	121.8
2199	IPI00321203.1	NISFQIMK	490.7659	2	23	y6	65.15	88.2
2200	IPI00321203.1	SFFSSK	351.6766	2	25	y4	25.35	50.4
2201	IPI00321203.1	SFFSSK	702.3536	1	32	y4	57.05	89.1
2202	IPI00321203.1	TPWIEFENNYR	734.8457	2	41	y7	22.4	63.4
2203	IPI00321203.1	VIYLIR	388.7552	2	29	y4	57.05	86.1
2204	IPI00121209.1	ARPAEDLR	347.5331	3	37		0	37.0
2205	IPI00121209.1	DFANVYVDAVK	621.3238	2	42	y6	89	131.0
2206	IPI00121209.1	DFANVYVDAVK	620.8142	2	46	y6	89	135.0
2207	IPI00121209.1	DFWDNLEK	533.7457	2	16	y6	46.75	62.8
2208	IPI00121209.1	DSGRDYVSQFESSSLGQQLNLLNLENWDTLGSTVSQLQER	1130.2695	4	30	y4	16.9	46.9
2209	IPI00121209.1	DSGRDYVSQFESSSLGQQLNLLNLENWDTLGSTVSQLQER	1129.5271	4	63	y7	1.75	64.8
2210	IPI00121209.1	HSLMPMLETLK	650.3530	2	24	P y7	46.75	70.8
2211	IPI00121209.1	KWKEDVELYR	455.9100	3	22	y4	15.6	37.6

2212	IPI00121209.1	LSPVAEEFRDR	659.8419	2	18		0	18.0
2213	IPI00121209.1	THVDSLRL	414.2220	2	28	y4	41	69.0
2214	IPI00121209.1	VAPLGAELQESAR	670.8620	2	63	y5	15.6	78.6
2215	IPI00126172.1	AKVIK	558.3606	1	22		0	22.0
2216	IPI00126172.1	IAEVGGVPYLLPLVNK	841.9979	2	32		0	32.0
2217	IPI00126172.1	IAEVGGVPYLLPLVNK	841.9980	2	48	c b7 P	13.65	61.7
2218	IPI00126172.1	LPGAFILGAGAGPFQTLGFNSEFMPIVQTASEHNQPVNGSY	1188.8413	4	18	b7	27.2	45.2
2219	IPI00126172.1	LPGAFILGAGAGPFQTLGFNSEFMPIVQTASEHNQPVNGSY	1187.8476	4	33	b7	20.55	53.6
2220	IPI00126172.1	LPGAFILGAGAGPFQTLGFNSEFMPIVQTASEHNQPVNGSY	1188.3295	4	40	y++13	2.65	42.7
2221	IPI00126172.1	LPGAFILGAGAGPFQTLGFNSEFMPIVQTASEHNQPVNGSY	1188.0950	4	50	y++13	2.15	52.2
2222	IPI00126172.1	LPGAFILGAGAGPFQTLGFNSEFMPIVQTASEHNQPVNGSY	1188.5918	4	57	y7	13.65	70.7
2223	IPI00126172.1	QTLEEHYGDKPVGMGGTFIVQK	812.4079	3	27		0	27.0
2224	IPI00126172.1	VIEVQAK	393.7397	2	27	y4	57.05	84.1
2225	IPI00126172.1	VYDLNEIAK	532.7846	2	28	y7	102.45	130.5
2226	IPI00331556.3	SNLAYDIVQLPTGLTGIK	952.5300	2	61	P y8	69.75	130.8
2227	IPI00331556.3	SNLAYDIVQLPTGLTGIK	952.5303	2	62		0	62.0
2228	IPI00331556.3	TRFQESEERPK	469.5725	3	37	c b5	52.95	90.0
2229	IPI00331556.3	TSTVDLPIESQLLWQLDREMLGLYTENEGK	1160.5936	3	23	y6	7.1	30.1
2230	IPI00331556.3	TSTVDLPIESQLLWQLDREMLGLYTENEGK	1160.5932	3	28	b6 P	0.7	28.7
2231	IPI00331556.3	TSTVDLPIESQLLWQLDREMLGLYTENEGK	1160.5937	3	54		0	54.0
2232	IPI00118059.1	ADRDATLWASHEK	514.5833	3	36	y5	44.5	80.5
2233	IPI00118059.1	AGMIFYR	429.2209	2	38	y4	83.9	121.9
2234	IPI00118059.1	ALSDALTELGYSK	640.8461	2	92	y6	38.2	130.2
2235	IPI00118059.1	GLLEEDFQK	539.7745	2	24	y5	27.2	51.2
2236	IPI00118059.1	IQSAVATLREEVENFASNFSPLGPDF	984.8328	3	16	y7	52.95	69.0
2237	IPI00118059.1	IQSAVATLREEVENFASNFSPLGPDF	984.8329	3	24	P y6	69.75	93.8
2238	IPI00118059.1	IQSAVATLREEVENFASNFSPLGPDF	984.8328	3	33		0	33.0
2239	IPI00118059.1	ISATSIFFESMPYK	810.9145	2	48		0	48.0
2240	IPI00118059.1	MLSQPLK	408.7362	2	22	y5	25.35	47.4
2241	IPI00118059.1	QAMTTEFK	478.2318	2	28		0	28.0
2242	IPI00118059.1	SALRPSGLR	478.7856	2	19	P y5	49.6	68.6
2243	IPI00118059.1	VAHFIHR	440.2513	2	48		0	48.0
2244	IPI00118059.1	VYPETGYINYDQLEENASLFHPK	910.1038	3	21		0	21.0
2245	IPI00118059.1	VYPETGYINYDQLEENASLFHPK	910.1037	3	33		0	33.0
2246	IPI00270906.2	EGMNIVEAMER	639.7936	2	40	y6	25.35	65.4
2247	IPI00270906.2	FEDENFILK	577.7903	2	55	y7	82.65	137.7
2248	IPI00270906.2	SIYGEKFEDENFILK	916.4602	2	47	y5	57.05	104.1
2249	IPI00270906.2	TAENFR	369.1826	2	19	y4	41	60.0
2250	IPI00270906.2	TEWLDGK	848.4330	1	27	y5	82.65	109.7
2251	IPI00270906.2	VNPTVFFDITADDEPLGR	1025.0018	2	42	P y4	41	83.0
2252	IPI00270906.2	VNPTVFFDITADDEPLGR	1004.0012	2	69	y7	23.75	92.8

2253	IPI00270906.2	VSFELFADK	528.2742	2	46	y4	89	135.0
2254	IPI00270906.2	VSFELFADKVPK	460.5904	3	34		0	34.0
2255	IPI00128378.1	AGNLKPGDTIIEPTSGNTGIGLALAAAVK	917.5098	3	40	y11	25.45	65.5
2256	IPI00128378.1	AGNLKPGDTIIEPTSGNTGIGLALAAAVK	917.5096	3	42	y9	31.95	74.0
2257	IPI00128378.1	AGNLKPGDTIIEPTSGNTGIGLALAAAVK	917.5100	3	43	y11	25.45	68.5
2258	IPI00128378.1	GFDQAPVVNESGAILGMVTLGNMLSSLLAGK	1030.8719	3	33	b8	6.6	39.6
2259	IPI00128378.1	GFDQAPVVNESGAILGMVTLGNMLSSLLAGK	1030.8715	3	33	b5 P	25.35	58.4
2260	IPI00128378.1	GFDQAPVVNESGAILGMVTLGNMLSSLLAGK	1030.8715	3	37	b5 P	7.7	44.7
2261	IPI00128378.1	IIGVDPEGSILAEPEELNQTEQTAYEVEGIGYDFIPTVLDR	1131.2922	4	25	P y6	57.05	82.1
2262	IPI00224740.3	DRSSFFVNGLTGGQK	575.9696	3	18	y6	46.75	64.8
2263	IPI00224740.3	DRSSFFVNGLTGGQK	576.3137	3	34	y6	13.65	47.7
2264	IPI00224740.3	DRSSFFVNGLTGGQK	576.3034	3	38	y6	46.75	84.8
2265	IPI00224740.3	DRSSFFVNGLTGGQK	863.4480	2	71	y9	12.15	83.2
2266	IPI00224740.3	DSPSVWAAVPGK	607.3163	2	34	c b9 P	12.15	46.2
2267	IPI00224740.3	EGVHGGLINKK	576.3301	2	30		0	30.0
2268	IPI00224740.3	SSFFVNGLTGGQK	728.3861	2	33	y6	25.35	58.4
2269	IPI00224740.3	SSFFVNGLTGGQK	728.3862	2	40		0	40.0
2270	IPI00224740.3	TFVSITPAEVLVVGK	808.9673	2	34	c b6 P	13.65	47.7
2271	IPI00224740.3	TFVSITPAEVLVVGK	808.9673	2	41	P y10	61.2	102.2
2272	IPI00224740.3	TFVSITPAEVLVVGK	808.9673	2	44	P y10	93.7	137.7
2273	IPI00408407.1	ALPFWNEEIVPQIK	842.4608	2	28	y5	49.1	77.1
2274	IPI00408407.1	ALPFWNEEIVPQIK	842.9605	2	48	P y4	75.6	123.6
2275	IPI00408407.1	AMEAVAAQ GK	488.2502	2	65	y5	75.6	140.6
2276	IPI00408407.1	FSGWYDADLSPAGHEEAK	660.6370	3	29		0	29.0
2277	IPI00408407.1	HGESAWNLENR	656.8047	2	72	y6	52.95	125.0
2278	IPI00408407.1	HYGGLTGLNK	530.2834	2	39	y8	69.75	108.8
2279	IPI00408407.1	NLKPIKPMQFLGDEETVRK	748.7688	3	21	y8	16.9	37.9
2280	IPI00408407.1	NLKPIKPMQFLGDEETVRK	748.7432	3	27		0	27.0
2281	IPI00408407.1	RGGQALR	379.2252	2	24	b5	13.65	37.7
2282	IPI00408407.1	RVLIAAHGNSLR	436.2615	3	56	y5	38.2	94.2
2283	IPI00408407.1	TLWTVLDAIDQMWPVVR	1079.0839	2	17	y5	35.8	52.8
2284	IPI00408407.1	TLWTVLDAIDQMWPVVR	1079.0841	2	33	y5	35.8	68.8
2285	IPI00132655.1	EGLLTLGAK	515.3012	2	52	y6	46.75	98.8
2286	IPI00132655.1	GKTELTPAYF	563.8150	2	17	y5	6.6	23.6
2287	IPI00132655.1	MTDSFTEQADQVTADV GK	972.4400	2	69	y6	52.95	122.0
2288	IPI00132655.1	QSMWTSTISSHLATK	839.4409	2	63	y7	49.6	112.6
2289	IPI00132655.1	RPNSGSLIQVTTD GKTELTPAYF	865.7883	3	22	P y4	29.45	51.5
2290	IPI00315452.4	EAQIFDYNEIPNFPQSTVQGHAGR	907.1028	3	47	P y++11	5.55	52.6
2291	IPI00315452.4	EAQIFDYNEIPNFPQSTVQGHAGR	907.1028	3	61	y++15	58.85	119.9
2292	IPI00315452.4	LVFGLNGR	495.3021	2	22	y4	29.45	51.5
2293	IPI00315452.4	LVFGLNGR	494.8011	2	55	y7	49.6	104.6

2294	IPI00315452.4	VFGFSLITNK	563.3188	2	60	y8	73.4	133.4
2295	IPI00111876.2	AGVDQHEGTIQ	598.7994	2	47	y8	73.4	120.4
2296	IPI00111876.2	FSSETWQNLGTLQR	833.9145	2	74	y5	18.5	92.5
2297	IPI00111876.2	GLLDFLQGLA	1046.5906	1	39	b9	11	50.0
2298	IPI00111876.2	GLLDFLQGLA	523.8045	2	61	c b5	15.6	76.6
2299	IPI00111876.2	INAVDYASVK	540.7915	2	28	y8	44.3	72.3
2300	IPI00111876.2	TPALIVYGDQDPMGSSSFQHLK	798.0622	3	43	b5	7.1	50.1
2301	IPI00226993.3	EAFQEALAAAGDK	660.8297	2	82	y5	57.05	139.1
2302	IPI00226993.3	EAFQEALAAAGDK	660.8296	2	85	y6	52.95	138.0
2303	IPI00136134.1	AELQEVQITEEKPLLPQQTPEAK	898.1439	3	38	P y9	44.3	82.3
2304	IPI00136134.1	AELQEVQITEEKPLLPQQTPEAK	898.1404	3	40		0	40.0
2305	IPI00136134.1	FGDMQEIIQNFVR	798.8942	2	60	y5	7.1	67.1
2306	IPI00136134.1	GIIQHAPNLENIELYWNSYNNRR	704.6083	4	43	y++13	16.75	59.8
2307	IPI00136134.1	GIIQHAPNLENIELYWNSYNNRR	704.3710	4	50	y++12	11	61.0
2308	IPI00136134.1	LDPTQTSFLK	575.3114	2	37	P y8	58.1	95.1
2309	IPI00136134.1	MADSGGQPQLTQPGK	757.8793	2	57	P y8	31.95	89.0
2310	IPI00136134.1	PLLPQQTPEAK	626.3547	2	31	P y9	66.55	97.6
2311	IPI00136134.1	YALNHPDVEGLVLINIDPNAK	803.0953	3	27	P y4	41	68.0
2312	IPI00136134.1	YRGIIQHAPNLENIELYWNSYNNRR	784.4012	4	18		0	18.0
2313	IPI00128518.1	EAMQEALK	460.7418	2	25		0	25.0
2314	IPI00128518.1	ELLEVVNK	472.2771	2	39		0	39.0
2315	IPI00128518.1	FVIGGPQGDAGVTGR	715.9006	2	64	P y10	27.7	91.7
2316	IPI00128518.1	FVIGGPQGDAGVTGRK	520.2831	3	22	y++12	22.4	44.4
2317	IPI00128518.1	HIGYDDSAK	503.2358	2	37	y7	49.6	86.6
2318	IPI00128518.1	IADLRR	372.2298	2	27		0	27.0
2319	IPI00128518.1	IIVDTYGGWGAHGGGAFSGK	650.6629	3	32	y++17	75.5	107.5
2320	IPI00128518.1	KPIYQK	388.7369	2	31	P y5	27.2	58.2
2321	IPI00128518.1	SEFPWEVPK	559.7843	2	34	P y6	89	123.0
2322	IPI00128518.1	SGVLPWLRPDSK	677.8767	2	29	y5	25.35	54.4
2323	IPI00128518.1	TERELLEVVNK	665.3774	2	29	c b7	5.85	34.9
2324	IPI00128518.1	TQVTVQYMQDNGAVIPVR	1010.5232	2	54	y5	13.65	67.7
2325	IPI00128518.1	YLDEDTVYHLQPSSGR	598.2890	3	30	y++11	55.3	85.3
2326	IPI00128518.1	YLDEDTVYHLQPSSGR	598.6233	3	34	P y4	16.9	50.9
2327	IPI00111315.1	SAGTSLVNFFSSLMNLEEK	1038.0097	2	69	y5	69.9	138.9
2328	IPI00111315.1	SAGTSLVNFFSSLMNLEEKAPAAA	828.1037	3	23	y7	52.95	76.0
2329	IPI00111315.1	THEQLTPLVR	597.3364	2	38	y8	21.2	59.2
2330	IPI00331442.1	GVYSTQVGFAGGHTR	512.9235	3	15	y++12	12.15	27.2
2331	IPI00331442.1	GVYSTQVGFAGGHTR	768.9090	2	71	y8	30.4	101.4
2332	IPI00331442.1	QGNDFGTQYR	593.2682	2	48	y5	29.45	77.5
2333	IPI00331442.1	SAVYPTSAVQMEAALR	847.4347	2	70	y8	11.55	81.6
2334	IPI00331442.1	TGHAEVVR	434.7355	2	39	y4	27.2	66.2

2335	IPI00331442.1	VFWENHDPTQGM	539.9155	3	23	y++10	35.8	58.8
2336	IPI00269510.2	HLEINPDHPIVETLR	594.9878	3	28	P y7	65.15	93.2
2337	IPI00269510.2	NTGIGMTKTDLINLNR	445.4976	4	17		0	17.0
2338	IPI00331127.1	AEDGIVLDFPVYPTFPQDFHEVEDLIK	1045.5149	3	33	b7	7.1	40.1
2339	IPI00331127.1	AEDGIVLDFPVYPTFPQDFHEVEDLIK	1045.5178	3	36	b8	31.95	68.0
2340	IPI00331127.1	GLILTVK	372.2550	2	24	y5	69.75	93.8
2341	IPI00331127.1	MKLPIFIADAFTATAFR	638.3704	3	37	y5	15.6	52.6
2342	IPI00331127.1	RAEDGIVLDFPVYPTFPQDFHEVEDLIK	1097.5589	3	41	b9	30.4	71.4
2343	IPI00331127.1	TLEEDAHQQIAR	470.9041	3	22		0	22.0
2344	IPI00331127.1	TLEEDAHQQIAR	705.8526	2	85	y6	52.95	138.0
2345	IPI00331127.1	VNTEPLPAIEK	605.8371	2	29	c b4 P	16.9	45.9
2346	IPI00124223.1	APLDIPVPDPVK	630.8723	2	47	P y7	77.6	124.6
2347	IPI00124223.1	EPALNEANLSNLK	706.8833	2	48	y4	44.5	92.5
2348	IPI00124223.1	IEDGNNFGV	482.7284	2	27	y7	23.75	50.8
2349	IPI00124223.1	IEDGNNFGVAVQEK	760.3860	2	54	y5	83.9	137.9
2350	IPI00124223.1	IVVLLQR	420.7869	2	26	y5	27.2	53.2
2351	IPI00124223.1	LEGFHTQISK	580.3093	2	29	y8	31.95	61.0
2352	IPI00124223.1	LMVMEIR	446.2432	2	25	y5	52.95	78.0
2353	IPI00352629.1	PYTLMSMVANLLYEK	887.4567	2	75	y7	22.4	97.4
2354	IPI00352629.1	PYTLMSMVANLLYEK	886.9523	2	88	y4	83.9	171.9
2355	IPI00116279.1	AFADALEVIPMALSENSGMNPIQTMTEVR	1046.5118	3	35	b9 P	19.15	54.2
2356	IPI00116279.1	SQDDEIGDGTGVVVLGALLEEAEQLLDR	1038.8571	3	43	y6	1.25	44.3
2357	IPI00116279.1	VLVDINNPEPLIQTAK	883.0035	2	56	P y7	35.8	91.8
2358	IPI00116279.1	VLVDINNPEPLIQTAK	882.4999	2	76	P y9	52.75	128.8
2359	IPI00132076.1	AVYQGPSSPVK	595.3141	2	35	y8	55.3	90.3
2360	IPI00132076.1	AVYQGPSSPVKS	638.8302	2	52	y9	42.15	94.2
2361	IPI00132076.1	EWAMNVGDAK	560.7582	2	37	y6	95.65	132.7
2362	IPI00132076.1	GQIMDAVIR	501.7744	2	44	y7	33.75	77.8
2363	IPI00132076.1	GTVLLADNVIVPGTPDFLAYVR	1166.1401	2	45	P y8	5.55	50.6
2364	IPI00132076.1	GTVLLADNVIVPGTPDFLAYVR	1166.1400	2	46	P y8	12.15	58.2
2365	IPI00132076.1	LLTMEINPDYAAITQQMLDFAGLQDK	980.8240	3	38	y6	25.35	63.4
2366	IPI00319992.1	IINEPTAAAIAAYGLDK	830.4500	2	70	y5	29.45	99.5
2367	IPI00319992.1	PTVTIK	658.4499	1	29	b5	44.5	73.5
2368	IPI00319992.1	RALSSQHQR	385.2113	3	50	y4	15.6	65.6
2369	IPI00123176.1	TVQAENGLVING	672.3267	2	20		0	20.0
2370	IPI00123176.1	VIPELNGK	869.5290	1	24	P y6	102.45	126.5
2371	IPI00129164.1	DMLYQVLAEEPSVR	861.4332	2	40	P y4	49.1	89.1
2372	IPI00129164.1	DMLYQVLAEEPSVR	574.6261	3	41	P y4	29.45	70.5
2373	IPI00129164.1	DMLYQVLAEEPSVR	574.2907	3	41	P y4	57.05	98.1
2374	IPI00129164.1	DMLYQVLAEEPSVR	860.9339	2	44	P y4	29.45	73.5
2375	IPI00129164.1	LLSPGSVMLVSAR	665.3826	2	72	c b10	23.75	95.8

2376	IPI00129164.1	VLSYAPGPLDNDMQQLAR	994.9981	2	39	y8	21.2	60.2
2377	IPI00129164.1	VLSYAPGPLDNDMQQLAR	994.9981	2	51	c b5 P	41	92.0
2378	IPI00336324.4	AIADHIR	398.2273	2	34	y5	44.5	78.5
2379	IPI00336324.4	DLDAVAVLVGSMR	686.3671	2	23	y5	16.9	39.9
2380	IPI00336324.4	DLDAVAVLVGSMR	686.3691	2	64	y5	29.45	93.5
2381	IPI00336324.4	ETAFFLSSA	1101.5141	1	25		0	25.0
2382	IPI00336324.4	ETAFFLSSA	1101.5093	1	26		0	26.0
2383	IPI00336324.4	EVGVYEALK	1007.5436	1	30		0	30.0
2384	IPI00336324.4	EVGVYEALK	504.2739	2	48	y5	69.75	117.8
2385	IPI00336324.4	EVGVYEALKDDSWLK	876.4460	2	54	y4	62.3	116.3
2386	IPI00336324.4	FVEGLPINDFSR	697.3683	2	33	P y7	61.35	94.4
2387	IPI00336324.4	FVEGLPINDFSR	697.3683	2	49	P y7	77.6	126.6
2388	IPI00336324.4	GEFITTVQQR	589.8125	2	55	y6	25.35	80.4
2389	IPI00336324.4	LGVTTADDVK	917.5253	1	36	b7	12.85	48.9
2390	IPI00336324.4	LSSAMSAK	865.4571	1	26		0	26.0
2391	IPI00336324.4	NVWGNHSSSTQYDPVNHAK	760.7265	3	18		0	18.0
2392	IPI00336324.4	NVWGNHSSSTQYDPVNHAK	761.0562	3	23		0	23.0
2393	IPI00336324.4	SQGTALEK	417.2217	2	18	y6	41	59.0
2394	IPI00336324.4	SQIALK	330.2081	2	34	c b5	14.55	48.6
2395	IPI00307837.3	EVSTYIK	420.2290	2	23	y5	44.5	67.5
2396	IPI00307837.3	EVSTYIKK	484.2766	2	29		0	29.0
2397	IPI00307837.3	IGGIGTVPVGR	513.3093	2	60	P y4	44.5	104.5
2398	IPI00307837.3	IGYNPDTVAFVPIGWNGDNMLEPSANMPWFK	1190.2358	3	31	b8	5.55	36.6
2399	IPI00307837.3	IGYNPDTVAFVPIGWNGDNMLEPSANMPWFK	1190.2362	3	37	y++16	2.85	39.9
2400	IPI00307837.3	KLEDGPK	393.7218	2	19	y6	29.45	48.5
2401	IPI00307837.3	LLAYTLGVK	489.2748	2	27	c b5	1.4	28.4
2402	IPI00307837.3	STTTGHLIYK	560.8038	2	46	y6	52.95	99.0
2403	IPI00307837.3	VAVGVK	685.4605	1	24		0	24.0
2404	IPI00307837.3	YYVTIIDAPGHR	702.8708	2	57	y7	46.75	103.8
2405	IPI00126184.4	FSSSTFEQVNLVK	807.4123	2	68	y7	5.85	73.9
2406	IPI00126184.4	FSSSTFEQVNLVK	807.4120	2	87	y8	21.2	108.2
2407	IPI00131204.1	AMSQDGASQFQEVILQELELSVKK	893.7965	3	23	b5	29.45	52.5
2408	IPI00131204.1	GGTLTQYEGK	527.2649	2	49	y6	52.95	102.0
2409	IPI00131204.1	IFNTNNLWISLGAVK	845.9714	2	101	y6	49.6	150.6
2410	IPI00131204.1	ILTTAASHEFEHTKK	571.6374	3	16		0	16.0
2411	IPI00131204.1	IQRPPEDSIQPYEK	567.2934	3	43		0	43.0
2412	IPI00131204.1	IYTFNQSR	514.7616	2	34	y5	36.1	70.1
2413	IPI00131204.1	NENTFLDLTVQQIEHLNK	719.7084	3	16		0	16.0
2414	IPI00128556.1	AAEAGADLVMLDNFKPEELHPTAATLK	951.8214	3	58	P y7	33.75	91.8
2415	IPI00128556.1	DNHVVAAGSMER	429.2033	3	29	y5	7.1	36.1
2416	IPI00128556.1	GPAHLLLLGER	400.5600	3	31	y4	15.6	46.6

2417	IPI00128556.1	GPAHLLLLGER	600.3368	2	46	y7	90.2	136.2
2418	IPI00128556.1	LFAEGDTPVPHAR	470.5777	3	27	P y4	41	68.0
2419	IPI00128556.1	LFAEGDTPVPHAR	705.3729	2	48	P y4	29.45	77.5
2420	IPI00128556.1	QAAGFSLK	411.2293	2	30		0	30.0
2421	IPI00128556.1	VALNTLAR	429.2643	2	63	y5	38.2	101.2
2422	IPI00378416.1	DISSAVQANPALTELSLR	943.5071	2	55	P y9	28.95	84.0
2423	IPI00378416.1	DISSAVQANPALTELSLR	943.5071	2	56	P y9	61.2	117.2
2424	IPI00378416.1	DISSAVQANPALTELSLR	943.0060	2	78	P y9	28.95	107.0
2425	IPI00224784.1	RVAEDEDVVDTKK	583.9308	3	102	c b6	33.75	135.8
2426	IPI00131406.1	ALLEVVQSGGK	550.8196	2	67	y8	46.75	113.8
2427	IPI00131406.1	LTVEDPVTVEYITR	817.9353	2	74	y5	25.35	99.4
2428	IPI00407543.1	EILVGDVGTVDVDDPYTTFVK	1099.0588	2	93	P y7	65.15	158.2
2429	IPI00407543.1	ESKKEDLVFIFWAPENAPLK	788.0876	3	26	P y7	77.6	103.6
2430	IPI00407543.1	MIYASSK	400.2047	2	19	y5	52.95	72.0
2431	IPI00407543.1	YALYDATYETK	669.3250	2	47	y8	73.4	120.4
2432	IPI00137331.4	GAVPYVQAFDSL LANPVAEYLK	1183.6311	2	84	c b9	5.15	89.2
2433	IPI00137331.4	HAEMVHTGLK	561.7904	2	45	y8	73.4	118.4
2434	IPI00137331.4	SSEMNVLIPTEGGDFNEFPVPEQFK	938.4444	3	20	b8 P	12.15	32.2
2435	IPI00314225.2	QEAFLNPAIGPEGLSGSSR	1015.5273	2	74	y10	26.5	100.5
2436	IPI00314225.2	VIPTALLSLLL	654.9353	2	63		0	63.0
2437	IPI00133066.1	ITMKRM	398.2128	2	28		0	28.0
2438	IPI00133066.1	LQEVIELLSLEK	757.9459	2	68	y5	29.45	97.5
2439	IPI00133066.1	LQEVIELLSLEK	758.4438	2	70	y4	41	111.0
2440	IPI00133066.1	SRVVEHNIR	370.5442	3	27	c b5	25.35	52.4
2441	gij547749	ELTTEIDNNIEQISSYK	998.9934	2	63	y7	44.3	107.3
2442	gij547749	SLLEGE GSSGGGGR	631.8023	2	66	y10	28.95	95.0
2443	IPI00125658.3	EGVFPGLIPILNSYLENMEVDVDTR	941.1451	3	29	b8 P	5.35	34.4
2444	IPI00125658.3	EGVFPGLIPILNSYLENMEVDVDTR	941.1450	3	29	b8 P	12.15	41.2
2445	IPI00125658.3	EGVFPGLIPILNSYLENMEVDVDTR	941.1453	3	37	b8 P	5.35	42.4
2446	IPI00125658.3	GLLSQGSPLSWEETQR	894.9502	2	42	y5	25.35	67.4
2447	IPI00125658.3	LDFLIPLSK	523.3183	2	40	y5	69.75	109.8
2448	IPI00125658.3	LTIDK	589.3558	1	19	b4	29.45	48.5
2449	IPI00125658.3	VQLLLNGGDVLETLQEK	935.0202	2	72	y5	49.1	121.1
2450	IPI00125658.3	VVINVPFIK	514.8289	2	25	y6	38.2	63.2
2451	IPI00125515.1	ESVQVPDDQDFR	717.8338	2	18	P y7	46.75	64.8
2452	IPI00125515.1	NRDVITLR	493.7906	2	44	y6	14.55	58.6
2453	IPI00125515.1	PAASTEPQGSRPALGR	532.2811	3	27	y++13	40.2	67.2
2454	IPI00125515.1	SSQFLAPK	439.2427	2	38	c b6	1.25	39.3
2455	IPI00125515.1	SWLPMGADYIIMNYSVK	663.6603	3	44	y7	49.6	93.6
2456	IPI00125515.1	SWLPMGADYIIMNYSVK	994.4877	2	49	y6	46.75	95.8
2457	IPI00125515.1	SWLPMGADYIIMNYSVK	994.9858	2	56	y6	49.6	105.6

2458	IPI00340989.2	ENIQVFELPSEDMK	977.9597	2	46	P y6	41	87.0
2459	IPI00340989.2	ENIQVFELPSEDMK	978.4589	2	52	P y6	52.95	105.0
2460	IPI00340989.2	HIDTAYVYQTENHVGQAIR	739.3943	3	51	y5	25.35	76.4
2461	IPI00340989.2	HIDTAYVYQTENHVGQAIR	739.3683	3	55	y++16	32.85	87.9
2462	IPI00340989.2	ILNKPGLK	441.7925	2	30	P y4	83.9	113.9
2463	IPI00340989.2	SIGVSNFNSR	540.7753	2	37	y6	52.95	90.0
2464	IPI00118892.4	FSLVGIAGQDLNEG NR	845.4306	2	69	y5	27.2	96.2
2465	IPI00118892.4	VNDDIIVNWVNTTLK	872.9683	2	58	y5	52.95	111.0
2466	IPI00118892.4	YAFVNWINK	578.3127	2	19	y7	65.15	84.2
2467	IPI00118892.4	YAFVNWINK	577.8107	2	39	c b4	27.95	67.0
2468	IPI00310240.1	DAYERDLESDIIGDTS GHFQK	799.7063	3	22		0	22.0
2469	IPI00310240.1	DAYERDLESDIIGDTS GHFQK	799.7060	3	35	y9	52.75	87.8
2470	IPI00310240.1	ESILELITSR	580.8300	2	45	y4	6.6	51.6
2471	IPI00310240.1	GSVHDFPEFDANQDAEALYTAMK	852.7157	3	35	y7	46.75	81.8
2472	IPI00310240.1	GSVHDFPEFDANQDAEALYTAMK	853.0505	3	43		0	43.0
2473	IPI00310240.1	TLIEILATR	515.3236	2	26	y7	46.75	72.8
2474	IPI00310240.1	WGTDEAQFIYILGNR	891.9465	2	55	y6	5.85	60.9
2475	IPI00222515.1	EQSILELGSLLAK	700.9069	2	46	y6	41	87.0
2476	IPI00222515.1	IMLNTPEDVQALVSGK	857.9546	2	83	c b5 P	41	124.0
2477	IPI00222515.1	ISSLIKLSK	494.7881	2	26	y5	25.35	51.4
2478	IPI00342230.2	KVVXKASKGPLK	621.3283	2	16	y7	5.55	21.6
2479	IPI00342230.2	KVVXKASKGPLK	621.3284	2	28	y7	5.55	33.6
2480	IPI00342230.2	LISWYDNEYGYSNR	890.4021	2	61	y5	23.75	84.8
2481	IPI00129528.1	ENPSANYTTMMK	693.8069	2	44	y7	73.4	117.4
2482	IPI00129528.1	RVPFMELIIPGITNGVEMLNNMPSPR	976.5128	3	24	y5	49.6	73.6
2483	IPI00129528.1	RVPFMELIIPGITNGVEMLNNMPSPR	976.5125	3	32	y5	18.5	50.5
2484	IPI00129528.1	RVPFMELIIPGITNGVEMLNNMPSPR	976.1781	3	37	y5	25.35	62.4
2485	IPI00129528.1	SGTTWVSEILDLYNNGDAEK	1163.5722	2	64	y8	66.55	130.6
2486	IPI00115850.1	AELGIPLEEVDLNEMDYLTR	1161.0765	2	40	y7	15.6	55.6
2487	IPI00115850.1	AFSVFLFNTENK	708.8627	2	70	y6	49.6	119.6
2488	IPI00115850.1	NVTLNPD PNEIK	677.3560	2	54	P y7	61.35	115.4
2489	IPI00331644.3	AVENSSTAIGIR	609.3281	2	74	c b9	5.15	79.2
2490	IPI00331644.3	GRHEIVPK	312.5191	3	33	c b5	23.35	56.4
2491	IPI00331644.3	IYIVHDEVK	410.2359	3	23		0	23.0
2492	IPI00331644.3	RLFNVDR	460.2590	2	28	c b6	23.75	51.8
2493	IPI00331644.3	SLADIAREEASNFR	526.9348	3	32	y++9	35.8	67.8
2494	IPI00331644.3	SLADIAREEASNFR	790.3971	2	33	y5	27.2	60.2
2495	IPI00331644.3	SLADIAREEASNFR	789.8973	2	46	y7	23.75	69.8
2496	IPI00118344.1	GMDQRIGNK	510.2722	2	28		0	28.0
2497	IPI00118344.1	IFDANTKPNLNLQVLSNPEFLAEGTAIK	1020.2124	3	52		0	52.0
2498	IPI00118344.1	ILTTNTWSSSELSK	740.4159	2	42	y++11	12.85	54.9

2499	IPI00118344.1	VLIGGETPEGQK	671.8475	2	42	P y5	38.2	80.2
2500	IPI00118344.1	VTVVDVNEAR	551.2984	2	59	y6	25.35	84.4
2501	IPI00277112.2	LNATNIELATVQPGQNFHMFTK	825.4901	3	49		0	49.0
2502	IPI00277112.2	LNATNIELATVQPGQNFHMFTK	825.7548	3	55	y++13	27.7	82.7
2503	IPI00277112.2	MFLTR	709.3692	1	19		0	19.0
2504	IPI00277112.2	SSLILK	387.2603	2	50	y4	57.05	107.1
2505	IPI00330685.4	APHLTHLR	315.5192	3	18	y4	9.55	27.6
2506	IPI00330685.4	APHLTHLR	472.7750	2	25		0	25.0
2507	IPI00330685.4	EIVPVLVSSR	549.8293	2	24	P y7	33.75	57.8
2508	IPI00330685.4	HGSNLEAMGK	522.2504	2	49	y8	31.95	81.0
2509	IPI00330685.4	ILVTLHTLER	436.6064	3	25		0	25.0
2510	IPI00330685.4	ILVTLHTLER	654.4218	2	44	y6	5.85	49.9
2511	IPI00330685.4	IVSWSQAGVEPSVMGVGPIPAIK	1162.1324	2	47	P y4	41	88.0
2512	IPI00330685.4	KWQVSR	402.2301	2	29	y5	38.2	67.2
2513	IPI00330685.4	LKPYFLTDGTGTVTTANATGMNDGAAAVVLMK	1077.2174	3	53	y9	31.95	85.0
2514	IPI00330685.4	TAIGSFNGALSTVPVHEMGTTVIK	811.0977	3	18	y7	5.85	23.9
2515	IPI00330685.4	VAVLSQNR	443.7593	2	42	y4	15.6	57.6
2516	IPI00127560.1	GSPAVDVAVK	471.7668	2	20	y5	69.75	89.8
2517	IPI00127560.1	TAESGELHGLTTDEK	794.3904	2	76	y7	22.4	98.4
2518	IPI00127560.1	TLGISPFHEFADVFTANDSGHR	840.0776	3	30	y6	27.2	57.2
2519	IPI00127560.1	TLGISPFHEFADVFTANDSGHR	840.0775	3	37	y8	20.1	57.1
2520	IPI00408961.1	DLGTQLAPIQEFFHSEQYR	798.4030	3	21	b6	7.1	28.1
2521	IPI00408961.1	IMFVGGPNTRK	407.2256	3	18	y7	0.2	18.2
2522	IPI00408961.1	IMFVGGPNTRK	610.3350	2	25	y9	21.2	46.2
2523	IPI00408961.1	LMHQEQLK	513.7743	2	15	y5	25.35	40.4
2524	IPI00408961.1	LMHQEQLK	342.8516	3	16		0	16.0
2525	IPI00127942.1	HEYQANGPEDLNR	514.9028	3	45		0	45.0
2526	IPI00127942.1	HEYQANGPEDLNR	771.8532	2	66	c b7 P	1.4	67.4
2527	IPI00127942.1	HFGMLPEK	529.2787	2	26	y8	44.3	70.3
2528	IPI00127942.1	YALYDASFETK	654.3172	2	55	y7	49.6	104.6
2529	IPI00318577.1	ALGKDDFTK	497.7646	2	32	y7	61.35	93.4
2530	IPI00318577.1	FVAVTSTNAAK	554.8038	2	33	y9	66.55	99.6
2531	IPI00318577.1	GSSLIEAFETWR	698.3509	2	55		0	55.0
2532	IPI00318577.1	IPNGVNGVEDR	585.2993	2	65	y6	25.35	90.4
2533	IPI00318577.1	MDENRFVAVTSTNAAK	585.6235	3	17	y7	38.2	55.2
2534	IPI00318577.1	RAGNVVYGEPIAAGLTDGR	658.3472	3	46	y5	14.55	60.6
2535	IPI00379621.1	HTGPGILSMANAGPNTNGSQLFICTAK	920.7748	3	20		0	20.0
2536	IPI00379621.1	TEWLDGK	424.7115	2	28	y5	111.85	139.9
2537	IPI00126048.1	ETIEDVEEMLNNLPGVTSVHSR	824.0722	3	74	P y9	20.1	94.1
2538	IPI00126048.1	QMTDPNVALTFLEK	803.9092	2	44	y7	22.4	66.4
2539	IPI00126048.1	VLDLQQIK	478.7925	2	37	y6	65.15	102.2

2540	IPI00126048.1	VNPLSLVEIILHVVR	567.6857	3	20		0	20.0
2541	IPI00353180.2	DNFGIGELMTTVHAIATQK	735.4306	3	27	y8	42.15	69.2
2542	IPI00353180.2	DNFGIGELMTTVHAIATQK	735.4284	3	41		0	41.0
2543	IPI00320217.3	FWQDLMNIAGTTLSSK	906.4545	2	59	y7	49.6	108.6
2544	IPI00320217.3	ILIAN TGMDTDK	646.3368	2	59	y8	61.35	120.4
2545	IPI00408378.1	TAFDEAIAELDTLNEDSYK	1073.4983	2	74	y6	69.75	143.8
2546	IPI00408378.1	TAFDEAIAELDTLNEDSYKDSTLIMQLLR	1106.2123	3	20	y++16	31.7	51.7
2547	IPI00114628.1	DYLTTYYSFHSGPVAEQEIVK	816.7326	3	44	y6	35.8	79.8
2548	IPI00114628.1	DYLTTYYSFHSGPVAEQEIVK	816.3975	3	44	y6	13.65	57.7
2549	IPI00114628.1	EIIVTDYTPQNLQELQK	1017.0364	2	45	y++14	10.05	55.1
2550	IPI00114628.1	EIIVTDYTPQNLQELQK	1017.0364	2	46	c b8 P	5.55	51.6
2551	IPI00114628.1	FQHVMVGP	553.7765	2	27	y7	108.75	135.8
2552	IPI00114628.1	FSGVYLEK	471.7505	2	32	y6	52.95	85.0
2553	IPI00114628.1	KFSGVYLEK	535.7985	2	36	y7	33.75	69.8
2554	IPI00114628.1	LAGLLKPGGHLVTLVTLR	465.2968	4	20		0	20.0
2555	IPI00345821.2	ALALXNNSTMGYMM	529.6198	3	18		0	18.0
2556	IPI00345821.2	ELISNASDALDK	638.3239	2	52	y8	31.95	84.0
2557	IPI00345821.2	VKAMLWTMNNQAEIAQLMSLIINTFYXNKEIFLR	684.1871	6	17		0	17.0
2558	IPI00343810.2	GAELEDSVLDVVRK	765.4221	2	16	y8	5.15	21.2
2559	IPI00343810.2	GAELEDSVLDVVRK	765.4220	2	17	y8	2.15	19.2
2560	IPI00271562.2	ALQTTYGTNAPR	646.8335	2	59	y6	38.2	97.2
2561	IPI00271562.2	FYAYNPLAGGLLTGK	793.4254	2	44	P y10	48.5	92.5
2562	IPI00271562.2	RMDASASAASVR	611.3045	2	58	y9	28.95	87.0
2563	IPI00271562.2	SIRSQLETSK	631.7805	2	18	c b6	1.4	19.4
2564	IPI00271562.2	VDLFYLHAPDHSTPVEETLR	585.5525	4	19		0	19.0
2565	sp P15636	VGEFKLRXLTKV	693.8915	2	18	c b5	1.05	19.1
2566	sp P15636	VGEFKLRXLTKV	693.8915	2	20	c b6	1.25	21.3
2567	sp P15636	VGEFKLRXLTKV	693.8915	2	20	y4	29.45	49.5
2568	IPI00134131.2	HSVNNNTYSQFQDEYSLEEVMK	850.3822	3	38	y7	33.75	71.8
2569	IPI00134131.2	HSVNNNTYSQFQDEYSLEEVMK	850.3823	3	47	y7	33.75	80.8
2570	IPI00134131.2	KLEEEGEQFVK	668.3417	2	52	y6	52.95	105.0
2571	IPI00134131.2	LQNLQLQPGK	569.8334	2	45	c b7 P	49.6	94.6
2572	IPI00134131.2	MNPQSAFFQGK	627.8058	2	17	y7	35.8	52.8
2573	IPI00134131.2	RQVPGAK	378.2301	2	29	c b6	25.35	54.4
2574	IPI00134131.2	WVINPSGGLISK	635.8617	2	25	y10	61.2	86.2
2575	IPI00134131.2	YGLSAHPITPQMFGYAGK	646.6601	3	22	c b9 P	4.95	27.0
2576	IPI00134131.2	YGLSAHPITPQMFGYAGK	646.9955	3	37	c b9 P	19.15	56.2
2577	IPI00118678.1	NLIINADELGR	614.8182	2	24	y7	23.75	47.8
2578	IPI00118678.1	SLLVIPNTLAVNAAQDSTDLVAK	1177.6537	2	46	c b4	11.15	57.2
2579	IPI00118678.1	SLLVIPNTLAVNAAQDSTDLVAK	1177.6535	2	68		0	68.0
2580	IPI00322312.1	AEEYEFLTPMEEAPK	892.4091	2	47	P y7	82.65	129.7

2581	IPI00322312.1	SIQEIQELDKDDESLRK	682.6929	3	26	y++8	27.2	53.2
2582	IPI00322312.1	VAVSADPNVNVIVTR	825.9616	2	68	P y7	22.4	90.4
2583	IPI00230043.1	GVVQDLQQAISK	643.3717	2	55	y8	44.3	99.3
2584	IPI00230043.1	ITSLEVENQNLR	708.3881	2	66	y6	23.75	89.8
2585	IPI00133206.1	AMEVDERPTEQYSDIGGLDK	752.0169	3	23		0	23.0
2586	IPI00133206.1	LAGPQLVQMFIGDGAK	822.9426	2	40	y5	38.2	78.2
2587	IPI00133206.1	MATVWDEAEQDGIGEEVLK	1061.0003	2	46	y++17	14.9	60.9
2588	IPI00133206.1	MSTEEIVQ	468.7615	2	29	b6	38.2	67.2
2589	IPI00133206.1	QTYFLPVIGLVDAEK	846.9654	2	37	y7	22.4	59.4
2590	IPI00133206.1	QTYFLPVIGLVDAEK	846.9653	2	50		0	50.0
2591	IPI00124372.1	ERKDEIATVETINNGK	606.3178	3	45	y7	23.75	68.8
2592	IPI00124372.1	EVNLAVENAK	543.7933	2	44	y6	14.55	58.6
2593	IPI00124372.1	GGARVEPVDASGTEK	491.5832	3	30	y7	35.8	65.8
2594	IPI00124372.1	GVKPITLLEGGK	404.5836	3	39		0	39.0
2595	IPI00124372.1	IMEMSAK	405.1985	2	22	y5	52.95	75.0
2596	IPI00124372.1	ISFTGSVPTGVK	596.8332	2	34		0	34.0
2597	IPI00124372.1	LGDPLLEDTR	564.7990	2	78	P y7	22.4	100.4
2598	IPI00124372.1	MGPLINAPHLER	449.9116	3	31	c b5	8.5	39.5
2599	IPI00124372.1	STGTFVVSQPLNYR	806.4143	2	26	y++11	11.55	37.6
2600	IPI00344912.1	FTEQADLSGITEAK	755.8916	2	16	y5	25.35	41.4
2601	IPI00344912.1	KLSVSQVVHK	375.5648	3	35	y4	16.9	51.9
2602	IPI00344912.1	KLSVSQVVHK	562.8426	2	47	y8	30.4	77.4
2603	IPI00344912.1	MQQVEASLQPETLRK	586.6455	3	25	P y6	5.85	30.9
2604	IPI00344912.1	NIVFSPLSISAALVSLGAK	691.4100	3	18	y5	52.95	71.0
2605	IPI00344912.1	NIVFSPLSISAALVSLGAK	691.4099	3	21	y5	89	110.0
2606	IPI00344912.1	TLFSSQIEELNLPK	809.9367	2	39	y7	23.75	62.8
2607	IPI00131845.1	AINQGGLTSVAVR	643.3665	2	82	y9	11	93.0
2608	IPI00131845.1	LLDSSTVTHLFK	454.2538	3	17		0	17.0
2609	IPI00131845.1	QTESTSFLEK	585.2872	2	28	y5	75.6	103.6
2610	IPI00228253.1	AGHFDK	337.6665	2	39	c b5	49.1	88.1
2611	IPI00228253.1	MNAGSDPVVIVSAAR	764.8932	2	49		0	49.0
2612	IPI00129096.1	ELDSNPFASLVFYWEPLNR	1149.5692	2	41	y5	7.7	48.7
2613	IPI00129096.1	ELDSNPFASLVFYWEPLNR	1149.5697	2	41		0	41.0
2614	IPI00129096.1	KNEELGQLYQDQEVKPEYWGYYILYPQVMEFWQGQTNR	1191.5784	4	22	y5	6.2	28.2
2615	IPI00129096.1	SSQIGAVVSR	502.2803	2	63	y6	89	152.0
2616	IPI00315299.3	NLNQALLDLHALGSAR	569.3166	3	33	b4	18.5	51.5
2617	IPI00315299.3	TQEAMEAALAMEK	711.8437	2	81	y4	75.6	156.6
2618	IPI00270326.1	ESDTGLAPPALWDLAADK	935.4655	2	22	c b7 P	6.2	28.2
2619	IPI00270326.1	ESDTGLAPPALWDLAADK	935.4653	2	35	c b7 P	46.75	81.8
2620	IPI00270326.1	TMLELINQLDGFDP	881.4478	2	41	y5	9.55	50.6
2621	IPI00130530.1	GDVVNQEDLYQALASGQIAAAGLDVTTPEPLPPSHPLTLK	1060.7972	4	50		0	50.0

2622	IPI00130530.1	RLPEAIEEVK	592.3380	2	32	b7	58.1	90.1
2623	IPI00130530.1	VFTGGLPAEGR	621.8459	2	37	P y7	13.65	50.7
2624	IPI00323592.1	VAVLGASGGIGQPLSLLK	897.5527	2	44	y9	38.5	82.5
2625	IPI00323592.1	VAVLGASGGIGQPLSLLK	897.5526	2	64	y9	18.3	82.3
2626	IPI00129512.3	IATVTEK	381.2239	2	30	y6	25.35	55.4
2627	IPI00129512.3	QPVLSQTEAR	564.8046	2	37	y6	35.8	72.8
2628	IPI00129512.3	QVLGQMVIDEELLGDGHSYSR	815.4021	3	37	y9	28.95	66.0
2629	IPI00129512.3	VNDSTMLGASGDYADFQYLK	1098.5028	2	67	y7	35.8	102.8
2630	IPI00121514.2	AMADPEVQQIMSDPAMR	945.9347	2	54	P y4	44.5	98.5
2631	IPI00121514.2	DPQALSEHLK	569.2990	2	33	y7	33.75	66.8
2632	IPI00121514.2	FMNPFNLPNLYQK	813.4119	2	40	P y6	52.95	93.0
2633	IPI00121514.2	HEANNLQLK	533.7855	2	44	y7	33.75	77.8
2634	IPI00121514.2	LAYINPDALALEEK	744.9231	2	34	P y8	85.6	119.6
2635	IPI00117914.1	GPAALRK	356.7270	2	28	y4	7.1	35.1
2636	IPI00117914.1	TGLLSGLDIMEVNPTLGK	929.5026	2	29	y6	35.8	64.8
2637	IPI00117914.1	TGLLSGLDIMEVNPTLGK	930.0085	2	56	y9	52.75	108.8
2638	IPI00117914.1	VMEETFSYLLGR	722.9466	2	55	y4	27.2	82.2
2639	IPI00269031.1	IEQIEAGTPGR	585.8101	2	62	y5	25.35	87.4
2640	IPI00269031.1	VLVLDVFTPTPLGTR	814.4757	2	54	P y7	22.4	76.4
2641	IPI00279218.1	TPVLLMLGQEDR	686.3924	2	78	y5	38.2	116.2
2642	IPI00116643.2	EVVQGIDADR	562.2975	2	39	y4	29.45	68.5
2643	IPI00116643.2	MIGLEDLIDDNYSK	813.3891	2	73	y7	49.6	122.6
2644	IPI00331146.3	IVPVEITISLLK	662.9268	2	37		0	37.0
2645	IPI00331146.3	IVPVEITISLLK	662.9249	2	40	y4	41	81.0
2646	IPI00331146.3	NPDSQYGELIEK	696.8443	2	63	y6	52.95	116.0
2647	IPI00331146.3	REMDQTMAANAQ	684.3400	2	17		0	17.0
2648	IPI00331146.3	RIQTYLESTKPIIDLYEEMGK	843.4431	3	22	b6	20.55	42.6
2649	IPI00331146.3	RIQTYLESTKPIIDLYEEMGK	843.1074	3	37	b6	6.6	43.6
2650	IPI00123223.1	AVDQSVLLKPESELSPSWIYNLPGMQQNK	1129.2562	3	44	P y7	46.75	90.8
2651	IPI00123223.1	DGSYSAFGDQNGEREGNTWLTAFVLK	955.1192	3	41	y7	22.4	63.4
2652	IPI00123223.1	FRVVSMKD	491.2629	2	16	c b7	12.15	28.2
2653	IPI00123223.1	LAGNQNK	374.1978	2	17		0	17.0
2654	IPI00123223.1	MLRPLNELLPLAYIEDPKK	564.3239	4	20	b7	6.2	26.2
2655	IPI00123223.1	NLFDELVLDK	603.3254	2	44	y8	90.2	134.2
2656	IPI00123223.1	SSGSLFNAMK	578.2766	2	47	y6	22.4	69.4
2657	IPI00119239.1	LAAIQESGVER	586.8181	2	75	y6	23.75	98.8
2658	IPI00119239.1	QVLLGDQIPK	555.8297	2	45		0	45.0
2659	IPI00230427.3	ASVPEGFLSELTQQLAQATGK	1088.5703	2	51	c b7	1.6	52.6
2660	IPI00230427.3	ASVPEGFLSELTQQLAQATGK	1088.5702	2	54	y6	46.75	100.8
2661	IPI00228819.3	DGNLMFDQVPMVEIDGMK	1020.4691	2	28	y6	49.6	77.6
2662	IPI00314191.3	EYGGLDVLVNNAGIAFK	890.9730	2	43	y8	20.1	63.1

2663	IPI00314191.3	GVHAEEGWPNSAYGVTK	601.2900	3	18	c b8 P	44.3	62.3
2664	IPI00314191.3	LQAEGLSPR	485.7689	2	35	y7	23.75	58.8
2665	IPI00314191.3	SPEEGAETPVYLALLPPDAEGPHGQFVQDK	1064.8558	3	50		0	50.0
2666	IPI00124181.1	IIDKPR	371.2355	2	19		0	19.0
2667	IPI00124181.1	NEVSFVIHNLPIIAK	847.4870	2	58	P y5	89	147.0
2668	IPI00124181.1	PLGTQVAANAHQWLDNPEK	697.3658	3	40	y++17	49.7	89.7
2669	IPI00318970.5	AANGVVLATEK	536.8040	2	46	y6	89	135.0
2670	IPI00318970.5	RYNEDLELEDIAHTAILTK	590.3148	4	18	b5	15.6	33.6
2671	IPI00318970.5	RYNEDLELEDIAHTAILTK	786.7612	3	22	y8	33.75	55.8
2672	IPI00318970.5	RYNEDLELEDIAHTAILTK	786.7501	3	40	c b7	41	81.0
2673	IPI00318970.5	RYNEDLELEDIAHTAILTK	786.7501	3	44	y8	46.75	90.8
2674	IPI00318970.5	SILYDER	448.2302	2	19	y5	38.2	57.2
2675	IPI00377386.1	NPISTMIC	452.7399	2	18	y4	1.05	19.1
2676	IPI00119622.1	FFNQLFSGLDPHALAGR	630.6822	3	45	P y7	21.2	66.2
2677	IPI00119622.1	FFNQLFSGLDPHALAGR	631.0245	3	47	y++13	48.5	95.5
2678	IPI00119622.1	HLLDGIQR	476.2725	2	23	y6	35.8	58.8
2679	IPI00119622.1	QLLDLELQSQGESR	809.9367	2	25		0	25.0
2680	IPI00119622.1	RIDQAFALTR	595.8359	2	44	y7	22.4	66.4
2681	IPI00130717.3	VTESCITAVAAK	625.3111	2	17	c b8	1.95	19.0
2682	IPI00331258.5	AFSGYLGPDSEK	635.8010	2	56	y7	22.4	78.4
2683	IPI00331258.5	AYSGSQIDILIDQG	494.2439	3	19		0	19.0
2684	IPI00331258.5	FAVYLPPQAESGK	703.8844	2	26	P y8	73.4	99.4
2685	IPI00331258.5	KIPVVFR	429.7820	2	22	P y5	97.85	119.9
2686	IPI00331258.5	LQEGYDHSYYFIATFIADHIR	854.0829	3	28	y6	25.35	53.4
2687	IPI00331258.5	LQEGYDHSYYFIATFIADHIR	854.0828	3	32	y8	35.8	67.8
2688	IPI00331258.5	MALKQISSNRC	436.8780	3	16		0	16.0
2689	IPI00331258.5	MYSYVTEELPQLINANFPVDPQR	909.1169	3	21	P y6	14.55	35.6
2690	IPI00331258.5	MYSYVTEELPQLINANFPVDPQR	909.1169	3	28	y4	20.55	48.6
2691	IPI00331258.5	MYSYVTEELPQLINANFPVDPQR	909.1166	3	37		0	37.0
2692	IPI00331258.5	VFEHSSVELK	587.8090	2	41	c b8	22.4	63.4
2693	IPI00283862.4	FVFDRLPVSR	444.9188	3	17	P y4	41	58.0
2694	IPI00283862.4	NQYDNDVTWVSPQGR	889.9508	2	47	y5	35.8	82.8
2695	IPI00283862.4	RAQSELAHQK	413.5587	3	49	c b5	25.35	74.4
2696	IPI00283862.4	RAQSELAHQK	456.2565	3	40	c b5	15.6	55.6
2697	IPI00283862.4	THAVLVALK	476.3030	2	36	y7	77.6	113.6
2698	IPI00331680.5	GNSMQEALR	503.2432	2	47	y7	12.85	59.9
2699	IPI00331680.5	HLGFQSAVEALR	664.8650	2	32	y7	12.85	44.9
2700	IPI00331680.5	HLGFQSAVEALR	443.2423	3	43	y4	27.2	70.2
2701	IPI00120914.1	IQDALSTVLQYAEDVLSGK	1026.0443	2	71	y8	77.6	148.6
2702	IPI00345039.2	SDKLPYK	446.7428	2	36	y4	83.9	119.9
2703	IPI00345039.2	VAEAHMGK	421.7588	2	21	y4	1.05	22.1

2704	IPI00119945.1	ESSIYLIGGSIPEEDAGK	932.9637	2	70	P y7	102.45	172.5
2705	IPI00115866.1	FYEGTADEMYK	677.2975	2	40	y8	44.3	84.3
2706	IPI00115866.1	HVEPGNAAIQEK	646.8335	2	54	P y9	81.65	135.7
2707	IPI00115866.1	TVQQHAGETDPVTTMR	590.9531	3	37	y4	29.45	66.5
2708	IPI00110986.1	ADQLTEEQIAEFK	782.8835	2	16		0	16.0
2709	IPI00110986.1	DGNGYISAAELR	633.8056	2	30	y7	22.4	52.4
2710	IPI00110986.1	DGNGYISAAELR	633.3101	2	64	y6	15.6	79.6
2711	IPI00110986.1	DTDSEEEIREAFR	798.8593	2	33	y++8	15.6	48.6
2712	IPI00110986.1	EAFSLFDK	478.7398	2	34		0	34.0
2713	IPI00110986.1	MKDTDSEEEIREAFR	619.2885	3	18		0	18.0
2714	IPI00132194.1	GAEADQIIEYLK	675.3522	2	69	c b8	12.85	81.9
2715	IPI00221614.1	LGLHSLR	398.2455	2	34	y4	44.5	78.5
2716	IPI00221614.1	MGNIFGNLL	1021.5743	1	22	c b4	1.25	23.3
2717	IPI00221614.1	QDLPNAMNAAEITDK	815.9253	2	69	y8	55.3	124.3
2718	IPI00403584.1	GLVGEIHK	414.7632	2	28	y5	83.9	111.9
2719	IPI00403584.1	NIIHGSDSVESA EK	495.9108	3	26	y5	69.9	95.9
2720	IPI00403584.1	NIIHGSDSVESA EK	743.3692	2	40	y++12	28.95	69.0
2721	IPI00403584.1	YMHSGPVVAMVWEGLNVVK	706.3634	3	19	y6	52.95	72.0
2722	IPI00403584.1	YMHSGPVVAMVWEGLNVVK	706.3634	3	19	y8	40.2	59.2
2723	IPI00321308.2	IVAVTGAEAQK	543.8114	2	49	y7	77.6	126.6
2724	IPI00321308.2	LERLVSVLQNK	650.3123	2	26	c b4	16.9	42.9
2725	IPI00321308.2	LVFIQYNR	527.2903	2	22		0	22.0
2726	IPI00321308.2	LVSVLQNK	450.7800	2	28	y6	25.35	53.4
2727	IPI00321308.2	MALELLTQEFGIPVER	923.9925	2	18	P y4	41	59.0
2728	IPI00321308.2	MALELLTQEFGIPVER	923.9928	2	33	P y4	41	74.0
2729	IPI00321308.2	VATVLALR	421.7587	2	32	y6	23.75	55.8
2730	IPI00321308.2	VGAEDADGIDMAYR	741.8773	2	57	y5	52.95	110.0
2731	IPI00119004.1	DVEEAKPELSLLGDGDY	925.4376	2	43	c b5	27.2	70.2
2732	IPI00119004.1	DVEEAKPELSLLGDGDY	925.4414	2	53		0	53.0
2733	IPI00129517.1	ATDLLLLDDSLVSLFGNR	925.4901	2	41	y5	7.1	48.1
2734	IPI00129517.1	ATDLLLLDDSLVSLFGNR	924.9870	2	47	y4	15.6	62.6
2735	IPI00129517.1	ATDLLLLDDSLVSLFGNRR	669.0344	3	25	b6	29.45	54.5
2736	IPI00129517.1	ATDLLLLDDSLVSLFGNRR	669.3632	3	36	b6	25.35	61.4
2737	IPI00129517.1	LLADPTGAFGK	545.3006	2	29	P y7	82.65	111.7
2738	IPI00129517.1	RFSMVIDNGIVK	460.2551	3	34	c b5	15.6	49.6
2739	IPI00129517.1	THLPGFVEQAGALK	734.4061	2	36		0	36.0
2740	IPI00129517.1	THLPGFVEQAGALK	489.9371	3	43	y7	42.15	85.2
2741	IPI00129517.1	VGDAIPSVEVFEGEPGK	865.4985	2	20	c b5 P	57.05	77.1
2742	IPI00129517.1	VNLAELFK	467.2740	2	47	y6	89	136.0
2743	IPI00347561.2	AENGKLVINGKPTTIFQE	979.9967	2	15	y8	5.35	20.4
2744	IPI00347561.2	QIIAS	532.3841	1	15	y4	7.7	22.7

2745	IPI00347561.2	QIIAS	532.3841	1	16		0	16.0
2746	IPI00116498.1	FLIPNASQPESK	665.8574	2	42	P y9	85.6	127.6
2747	IPI00116498.1	GIVDQSQQAYQEAFEISKK	724.0311	3	18		0	18.0
2748	IPI00116498.1	VVSSIEQK	445.2534	2	21	y6	52.95	74.0
2749	IPI00116498.1	YLAEVAAGDDKK	640.3297	2	48	y8	73.4	121.4
2750	IPI00337957.3	ALLELQLEPEELYQTFQR	1111.0814	2	47	b7	13.65	60.7
2751	IPI00337957.3	GEGQLSAAER	509.2520	2	55	y5	15.6	70.6
2752	IPI00314439.3	AIRDGVIEASINHEK	551.2977	3	38	c b6	44.5	82.5
2753	IPI00314439.3	FNQVLDQFGEK	662.8290	2	50	y6	102.45	152.5
2754	IPI00314439.3	LQLDSPEDAEFIVAK	837.9326	2	61	b4	49.1	110.1
2755	IPI00314439.3	SVFPEQANNNE	625.8087	2	18		0	18.0
2756	IPI00123750.1	GNFGDNSGLAEYVAQAIDPSLSWDDITWLR	1156.5624	3	65	y++14	16.1	81.1
2757	IPI00123750.1	ISDYEQHVRSVLQK	851.9451	2	23	y8	11.55	34.6
2758	IPI00131459.1	DRPFFTGLVK	590.3296	2	21		0	21.0
2759	IPI00131459.1	EISLWFQPEELVEYK	955.9833	2	26	c b7 P	38.2	64.2
2760	IPI00131459.1	EISLWFQPEELVEYK	955.9836	2	32		0	32.0
2761	IPI00131459.1	FLQASEDLLK	582.3195	2	43	y7	77.6	120.6
2762	IPI00131459.1	TFIAIKPDGVQR	672.8881	2	23	y4	49.1	72.1
2763	IPI00131548.1	LMAVPNLSMLETVDVSK	923.9908	2	40		0	40.0
2764	IPI00131548.1	TFGENYVQELLEK	785.3944	2	53	y6	38.2	91.2
2765	IPI00108189.2	AQVAQPGGDTIFGK	694.8618	2	64	P y9	85.6	149.6
2766	IPI00108189.2	KHISQISVADDDDESLLGHLMIVGKK	570.7044	5	23	y++9	14.55	37.6
2767	IPI00228491.1	FLGPDGSLLLDLLQLAEPPPK	788.4340	3	33	P y4	27.2	60.2
2768	IPI00228491.1	TAGAQQMPWLESVPIAVSNNIDESELMR	1078.8590	3	55	y7	33.75	88.8
2769	IPI00130353.1	QKTQQQPPHG	575.7303	2	18		0	18.0
2770	IPI00130353.1	SILYVSPHPDAFPSLR	920.9817	2	63	y6	14.55	77.6
2771	IPI00378963.1	KRIEK	337.2035	2	22		0	22.0
2772	IPI00378963.1	LVRGR	300.6950	2	16		0	16.0
2773	IPI00378963.1	SVEAAAELSAK	538.2853	2	62	y9	66.55	128.6
2774	IPI00131460.1	EVAGQVGVPLQDLMVR	855.9619	2	44	P y8	95.65	139.7
2775	IPI00131460.1	NINENFGPNTIHLVPILATAVQEELEK	1045.2132	3	31	y7	22.4	53.4
2776	IPI00131460.1	NINENFGPNTIHLVPILATAVQEELEK	1045.2136	3	39	P y++13	50.5	89.5
2777	IPI00131460.1	SMIR	506.2763	1	18		0	18.0
2778	IPI00133551.2	FHVPLLLSPWSYTTYR	660.6846	3	44	c b8 P	13.65	57.7
2779	IPI00133551.2	TSYTNLDGR	513.7459	2	52	y7	33.75	85.8
2780	IPI00317309.3	ADAEVLRK	451.2593	2	44		0	44.0
2781	IPI00317309.3	FITIFGTR	477.7739	2	24	y6	13.65	37.7
2782	IPI00317309.3	NFATSLYSMIK	637.8578	2	40	y7	33.75	73.8
2783	IPI00317309.3	SELTGKFEK	519.7780	2	17	y7	46.75	63.8
2784	IPI00317309.3	SVSHLR	349.7008	2	17	y4	41	58.0
2785	IPI00317309.3	TPEELSAIK	494.2724	2	49	y7	90.2	139.2

2786	IPI00317309.3	VLTEIIASR	501.3038	2	53	y7	46.75	99.8
2787	gij2497269	ANTELENKIR	595.3350	2	55		0	55.0
2788	gij2497269	ANTELENKIR	595.3350	2	55		0	55.0
2789	IPI00407451.1	GVLLGIDDLQTNQFK	830.9474	2	61	y6	6.6	67.6
2790	IPI00330302.2	ASLQVLGTVGEPINPEAWLWYHR	879.7945	3	37	b10	4.95	42.0
2791	IPI00330302.2	ASLQVLGTVGEPINPEAWLWYHR	879.7945	3	39	b6	1.05	40.1
2792	IPI00330302.2	IGPIATPDYIQNAPGLPK	933.5133	2	33	P y5	57.05	90.1
2793	IPI00121517.1	AMSVEQLTDVLINEILHGADGTSIK	885.4822	3	29	y++15	38.5	67.5
2794	IPI00121517.1	AMSVEQLTDVLINEILHGADGTSIK	885.8243	3	45	y++17	14.9	59.9
2795	IPI00121517.1	ILQEAGADISK	572.8140	2	53	y6	69.75	122.8
2796	IPI00121517.1	TVMSHLDR	479.7427	2	21	y5	62.3	83.3
2797	IPI00277001.3	ALALAVK	685.4604	1	39	b6	49.6	88.6
2798	IPI00277001.3	VEIATLTR	451.7696	2	60	y6	27.2	87.2
2799	IPI00266614.1	ALTSDFEEQRK	718.8840	2	60		0	60.0
2800	IPI00266614.1	GFAFDIPGFYDSGFLK	890.9346	2	30	c b6 P	6.6	36.6
2801	IPI00133706.1	EFADSLGVPFLETSK	855.9340	2	47	P y8	73.4	120.4
2802	IPI00133706.1	LQIWDTAGQER	659.3382	2	36	y4	15.6	51.6
2803	IPI00133706.1	LQIWDTAGQER	658.8359	2	49	y5	29.45	78.5
2804	IPI00127691.1	EGGGNNLYGEEMVQALEQLK	1090.5259	2	60	y7	25.35	85.4
2805	IPI00123449.1	DVQLSGPGGSVQDGPDLTYFTMLK	920.7804	3	41	y4	32.3	73.3
2806	IPI00123449.1	DVQLSGPGGSVQDGPDLTYFTMLK	920.7801	3	41	y5	20.55	61.6
2807	IPI00123449.1	MQVLTK	761.4424	1	36		0	36.0
2808	IPI00230042.3	EGKQNLVIMGR	415.8708	3	25		0	25.0
2809	IPI00230042.3	IMQEFESDTFFPEIDLK	1074.0075	2	37	P y7	102.45	139.5
2810	IPI00133605.1	TGVLQGGPESEVEIVK	821.4394	2	59	y7	27.2	86.2
2811	IPI00226835.1	SSMPDLPGAMDEPYDTR	941.4037	2	58	y6	38.2	96.2
2812	IPI00121531.1	EVGLAIR	757.4689	1	22	y6	27.2	49.2
2813	IPI00121531.1	IAIDAGFR	431.7427	2	43	y5	57.05	100.1
2814	IPI00378259.1	SIYGEEFEDENFILK	916.9601	2	51	y7	82.65	133.7
2815	IPI00270133.1	IAIDTGFR	446.7480	2	32		0	32.0
2816	IPI00270133.1	QLETILNKPLK	451.9416	3	20		0	20.0
2817	IPI00270133.1	SIGVSNFNFR	570.7935	2	31	y6	1.4	32.4
2818	IPI00270133.1	TPALIAIR	427.7771	2	58	y6	25.35	83.4
2819	IPI00270133.1	VFEFQLASEDMK	722.3735	2	41	y6	25.35	66.4
2820	IPI00341351.2	VMPELN	360.1919	2	17	c b4	7.1	24.1
2821	IPI00341351.2	YDNSLK	739.3638	1	23	y4	62.3	85.3
2822	IPI00323911.3	AILSZYAAK	475.2894	2	53	y6	65.15	118.2
2823	IPI00323911.3	DGHLLFGQVPLVEIDGMMLTQTR	857.7761	3	41	y4	29.45	70.5
2824	IPI00113996.4	DSSRLPSEGPQPAHVVDVDR	551.5377	4	15		0	15.0
2825	IPI00113996.4	DSSRLPSEGPQPAHVVDVDR	735.0574	3	32	b5 P	14.55	46.6
2826	IPI00113996.4	HDLGHFMLR	375.8590	3	28		0	28.0

2827	IPI00113996.4	IAIFGATGR	453.2643	2	49	y6	21.2	70.2
2828	IPI00113996.4	ILQESGLK	444.2636	2	28	y5	57.05	85.1
2829	IPI00113996.4	LQDVTDDHIR	606.3043	2	47	y8	44.3	91.3
2830	IPI00128376.1	NAQLDYVDLYIIHFPMALQPGDK	888.1175	3	26		0	26.0
2831	IPI00228824.1	SSTQIEQLR	531.2702	2	24	c b7	1.75	25.8
2832	IPI00348328.2	IIAEVRAR	927.5681	1	15	y4	15.6	30.6
2833	IPI00348328.2	NDSLQSAIADAEQQGEMAVR	1068.0315	2	19		0	19.0
2834	IPI00348328.2	NDSLQSAIADAEQQGEMAVR	1068.0311	2	32		0	32.0
2835	IPI00308391.3	ASTPAASLLPK	528.3266	2	55	c b7	13.65	68.7
2836	IPI00308391.3	IPKVR	306.6950	2	18	P y4	15.6	33.6
2837	IPI00110528.1	ARREEDGIVLDFPVYPTFPQDFHEVEDLIK	894.7029	4	17	b6	16.9	33.9
2838	IPI00110528.1	ARREEDGIVLDFPVYPTFPQDFHEVEDLIK	894.7024	4	32	b6	1.25	33.3
2839	IPI00110528.1	VNTEPLPAIEK	605.8371	2	23	P y7	49.6	72.6
2840	IPI00222323.1	AAFIDNMNQYTR	722.3448	2	24	y5	15.6	39.6
2841	IPI00222323.1	DSTLDAEEIFR	683.8526	2	51	y8	77.6	128.6
2842	IPI00222323.1	WTSSDWTFDPR	699.3100	2	38	y6	12.85	50.9
2843	IPI00225670.1	DLVQDPSLLGGTISAYK	888.9726	2	54	y8	21.2	75.2
2844	IPI00133428.1	AVANQTSATFLR	639.8451	2	54		0	54.0
2845	IPI00133428.1	KYEPPVPTR	543.8007	2	32	P y6	49.6	81.6
2846	IPI00124225.1	ALVHERDEAAYGALR	557.6249	3	26	y4	16.9	42.9
2847	IPI00124225.1	LLALLALVKPEVWTLK	603.0634	3	29	P y7	35.8	64.8
2848	IPI00121348.1	ALGVNTVGAQTLK	636.3695	2	57	y6	25.35	82.4
2849	IPI00121348.1	LFYEHPIFSEVISDQEAVSALEK	884.7835	3	20	y5	29.45	49.5
2850	IPI00121348.1	LFYEHPIFSEVISDQEAVSALEK	884.7803	3	23	y5	41	64.0
2851	IPI00121348.1	LGIPATIVPNTTPALTIER	1039.1070	2	29	y8	22.4	51.4
2852	IPI00121348.1	NNPGWVYISPFDDPLIWEGHTSLVK	962.4830	3	17	b6	1.6	18.6
2853	IPI00407129.1	QGFIDLPEFPFGLLEPR	931.4790	2	54	P y7	61.35	115.4
2854	IPI00382015.1	GTTAVLTEK	460.2587	2	47	c b6	15.6	62.6
2855	IPI00135443.1	DKTPALISDYK	625.8371	2	18		0	18.0
2856	IPI00135443.1	MAKSSLAGSDGA	576.8069	2	17		0	17.0
2857	IPI00136483.1	DGIVLGADTR	508.7721	2	53	y7	12.85	65.9
2858	IPI00119234.2	PAKYDDIK	475.2536	2	33	c b6	57.05	90.1
2859	IPI00119234.2	VVDLMAYMASEE	453.2244	3	32	c b7	14.55	46.6
2860	IPI00345883.2	VIHDNFGIVEGLMTMVHAITATXK	669.8382	4	21		0	21.0
2861	IPI00313201.3	IGGHGAEYGAEALER	510.5832	3	47	y4	44.5	91.5
2862	IPI00313201.3	IGGHGAEYGAEALER	765.3789	2	49	y7	23.75	72.8
2863	IPI00313201.3	LRVDPVNFK	363.2133	3	28	c b5	25.35	53.4
2864	IPI00313201.3	TYFPHFDVSHGSAQVK	607.6320	3	22	y++9	1.05	23.1
2865	IPI00313201.3	TYFPHFDVSHGSAQVK	607.2986	3	31	c b7	35.8	66.8
2866	IPI00313201.3	VADALANAAGHLDDLPGALSALSDDLHAHK	573.7013	5	16		0	16.0
2867	IPI00137560.1	HPQRNQGDR	583.2293	2	18	y7	5.55	23.6

2868	IPI00395139.1	ENEMRENLQVFEFQLSPEDMK	872.0698	3	24	P y5	75.6	99.6
2869	IPI00395139.1	LNDGHLIPALGFGTYKPK	648.0346	3	16	y6	6.2	22.2
2870	IPI00395139.1	SIGVSNFNHR	565.7885	2	51	y6	14.55	65.6
2871	IPI00377876.1	GAGTATQPLAPVQ	605.8434	2	19	y9	4.95	24.0
2872	IPI00377876.1	MAGMDLGA	383.2198	2	52	y7	5.85	57.9
2873	IPI00119522.1	QLQGNQLR	479.7595	2	16		0	16.0
2874	IPI00312058.3	ASQRPDVLTGGGNPIGDK	628.3289	3	19	y9	33.75	52.8
2875	IPI00312058.3	EAETFPFNPFDLTK	828.9023	2	18	c b5 P	69.75	87.8
2876	IPI00312058.3	NAIHTYTQAGSHMAAK	567.9453	3	34	y++12	27.7	61.7
2877	IPI00312058.3	NAIHTYTQAGSHMAAK	567.6113	3	43		0	43.0
2878	IPI00312058.3	NPVNYFAEVEQMAFDPSNMPPGIEPSPDK	1074.8268	3	29	y6	49.1	78.1
2879	IPI00312058.3	RTPIAVR	406.7590	2	22	c b5	7.1	29.1
2880	IPI00283327.4	GYSWRKK	462.7324	2	16		0	16.0
2881	IPI00283327.4	HMAATLIEAMFK	689.8575	2	16		0	16.0
2882	IPI00283327.4	VILQAAVR	435.7742	2	51		0	51.0
2883	IPI00135640.1	TMLELLNQLDGFTEATK	912.4684	2	51	y7	95.65	146.7
2884	IPI00117264.1	APLVLKD	378.2371	2	21	y4	36.1	57.1
2885	IPI00117264.1	DGLILTSR	437.7530	2	26	y4	27.2	53.2
2886	IPI00117264.1	GAEEMETVIPVDVMR	838.4049	2	47	P y6	52.95	100.0
2887	IPI00117264.1	MMNGSHYSYSESR	516.8783	3	29	y++10	49.6	78.6
2888	IPI00117264.1	TQGPYDVVWLPGGNLGAQNLSESPMVK	924.4735	3	25	b9	21.2	46.2
2889	IPI00117264.1	TQGPYDVVWLPGGNLGAQNLSESPMVK	924.4776	3	38	b9	31.95	70.0
2890	IPI00117264.1	VTTHPLAK	433.7586	2	41		0	41.0
2891	IPI00331528.4	QGLLEFVDITATNNTSAIQDYLQQLTGAR	1061.2129	3	51	y4	18.5	69.5
2892	IPI00116134.1	GAFNFDKETVINPETGEQI	352.5410	6	18		0	18.0
2893	IPI00116134.1	KVVEHLEKAK	590.8137	2	17	y8	22.4	39.4
2894	IPI00116134.1	LASVLNTDPALDSELTSK	937.4902	2	50	c b8 P	5.35	55.4
2895	IPI00116134.1	VILGSKAAQQR	585.8473	2	21	y9	11	32.0
2896	IPI00116134.1	VLAVAYAAGR	531.3029	2	19	y4	1.05	20.1
2897	IPI00154045.1	ALELEQELR	550.8013	2	40	y7	49.6	89.6
2898	IPI00154045.1	ANIGDAQAMGQRPIFFR	665.0128	3	44		0	44.0
2899	IPI00154045.1	KPFTEVIR	495.2929	2	22	P y7	61.35	83.4
2900	IPI00154045.1	LTEQVFNEAPGIR	737.4058	2	36	P y4	32.3	68.3
2901	IPI00109482.1	AGLGHPSAFGR	556.2853	2	38	P y6	14.55	52.6
2902	IPI00109482.1	ATHAVVR	377.2222	2	21	y4	15.6	36.6
2903	IPI00109482.1	GAEILADTFK	532.7858	2	50	y6	38.2	88.2
2904	IPI00346002.2	ATISNDGATILK	602.3329	2	49	y9	11	60.0
2905	IPI00346002.2	AVTALSSK	388.7004	2	16	y5	1.25	17.3
2906	IPI00307991.1	EPVARSR	407.7428	2	21	y5	15.6	36.6
2907	IPI00308885.2	TLNDELEIIEGMK	752.8814	2	49	y5	44.5	93.5
2908	IPI00230139.3	GDHPTDAEMK	372.8646	3	20	y5	16.9	36.9

2909	IPI00230139.3	RGEAHLAVNDFDLAR	562.2974	3	29	y7	25.35	54.4
2910	IPI00230139.3	RGEAHLAVNDFDLAR	561.9584	3	37		0	37.0
2911	IPI00129928.2	KPVHPNDHVNK	429.2331	3	23	c b4 P	8.5	31.5
2912	IPI00129928.2	MPIPVIQAFGILK	713.9282	2	49	y7	15.6	64.6
2913	IPI00157501.5	EMIAHKSK	472.3027	2	25	y6	6.2	31.2
2914	IPI00157501.5	LQVTAVKHGDSLK	698.4070	2	15	c b8	1.95	17.0
2915	IPI00112555.3	KSEMESVLAQLDNYGQQLADLFVNYNVK	1116.5525	3	48	y7	49.6	97.6
2916	IPI00310658.3	ENEMRENLQVFGFQLSPEDMK	848.0628	3	24	P y5	44.5	68.5
2917	IPI00310658.3	GIVPLAQSFK	530.3141	2	20	P y7	111.85	131.9
2918	IPI00310658.3	KLQLDYVDLYIMHYPVPMK	789.7468	3	23	c b8	22.4	45.4
2919	IPI00310658.3	KLQLDYVDLYIMHYPVPMK	789.7495	3	26	y++11	44.3	70.3
2920	IPI00153294.2	ILATGGASHNK	534.7936	2	47	y9	52.75	99.8
2921	IPI00117910.1	EGGLGPLNIPLLDVTK	853.9867	2	34		0	34.0
2922	IPI00117910.1	NDLPVGR	770.4878	1	20		0	20.0
2923	IPI00117910.1	QITVNDLPVGR	606.3402	2	41		0	41.0
2924	IPI00330504.1	REDIFYTSK	579.7935	2	48	c b5	27.2	75.2
2925	IPI00137930.1	SAIQNLHSFDPFADASKGDDLLPAGTEDYIHIR	914.9471	4	30		0	30.0
2926	IPI00137930.1	SAIQNLHSFDPFADASKGDDLLPAGTEDYIHIR	914.9470	4	39	y6	16.9	55.9
2927	IPI00115871.1	LAHAVHER	311.5071	3	23		0	23.0
2928	IPI00115871.1	LAHAVHER	466.7573	2	46	y5	41	87.0
2929	IPI00112955.1	ASGVAVSDGVIK	572.8140	2	20		0	20.0
2930	IPI00230044.1	IQLVEEELDRAQER	864.4831	2	27	y4	6.6	33.6
2931	IPI00230044.1	IQVLQQADDAEERAER	667.0010	3	36		0	36.0
2932	IPI00230044.1	LMDQNLK	431.2284	2	16	y5	69.75	85.8
2933	IPI00230044.1	MLDQTLDDLNEM	718.3487	2	39	y5	25.35	64.4
2934	IPI00379752.1	LVQAFQFTDK	598.8193	2	45	y8	25.35	70.4
2935	IPI00122657.1	ENFQIFDFSLTEEEMKDIDALNK	926.7734	3	15		0	15.0
2936	IPI00122657.1	ENFQIFDFSLTEEEMKDIDALNK	926.4398	3	16		0	16.0
2937	IPI00122657.1	LWNTEHVPSMVLPALER	664.6837	3	29	P y5	75.6	104.6
2938	IPI00122657.1	MNLSAAHHQISLSDGNNIPLIGLGTYS DPRPVPGK	928.9791	4	32	P y7	23.75	55.8
2939	IPI00122657.1	MNLSAAHHQISLSDGNNIPLIGLGTYS DPRPVPGK	929.2300	4	35		0	35.0
2940	IPI00122657.1	QLELILNKPLK	683.4336	2	33	y7	33.75	66.8
2941	IPI00122657.1	TQAQIVLR	464.7822	2	42	y6	38.2	80.2
2942	IPI00124692.1	IHLDEK	377.7084	2	24	y4	41	65.0
2943	IPI00124692.1	LIELYK	389.7392	2	26	y5	57.05	83.1
2944	IPI00124692.1	LSDGIRK	394.7350	2	30	y4	15.6	45.6
2945	IPI00124692.1	MESALDQLK	517.7632	2	47	y5	38.2	85.2
2946	IPI00124692.1	SYEPQEDPGVK	624.7907	2	34	P y8	90.2	124.2
2947	IPI00124692.1	VSTEVDAR	438.7245	2	46		0	46.0
2948	IPI00124692.1	WLHNEDQMAVEK	500.5698	3	35	y5	62.3	97.3
2949	IPI00339916.1	AIQGATSHHLGQNFSK	565.9572	3	19	y++11	12.15	31.2

2950	IPI00339916.1	EVVPVNVLDAQEEMK	850.4311	2	44	y8	33.75	77.8
2951	IPI00339916.1	LDAQEEMK	490.7382	2	18		0	18.0
2952	IPI00121736.1	DRSGVISDNELQQALSNGTWTPFNPVTVR	1068.2092	3	43	P y5	49.6	92.6
2953	IPI00408350.1	RILGLLDTHLK	426.9350	3	43	c b5	29.45	72.5
2954	IPI00113845.1	AGGSASAMLQPLLDNQVGFK	1002.5148	2	42	c b10 P	19.15	61.2
2955	IPI00318841.1	NKQATENAKEEVK	744.9230	2	16		0	16.0
2956	IPI00318841.1	YSNEDTLSVALPYFWEHFDK	821.3830	3	34		0	34.0
2957	IPI00352984.2	EVEIDCLTGDHK	708.3916	2	31	c b4	18.5	49.5
2958	IPI00352984.2	KLHPVQER	336.1980	3	17		0	17.0
2959	IPI00112783.1	EGVGSIKK	409.2299	2	34	c b7	22.4	56.4
2960	IPI00120095.2	LTDNIFLEVLHSTDPQLSEAQSILR	947.5038	3	41	y6	6.6	47.6
2961	IPI00330303.4	DVSELTFPEMLGGR	804.3901	2	41	P y7	52.95	94.0
2962	IPI00120165.1	EEGLPVPELFDPLFSR	987.4962	2	41	P y5	65.15	106.2
2963	IPI00128491.1	LGPIPFLLQYD	755.9052	2	40	y6	52.95	93.0
2964	IPI00331704.5	FAPNILENSEALELVK	894.5077	2	15		0	15.0
2965	IPI00331704.5	FAPNILENSEALELVK	894.4690	2	16		0	16.0
2966	IPI00109823.2	AGLLFIFNFHPSK	497.9461	3	18		0	18.0
2967	IPI00109823.2	ENNNVNYDWIHWAPEDPYK	802.3608	3	16	P y6	52.95	69.0
2968	IPI00109823.2	EWAPGAEGVFLTGEFSGWNPFSHPYK	971.1239	3	15		0	15.0
2969	IPI00109823.2	GNIVYTLNRR	436.8979	3	16	b5	6.6	22.6
2970	IPI00109823.2	GYESFGIHR	533.2593	2	40	y6	15.6	55.6
2971	IPI00109823.2	HFTSNVLP	535.7916	2	31	y7	61.35	92.4
2972	IPI00109823.2	IVLSDAAEYGGHQR	544.2651	3	23	y++14	35.45	58.5
2973	IPI00331262.1	ENISQDIDHILETSLAVALDLGGTNLR	969.8444	3	17		0	17.0
2974	IPI00331262.1	ENISQDIDHILETSLAVALDLGGTNLR	970.1760	3	39	y5	16.9	55.9
2975	IPI00134334.2	VDPQLVDGHLASYFLGAIGMPGLTSLIGVQEK	1085.9133	3	21	y5	16.9	37.9
2976	IPI00134334.2	VDPQLVDGHLASYFLGAIGMPGLTSLIGVQEK	1085.9128	3	39		0	39.0
2977	IPI00131228.1	YDYVFPENGLVAYK	839.4112	2	39	P y9	78.1	117.1
2978	gij547754	GGGFGGGGFGSR	506.7460	2	32	c b10	4.8	36.8
2979	gij547754	IEISELNR	487.2689	2	42	y6	27.2	69.2
2980	gij547754	QSGSRGGSGGGGSI	582.3091	2	17	y7	1.75	18.8
2981	IPI00346617.2	DLQQGTL	388.7004	2	24		0	24.0
2982	IPI00116281.1	DLFMVEIMEMK	693.3117	2	16		0	16.0
2983	IPI00116281.1	DRETLIDVAR	396.5510	3	21	y4	27.2	48.2
2984	IPI00116281.1	GIDPFSLDALAK	623.8385	2	37	P y9	66.55	103.6
2985	IPI00116281.1	IIGELLK	393.2603	2	26	y6	52.95	79.0
2986	IPI00128945.1	MRNGYELSPTAAANFTR	633.6454	3	36	c b8 P	12.15	48.2
2987	IPI00128945.1	RFILNLPTFSVR	488.2893	3	33	b5	29.45	62.5
2988	IPI00128945.1	VAASNIVQMKDDHDK	557.6100	3	18	y++12	28.95	47.0
2989	IPI00132951.2	ETLLEMFK	505.7648	2	45		0	45.0
2990	IPI00132951.2	GAYIYNTLMEFIR	796.4922	2	35	y4	29.45	64.5

2991	IPI00132951.2	KRPVIVHR	335.5542	3	18		0	18.0
2992	IPI00132951.2	MDGEKPVDASEEK	478.8856	3	24		0	24.0
2993	IPI00132951.2	QLENSLNEFGKEKWELNPGDGAFYGPK	980.8005	3	17	y9	22.4	39.4
2994	IPI00132951.2	QLENSLNEFGKEKWELNPGDGAFYGPK	980.8013	3	32	y7	49.6	81.6
2995	IPI00314948.3	HPHIK	316.1877	2	22	P y4	29.45	51.5
2996	IPI00314948.3	RGQVVGTR	436.7567	2	27	c b5	11.15	38.2
2997	IPI00314948.3	VLSMAPGLTSVEIIPFR	915.5145	2	35	y4	16.9	51.9
2998	IPI00127596.1	DLFDPIIQDR	616.3197	2	40	P y6	14.55	54.6
2999	IPI00127596.1	SMTEQEQQLLIDHFLFDKPVSPLLLASGMAR	912.4586	4	22	y5	16.9	38.9
3000	IPI00125971.1	ALQSVGQIVGEVLK	720.9251	2	25	y9	81.65	106.7
3001	IPI00125971.1	TLMELLNQMDGFDLHR	678.9979	3	35	b5	8.5	43.5
3002	IPI00400117.1	ISVLQCHGDCDPLVPLMFGSLTVER	948.4579	3	33	y4	27.2	60.2
3003	IPI00153740.1	FHMVDGNVTGEFTDLVPEK	712.3721	3	33	y4	44.5	77.5
3004	IPI00283511.1	MRKPDGSTVTQR	459.2422	3	33	y4	15.6	48.6
3005	IPI00124793.1	LQEAYYIFQELADK	866.4345	2	32	y7	35.8	67.8
3006	IPI00119520.1	DLNRAEEFAQK	660.8324	2	32	c b7	13.65	45.7
3007	IPI00119520.1	PMGVNAAEVR	522.2185	2	32	y8	21.2	53.2
3008	IPI00310091.1	IGPILDNSTLQSEVKPILEK	732.4160	3	31	y++14	9.65	40.7
3009	IPI00379563.1	LNWLSVDFNWK	768.3862	2	31	y6	52.95	84.0
3010	IPI00124742.1	ELPTEPPYTAYVGNLFPNTVQGDIDAIFK	1070.8737	3	30	b5 P	8.5	38.5
3011	IPI00229834.2	HVLEGHDR	321.4983	3	30	c b4	32.3	62.3
3012	IPI00229834.2	LPIYVTR	431.2494	2	17	P y6	38.2	55.2
3013	IPI00116221.1	ANIIYPGHGPVIHNAEAK	634.6779	3	17	c b5 P	7.7	24.7
3014	IPI00116221.1	ENGDVVK	381.2555	2	33		0	33.0
3015	IPI00116221.1	IFYTTTPVK	535.3002	2	29	y7	44.3	73.3
3016	IPI00116221.1	SFTVTELR	476.7583	2	30	y4	15.6	45.6
3017	IPI00136213.3	FHHSLTDHTR	417.5392	3	30	y5	27.2	57.2
3018	IPI00112093.2	RREDGDPDAAAAPLQDAELALAGINMLLNNGFR	874.7176	4	28	y6	6.6	34.6
3019	IPI00112093.2	RREDGDPDAAAAPLQDAELALAGINMLLNNGFR	874.9679	4	30	y5	7.1	37.1
3020	IPI00112093.2	TGDVDGAQLVFK	625.7944	2	34		0	34.0
3021	IPI00331650.1	KGEHLSDAFAR	410.8791	3	30	y6	25.35	55.4
3022	IPI00132080.1	AAPAPSLISVFSSPQELGASLAQLVAQR	951.5191	3	16		0	16.0
3023	IPI00132080.1	AAPAPSLISVFSSPQELGASLAQLVAQR	951.5191	3	28		0	28.0
3024	IPI00126680.1	VLGPLIGVQPQEK	738.9675	2	28	y8	55.3	83.3
3025	IPI00121962.1	TNNFNVETLK	590.3042	2	40	y8	31.95	72.0
3026	IPI00121962.1	TTADEWGENYFLIGPYFEHNMK	888.4034	3	24		0	24.0
3027	IPI00121962.1	TTADEWGENYFLIGPYFEHNMK	888.4030	3	28	b6	6.6	34.6
3028	IPI00121962.1	YYQHAR	419.2040	2	26	y4	27.2	53.2
3029	IPI00121271.1	MVDMPANNK	510.2361	2	30	y7	77.6	107.6
3030	IPI00121271.1	VLEVASGSGQHAHFAQAFPNAEWQPSDQDR	863.4119	4	20		0	20.0
3031	IPI00121271.1	VLEVASGSGQHAHFAQAFPNAEWQPSDQDR	863.4116	4	28	P y7	35.8	63.8

3032	IPI00320400.5	DAFERNPELQNLDDFFK	775.7244	3	24	y7	46.75	70.8
3033	IPI00320400.5	DAFERNPELQNLDDFFK	775.7351	3	26	y7	61.35	87.4
3034	IPI00320400.5	VVQLEGSKK	494.2960	2	32	y7	49.6	81.6
3035	IPI00378404.1	QQWQQLYDTLNAWK	911.9530	2	24	y++13	36.9	60.9
3036	IPI00378404.1	VVSHSTHR	341.1897	3	29		0	29.0
3037	IPI00379594.1	MMADLPLIDFEGK	756.3735	2	27		0	27.0
3038	IPI00316314.1	TQDVEYMFVGGIPVTEIALAAQELGIK	998.1990	3	27	y8	11.55	38.6
3039	IPI00108895.1	CGKTMLAK	454.7644	2	24	c b7	5.85	29.9
3040	IPI00108895.1	ENAPAIIFIDEIDAIATK	973.0452	2	27	y5	5.85	32.9
3041	IPI00108895.1	RFDAQTGADREVQR	550.2764	3	20	y++11	21.2	41.2
3042	IPI00124639.1	SWSDNWRGIIESK	789.4328	2	17	y8	2.3	19.3
3043	IPI00124639.1	VASVYESPGFFLNLEPIGALDALREMNDMK	1142.5745	3	26	y++17	5.35	31.4
3044	IPI00229281.1	AMVQLQSQISSMEK	798.9596	2	26		0	26.0
3045	IPI00403557.1	LEPIWTRNPDDITQEEYGEFYK	915.4541	3	25	y6	29.45	54.5
3046	IPI00131478.1	LHPDPGTWESFLENFMDGK	741.0100	3	22		0	22.0
3047	IPI00131478.1	LHPDPGTWESFLENFMDGK	741.0101	3	24	y7	23.75	47.8
3048	IPI00131478.1	VSYGSWYQHVK	677.3452	2	23		0	23.0
3049	IPI00223800.3	DINLASFIEQVAVSMT	869.4384	2	24		0	24.0
3050	IPI00116603.1	GLTLSWGDNILHSIMMSAAK	810.4412	3	21	y++16	52.95	74.0
3051	IPI00116753.3	TIVAINKDPEAPIFQVADYGVADLFK	983.5313	3	21	y4	55.9	76.9
3052	IPI00113214.1	AGDRVHK	782.4532	1	27		0	27.0
3053	IPI00113214.1	IVILPDYLEIAR	707.9201	2	20	P y8	108.75	128.8
3054	IPI00113214.1	QQDAQEFFLHLINMVER	707.0201	3	19	y5	29.45	48.5
3055	IPI00109232.3	AEPANAGKYTCQIKN	556.6321	3	15		0	15.0
3056	IPI00109232.3	ETNGLSGSSV	476.2052	2	19		0	19.0
3057	IPI00109232.3	ETNGLSGSSV	476.2052	2	24		0	24.0
3058	IPI00109232.3	ETNGLSGSSV	476.2052	2	29		0	29.0
3059	IPI00109232.3	FVKKLSDAS	332.1763	3	17		0	17.0
3060	IPI00109232.3	IFVKR	331.7030	2	34	y4	27.2	61.2
3061	IPI00230690.1	ADTESVKLQVEQNK	794.9109	2	16	c b7	5.55	21.6
3062	IPI00230690.1	EFNSGGSEQ	478.7579	2	22		0	22.0
3063	IPI00230690.1	ILNQR	322.7083	2	33		0	33.0
3064	IPI00230690.1	KTVNLVLK	457.7875	2	16		0	16.0
3065	IPI00230690.1	LTVDEAVQ	437.7749	2	20	y6	33.75	53.8
3066	IPI00230690.1	NQEAFIGDGTVELQK	583.9490	3	15		0	15.0
3067	IPI00230690.1	QQAPKIK	406.7531	2	20	y6	38.2	58.2
3068	IPI00230690.1	QQMSSKEISTKKEQ	835.3623	2	19		0	19.0
3069	IPI00230690.1	SGSDISQLEK	532.7669	2	20		0	20.0
3070	IPI00230690.1	SQQVDEK	417.7286	2	34		0	34.0
3071	IPI00230690.1	SYHVELMRELEQK	831.9514	2	16	c b5	1.4	17.4
3072	IPI00319167.2	EMSLTTEQKLAstriic	998.9844	2	16		0	16.0

3073	IPI00319167.2	FEATLDGLPSNIAR	752.3803	2	20		0	20.0
3074	IPI00319167.2	ITNTSHFPV	508.2986	2	35	y7	6.2	41.2
3075	IPI00319167.2	IVILR	307.2235	2	28	y4	7.1	35.1
3076	IPI00319167.2	KPGATK	301.2052	2	22	c b5	6.6	28.6
3077	IPI00319167.2	LIMEK	317.1914	2	26		0	26.0
3078	IPI00319167.2	LKDSDNLAQK	630.8071	2	29		0	29.0
3079	IPI00229612.1	AREGLDK	394.7294	2	30	y5	75.6	105.6
3080	IPI00229612.1	DQTTAQLQVQK	630.8246	2	20	y++8	1.25	21.3
3081	IPI00229612.1	ELDGMGAIGR	509.7712	2	18		0	18.0
3082	IPI00229612.1	GAKANRADPKK	578.8198	2	18		0	18.0
3083	IPI00229612.1	KQTQALR	423.7251	2	34		0	34.0
3084	IPI00229612.1	LEEEKVVVEEKQ	809.8722	2	15		0	15.0
3085	IPI00137718.1	DYNIQK	781.4090	1	26		0	26.0
3086	IPI00137718.1	ESTLHLVLR	534.3142	2	28		0	28.0
3087	IPI00137718.1	LIFAGK	648.4086	1	19		0	19.0
3088	IPI00137718.1	LIFAGK	324.7079	2	23	y5	52.95	76.0
3089	IPI00137718.1	MQIFVK	765.4387	1	34	y4	32.3	66.3
3090	IPI00137718.1	TLSDYNIQK	541.7817	2	26	y7	77.6	103.6
3091	IPI00137718.1	TLSDYNIQK	541.2805	2	29	y7	61.35	90.4
3092	IPI00352763.2	KDLPEAEIVSLAIK	763.4774	2	20		0	20.0
3093	IPI00352763.2	KIIDTVYSK	533.8061	2	20	y6	25.35	45.4
3094	IPI00352763.2	NAFTSVHPTH	556.2850	2	17	y6	1.4	18.4
3095	IPI00352763.2	QQTEQKK	889.5384	1	16	y5	6.2	22.2
3096	IPI00352763.2	SDVDVLK	775.4214	1	31	c b5	7.1	38.1
3097	IPI00330130.1	DEPQYPLLLPK	656.8646	2	22	b4	16.9	38.9
3098	IPI00330130.1	QKRPLVQK	499.8132	2	17		0	17.0
3099	IPI00339751.2	AGDRVL	315.6917	2	20	c b4	20.55	40.6
3100	IPI00339751.2	EMRERMSEVTKLLE	632.3950	3	18		0	18.0
3101	IPI00339751.2	FEKEIELLQAQK	739.3943	2	18		0	18.0
3102	IPI00137414.1	DVRDIVDQAVK	629.7702	2	16		0	16.0
3103	IPI00137414.1	ELLAVR	350.7215	2	23		0	23.0
3104	IPI00137414.1	KFIRIGDK	488.7536	2	19	c b7	5.85	24.9
3105	IPI00117014.1	EQMLQQVGKQRVELEQE	1038.0103	2	18		0	18.0
3106	IPI00117014.1	MLELR	339.2027	2	25		0	25.0
3107	IPI00319488.2	DVIEEVTQA	502.8138	2	19		0	19.0
3108	IPI00319488.2	IMSLNKHMEIHK	744.9001	2	16		0	16.0
3109	IPI00319488.2	MAESTEWQEKHKELQKEYE	814.0430	3	16		0	16.0
3110	IPI00319488.2	NLEGIHK	786.4913	1	26		0	26.0
3111	IPI00319488.2	VEIKTLK	415.7587	2	28	c b6	16.9	44.9
3112	IPI00400209.1	DIQLIR	379.2321	2	35	y4	41	76.0
3113	IPI00400209.1	EEQQRQQQMEQEKK	998.9846	2	20		0	20.0

3114	IPI00400209.1	EQMAQQ	752.5239	1	20		0	20.0
3115	IPI00400209.1	IYEAMRR	469.7514	2	15	y5	1.25	16.3
3116	IPI00353420.2	GAMDDLADDMK	394.5660	3	21	y5	18.5	39.5
3117	IPI00353420.2	NFEKVSQHIKSAR	772.3738	2	19	y8	31.95	51.0
3118	IPI00353420.2	QQTDPNPKSMDEQ	720.8752	2	18		0	18.0
3119	IPI00119876.1	AQSIYGGRVDNEFDQR	928.4671	2	17		0	17.0
3120	IPI00119876.1	KINMLVIELK	401.2192	3	18		0	18.0
3121	IPI00119876.1	RVLLK	628.4412	1	23		0	23.0
3122	IPI00119876.1	VLQLYQ	763.4737	1	20		0	20.0
3123	IPI00169916.4	AFMTADLPNELIELLEK	974.5126	2	15	c b7 P	1.4	16.4
3124	IPI00169916.4	AMLSANIRQNLQ	680.8461	2	25		0	25.0
3125	IPI00169916.4	IFNIEMK	447.7583	2	31	y6	35.8	66.8
3126	IPI00169916.4	LVAEVEK	394.2578	2	23		0	23.0
3127	IPI00350772.2	KLILDIQNK	362.5525	3	16		0	16.0
3128	IPI00350772.2	KSLPDYLER	560.7909	2	17	P y6	1.25	18.3
3129	IPI00350772.2	RVIGNMGR	460.2771	2	17		0	17.0
3130	IPI00350772.2	TENSLNQPSG	523.8033	2	26	c b5	14.55	40.6
3131	IPI00357831.3	TITLQVEPSDTIENVK	894.9693	2	17		0	17.0
3132	IPI00380805.1	AVTPRFPK	458.2667	2	20		0	20.0
3133	IPI00380805.1	DFGLTWK	866.4030	1	20		0	20.0
3134	IPI00380805.1	IKVR	515.3303	1	21		0	21.0
3135	IPI00380805.1	VLVCTAT	382.2267	2	16	y5	1.4	17.4
3136	IPI00377897.1	GNHLEDVRNK	592.3203	2	16		0	16.0
3137	IPI00377897.1	NQQTILGSPASGIQNTI	872.9179	2	18		0	18.0
3138	IPI00377897.1	QQQMK	404.2219	2	18		0	18.0
3139	IPI00343270.2	ILNGQNKALXLE	665.8903	2	28		0	28.0
3140	IPI00343270.2	IQELQNX	422.2379	2	28		0	28.0
3141	IPI00407973.1	YNKILR	403.7297	2	21		0	21.0
3142	IPI00172328.1	DPPLARNMPPIAGKILWVR	1073.0376	2	18	y4	16.9	34.9
3143	IPI00172328.1	EIMNQISRNEK	454.9298	3	19	c b4	1.05	20.1
3144	IPI00172328.1	FEVKVTK	850.4877	1	15		0	15.0
3145	IPI00172328.1	HINTVLK	412.7348	2	15	y5	6.2	21.2
3146	IPI00172328.1	IKTNDIATVRK	630.3328	2	16		0	16.0
3147	IPI00172328.1	KLIQLSMQGGG	611.3095	2	16		0	16.0
3148	IPI00172328.1	LLNDADMCR	1108.5365	1	16		0	16.0
3149	IPI00126214.1	ELADHQB	421.2380	2	23		0	23.0
3150	IPI00403995.1	CHLDAS	702.4757	1	16		0	16.0
3151	IPI00403995.1	LLLLAAMLSASLPG	462.5716	3	17	c b4	1.05	18.1
3152	IPI00403995.1	NVISLTENV	494.7749	2	34	y6	15.6	49.6
3153	IPI00338604.1	KAKNLAK	386.7558	2	40	c b6	15.6	55.6
3154	IPI00338604.1	KLDAQVQELHAK	690.8796	2	23	y6	12.85	35.9

3155	IPI00338604.1	KQQQLSALK	349.1967	3	16		0	16.0
3156	IPI00338604.1	QLSALK	659.4078	1	31	c b4	16.9	47.9
3157	IPI00343214.2	ITVAQR	344.2237	2	27	y5	15.6	42.6
3158	IPI00378509.1	ATAEKIK	760.4213	1	16		0	16.0
3159	IPI00378509.1	VQTVPIQDIEPVDAPHPQVLKSLNKTYQNLK	1172.2583	3	17	b5	1.4	18.4
3160	IPI00396787.1	EEVEEQLTGVVXKLQ	879.9645	2	26		0	26.0
3161	IPI00396787.1	ENSGVYTSQNSPELQ	892.9935	2	23		0	23.0
3162	IPI00396787.1	INGGELDHNHDLEMIR	932.9224	2	22		0	22.0
3163	IPI00338309.3	AAMVFLDRV	575.8248	2	22	b5	7.1	29.1
3164	IPI00338309.3	DIIRSNHL	541.2771	2	21		0	21.0
3165	IPI00338309.3	GPMVAATLKLGIALNGGNSTVQQK	828.0954	3	18	c b10	4.8	22.8
3166	IPI00338309.3	VKSFEK	433.7314	2	21		0	21.0
3167	IPI00229917.1	AQEDAQREAQR	651.8300	2	20		0	20.0
3168	IPI00229917.1	NGRLGR	336.6883	2	17		0	17.0
3169	IPI00273443.2	MREMSSLSEGEVQNR	928.4503	2	15		0	15.0
3170	IPI00273443.2	SALAGVAVIVLLIPLNGAVSMKMKTYQVK	1016.1855	3	15		0	15.0
3171	IPI00352675.2	EGLPILEKRVK	689.8924	2	22	c b8	1.95	24.0
3172	IPI00352675.2	GRLKEPLQK	534.8125	2	18	y5	1.25	19.3
3173	IPI00352675.2	KVEALARK	457.7687	2	34	y6	38.2	72.2
3174	IPI00352675.2	LSVREMLK	488.3036	2	24	c b7	23.75	47.8
3175	IPI00135511.1	EILEKAGQ	887.4956	1	31	y5	38.2	69.2
3176	IPI00135511.1	ESEKTVQLALDK	681.3688	2	28		0	28.0
3177	IPI00135511.1	ESEKTVQLALDK	681.3742	2	29		0	29.0
3178	IPI00135511.1	LVDKEQQR	508.7731	2	18		0	18.0
3179	IPI00135511.1	SQLSRGEKQRIAIAR	429.1909	4	23		0	23.0
3180	IPI00135511.1	VQGALNKIQH	554.7985	2	17	c b5	1.4	18.4
3181	IPI00378514.1	DHQEVNTML	543.7593	2	20		0	20.0
3182	IPI00378514.1	LNNSIMVLSDEIR	752.4115	2	16	c b8	12.15	28.2
3183	IPI00406756.1	KSFAASQVTEGG	591.3126	2	19	y9	5.15	24.2
3184	IPI00406756.1	VAEHIHK	417.2353	2	32	c b6	38.2	70.2
3185	IPI00128278.1	AKEEMDK	866.4071	1	28	c b4	7.7	35.7
3186	IPI00128278.1	DPVTMIDAIPTLINAIK	912.9975	2	16	c b6	1.6	17.6
3187	IPI00128278.1	EVQDALIK	915.5152	1	24	y6	22.4	46.4
3188	IPI00128278.1	QALSTLK	380.6955	2	16		0	16.0
3189	IPI00128278.1	QCMSQLGLPVSPFAALFQKR	789.1074	3	17	y6	25.35	42.4
3190	IPI00323230.3	DNKNYGADEEAAGALLK	889.9806	2	16		0	16.0
3191	IPI00323230.3	ETGTLESQLEANK	711.3529	2	18		0	18.0
3192	IPI00323230.3	LNEAHK	356.1842	2	24	y4	16.9	40.9
3193	IPI00315536.2	AAGEFLYKK	342.8337	3	16		0	16.0
3194	IPI00315536.2	ELQENQDEIE	624.8165	2	38		0	38.0
3195	IPI00315536.2	LSGEEALTD	545.7966	2	26		0	26.0

3196	IPI00331176.1	LEQQDNDK	496.7687	2	23		0	23.0
3197	IPI00331176.1	QQMDVSEIK	359.8697	3	22		0	22.0
3198	IPI00331176.1	VESETKNGNEAEVTDQSTSIR	766.0648	3	16		0	16.0
3199	IPI00135182.2	AQALASDHD	464.7519	2	25	y6	1.4	26.4
3200	IPI00135182.2	GSFPAMITPX	546.7707	2	25		0	25.0
3201	IPI00135182.2	MRGVGWLTEGSLNLEQAKK	1068.0315	2	23		0	23.0
3202	IPI00135182.2	RMVEAR	389.1876	2	20	c b5	6.2	26.2
3203	IPI00223699.4	AAATFTQ	355.2215	2	16	c b6	6.2	22.2
3204	IPI00223699.4	ATNLITK	761.4422	1	26		0	26.0
3205	IPI00223699.4	ITNKGLVLDENSVEK	830.9003	2	16		0	16.0
3206	IPI00223699.4	LAKEGVK	372.7348	2	22	y5	41	63.0
3207	IPI00340443.1	DKEVIQLREQDRK	829.4853	2	16		0	16.0
3208	IPI00340443.1	SQMAEKK	419.2086	2	17	y5	14.55	31.6
3209	IPI00113302.1	FFTGEK	728.3887	1	15		0	15.0
3210	IPI00355519.2	FATSMVSSDK	544.7537	2	24		0	24.0
3211	IPI00355519.2	IKMSFSVFDEEPR	528.9428	3	16		0	16.0
3212	IPI00355519.2	SSTAHMAISSLR	459.9089	3	18	c b5	8.5	26.5
3213	IPI00330833.3	ISADSR	648.3727	1	29	y4	0.9	29.9
3214	IPI00330833.3	ISDTRLQK	480.7771	2	34	c b6	27.2	61.2
3215	IPI00330833.3	NANLVK GK	843.4511	1	18	b7	1.6	19.6
3216	IPI00330833.3	QMMHK	674.5027	1	27	b4	0.9	27.9
3217	IPI00403414.1	ETDAEEATR	511.2747	2	31	y4	27.2	58.2
3218	IPI00403414.1	GSQKGGR	345.6697	2	30		0	30.0
3219	IPI00403414.1	KMPRLK	386.7450	2	25		0	25.0
3220	IPI00350504.3	INVVLNITATDR	664.8299	2	17		0	17.0
3221	IPI00350504.3	KTNLPNNK	465.7722	2	25		0	25.0
3222	IPI00350504.3	NKPPKVTMK	521.7646	2	18	c b7	1.6	19.6
3223	IPI00350504.3	NNKAINK	401.2271	2	21		0	21.0
3224	IPI00228668.1	TAVVSSQPK	459.2690	2	19		0	19.0
3225	IPI00229904.2	KISSKLKETF SQGLVK	896.9729	2	21	c b4	16.9	37.9
3226	IPI00229904.2	LAVSGGLRP	435.2640	2	46	y7	35.8	81.8
3227	IPI00229904.2	VLEKAFK	417.7232	2	25	y5	6.6	31.6
3228	IPI00229465.1	EAQEANAAILADH	676.8755	2	19	y9	2.3	21.3
3229	IPI00229465.1	LEQKSGEL	452.7350	2	19		0	19.0
3230	IPI00229465.1	QHQEVIAYRTHLLSAAQ	693.7104	3	17	y5	14.55	31.6
3231	IPI00125222.2	AYVAAALGVSNAAVEDLITAATTGILR	877.7936	3	19		0	19.0
3232	IPI00125222.2	LLHVHQK GK	594.3108	2	21	y8	44.3	65.3
3233	IPI00125222.2	LTEK LK	366.2189	2	27	y4	41	68.0
3234	IPI00125222.2	RLIQSSR	430.7692	2	26		0	26.0
3235	IPI00230500.1	EGEGEPK	745.4083	1	16		0	16.0
3236	IPI00230500.1	ITALLIAGN	443.7593	2	16		0	16.0

3237	IPI00230500.1	NDLIAKVD	444.2529	2	16	y6	22.4	38.4
3238	IPI00230500.1	VLKGELEAAKQAK	462.2348	3	16		0	16.0
3239	IPI00120997.1	FANESVPDHVGYAK	512.2676	3	16		0	16.0
3240	IPI00120997.1	IREGPIK	812.4277	1	27		0	27.0
3241	IPI00120997.1	MVQKASSCHSSI	668.3144	2	17		0	17.0
3242	IPI00129366.5	EQGGDCLLLLKSLPAAEA EKTAERVI	938.1129	3	17		0	17.0
3243	IPI00129366.5	IIDLIDREQ	372.5607	3	17		0	17.0
3244	IPI00129366.5	IIDLIDREQ	372.5607	3	19		0	19.0
3245	IPI00129366.5	IIDLIDREQ	558.3376	2	35		0	35.0
3246	IPI00129366.5	ISALLR	336.7239	2	30	y4	15.6	45.6
3247	IPI00129366.5	KNLKP K	364.7188	2	25	y4	1.05	26.1
3248	IPI00229987.1	AVQIHQ	348.2135	2	25	y4	36.1	61.1
3249	IPI00229987.1	IGAQPLFIVPR	606.3596	2	31		0	31.0
3250	IPI00169493.1	DLLVAVPGRSPMAVLAG	841.4229	2	21	y6	5.85	26.9
3251	IPI00169493.1	ELKIKEGMENM	452.2533	3	20		0	20.0
3252	IPI00169493.1	ERKLLAAAQQ	564.8123	2	17		0	17.0
3253	IPI00169493.1	I IYR	564.3510	1	18		0	18.0
3254	IPI00169493.1	SEALHR	356.6906	2	26	y4	16.9	42.9
3255	IPI00123871.1	AKAPMGPLTMGLPLAVDPK	641.6933	3	15		0	15.0
3256	IPI00123871.1	KEELSKEK	495.7645	2	36	c b6	13.65	49.7
3257	IPI00123871.1	TMVEQQISK	540.7825	2	22	c b6	1.25	23.3
3258	IPI00229705.1	IVAMQ	561.3434	1	22	b4	29.45	51.5
3259	IPI00229705.1	LGYSNITIFEK	643.3539	2	22		0	22.0
3260	IPI00229705.1	VAELMGQK	446.2526	2	21	y6	25.35	46.4
3261	IPI00120490.1	KMMIDVIK	489.2521	2	38		0	38.0
3262	IPI00120490.1	LKTVR	308.7054	2	17		0	17.0
3263	IPI00378378.1	AISGDGQAEGYIAANSEPETR	534.7969	4	17	P y4	1.05	18.1
3264	IPI00378378.1	AISGDGQAEGYIAANSEPETR	534.7968	4	21	y6	6.6	27.6
3265	IPI00378378.1	KNGDPDK	387.2295	2	25	c b6	12.85	37.9
3266	IPI00380873.1	IGFGVFLK	440.7206	2	23	y6	14.55	37.6
3267	IPI00380873.1	KQDLLKTKMR	426.2207	3	27		0	27.0
3268	IPI00229912.1	GSLCMSAG	399.7453	2	25	y6	6.2	31.2
3269	IPI00229912.1	IFRSNNLHLK	621.3193	2	24	c b8	12.15	36.2
3270	IPI00229912.1	KIKPE	307.6972	2	22	y4	15.6	37.6
3271	IPI00381708.1	ASLPIANQRRK	692.3839	2	18		0	18.0
3272	IPI00381708.1	IKASLPIANQK	591.8640	2	20	P y6	25.35	45.4
3273	IPI00113262.1	AVAVVVDPIQSVK	662.9028	2	35	y7	49.6	84.6
3274	IPI00113262.1	HNESVVK	406.7170	2	33	y6	69.75	102.8
3275	IPI00113262.1	LGGGMPGLGQGPPTDAPAVDTAEQVYISSLALLK	1109.2447	3	17		0	17.0
3276	IPI00344281.2	GDRQVPSR	458.2667	2	16		0	16.0
3277	IPI00264718.1	ALSGMAR	353.1928	2	18		0	18.0

3278	IPI00264718.1	DQALLLLK	914.5715	1	40		0	40.0
3279	IPI00264718.1	RALSGMAR	439.2542	2	20	y7	22.4	42.4
3280	IPI00316682.2	GAATALRK	394.2239	2	19		0	19.0
3281	IPI00316682.2	LRHEKEMQKEEIQK	921.4440	2	17	y7	5.55	22.6
3282	IPI00316682.2	SLNQEMASLLQRSK	811.9721	2	16		0	16.0
3283	IPI00340215.2	DKKHHEASDEDLILK	885.4063	2	18		0	18.0
3284	IPI00340215.2	DKKHHEASDEDLILK	885.4065	2	18		0	18.0
3285	IPI00340215.2	DKKHHEASDEDLILK	885.4066	2	23		0	23.0
3286	IPI00340215.2	FLDQLT	368.6976	2	32	y5	1.4	33.4
3287	IPI00135444.1	EDNLI	302.1985	2	24		0	24.0
3288	IPI00135444.1	FQLQMRAR	525.7703	2	25	y6	1.4	26.4
3289	IPI00135444.1	ITLQNTSD	446.7610	2	15		0	15.0
3290	IPI00135444.1	ITLQNTSD	446.7610	2	17		0	17.0
3291	IPI00135444.1	TGRYQRCDPK	427.5777	3	16		0	16.0
3292	IPI00407572.1	APTPVCPSTSLR	643.3015	2	15	y7	5.55	20.6
3293	IPI00407572.1	ASAIQEVPPPK	568.7731	2	28	y7	22.4	50.4
3294	IPI00407572.1	TSVLVQQ	776.5161	1	18		0	18.0
3295	IPI00221657.1	CGTGIAIISETKIK	802.3998	2	25	c b10	4.7	29.7
3296	IPI00221657.1	CGTGIAIISETKIK	802.3997	2	31		0	31.0
3297	IPI00221657.1	ILNDR	316.1925	2	30		0	30.0
3298	IPI00221657.1	QLNINGA	365.2392	2	29		0	29.0
3299	IPI00221657.1	TIQER	380.2219	2	21	y4	7.1	28.1
3300	IPI00130597.3	EFFELTSEEK	629.8278	2	22	y7	22.4	44.4
3301	IPI00130597.3	GKGILNGQKST	551.8087	2	20		0	20.0
3302	IPI00124546.2	ARNLLEKETAVTKILR	619.0796	3	18		0	18.0
3303	IPI00320831.1	MQQDVIMVLK	611.3406	2	31		0	31.0
3304	IPI00111158.1	LADAAEN	352.2032	2	21	y5	6.6	27.6
3305	IPI00111158.1	RKVQALKR	500.2889	2	41		0	41.0
3306	IPI00404837.1	IVQEAR	358.7132	2	19		0	19.0
3307	IPI00404837.1	RNIEAVKG	443.7715	2	41	y7	13.65	54.7
3308	IPI00404837.1	TQAELEASQK	368.8771	3	16	y5	0.35	16.4
3309	IPI00349020.2	EVAKQALSRLR	636.3546	2	18	y4	16.9	34.9
3310	IPI00349020.2	RSLDSR	367.2014	2	21		0	21.0
3311	IPI00127330.1	DEQMTVNPPEK	652.8046	2	29		0	29.0
3312	IPI00127330.1	NLAEELESVAGRCQQVR	491.0115	4	16		0	16.0
3313	IPI00127330.1	SIEENLGTVK	545.7694	2	27	y6	5.55	32.6
3314	IPI00127330.1	TLLEAENS	517.2619	2	28		0	28.0
3315	IPI00224151.3	NLLNEKNHGV	626.3356	2	16		0	16.0
3316	IPI00276393.2	DKQIEELTRMLQQK	593.3514	3	23	b5	1.4	24.4
3317	IPI00276393.2	DMKVAELK	317.1714	3	24		0	24.0
3318	IPI00276393.2	FKEPPSLPGKEK	678.8439	2	19	y++11	5.35	24.4

3319	IPI00276393.2	MLQQKQQLVELL	736.9054	2	18		0	18.0
3320	IPI00119886.1	GGDDFK	319.6609	2	21		0	21.0
3321	IPI00356257.2	ILKFMDKGD	541.7798	2	23	y6	7.1	30.1
3322	IPI00356257.2	INMKVR	760.4175	1	20		0	20.0
3323	IPI00356257.2	LTNVKLEK	473.2480	2	16		0	16.0
3324	IPI00115607.1	EAFSGQILANFK	442.5652	3	25	b7	1.6	26.6
3325	IPI00115607.1	LKPAFIKP	305.1708	3	16		0	16.0
3326	IPI00115607.1	SHSLAKKAQDE	405.5477	3	20	b4	1.05	21.1
3327	IPI00408623.1	IIEVQK	365.2289	2	23	y5	69.75	92.8
3328	IPI00408623.1	IIEVQK	729.4510	1	44	y4	29.45	73.5
3329	IPI00350704.1	GARCSK	339.7186	2	15	y4	7.1	22.1
3330	IPI00350704.1	LQPACEQARSVSR	751.9071	2	20		0	20.0
3331	IPI00350704.1	QAFMVSVR	469.2504	2	17		0	17.0
3332	IPI00353672.1	FEATNQTVQ	520.2947	2	20		0	20.0
3333	IPI00353672.1	FEATNQTVQ	520.2946	2	29		0	29.0
3334	IPI00353672.1	FETQPLDMISDK	720.9188	2	16		0	16.0
3335	IPI00353672.1	QASQFHQYV	554.8039	2	16	y7	5.55	21.6
3336	IPI00267295.2	MITSAAGIISL	546.7657	2	32	c b8	44.3	76.3
3337	IPI00267295.2	RLDVFEK	453.7557	2	32	b5	38.2	70.2
3338	IPI00126245.1	FYKMPLS	901.4455	1	19	y5	25.35	44.4
3339	IPI00126245.1	GVLAAALQLR	506.3064	2	19	c b9	11	30.0
3340	IPI00229428.1	DPEANECWK	574.7762	2	15	y7	12.85	27.9
3341	IPI00229428.1	LVGDGYRGK	482.7340	2	28	c b7	5.55	33.6
3342	IPI00378277.1	GGPSSRSBK	456.7527	2	17	y4	8.5	25.5
3343	IPI00378277.1	MRFTNQVISR	635.3607	2	30		0	30.0
3344	IPI00265190.1	DQERTLSLNNVK	709.8715	2	22		0	22.0
3345	IPI00340120.2	AIDLFTDAIK	553.8082	2	42	y6	83.9	125.9
3346	IPI00340120.2	LAILYAK	396.2550	2	18	y4	44.5	62.5
3347	IPI00132317.1	ELGGSPAGGK	436.7636	2	36		0	36.0
3348	IPI00345502.2	AINVQGIENR	558.7858	2	28		0	28.0
3349	IPI00345502.2	IATNNIK	775.4424	1	16		0	16.0
3350	IPI00403860.1	GVAKETYK	448.2097	2	20		0	20.0
3351	IPI00322464.3	DTQDALAVVIE	587.2987	2	20	c b4	16.9	36.9
3352	IPI00322464.3	ERMLTWTEQQR	493.8996	3	25		0	25.0
3353	IPI00346595.2	AKLEKIQK	479.2721	2	19	y4	18.5	37.5
3354	IPI00346595.2	EQA AVR	673.3776	1	35		0	35.0
3355	IPI00230481.1	HIKRLR	411.7328	2	32	y4	29.45	61.5
3356	IPI00230481.1	PDIIK	698.3964	1	17		0	17.0
3357	IPI00336672.3	DGFARTIQK	518.7881	2	22	b6	14.55	36.6
3358	IPI00336672.3	GRLHGQE	398.7248	2	18	y5	14.55	32.6
3359	IPI00336672.3	ILLNKK	365.2289	2	27		0	27.0

3360	IPI00336672.3	QFSRGGEPDGGK	618.3395	2	22	y10	11	33.0
3361	IPI00344728.2	CHFENQRSILSSR	545.2862	3	35	y5	25.35	60.4
3362	IPI00344728.2	EAQPTARARS	544.3096	2	25	y6	1.4	26.4
3363	IPI00344728.2	KLAAKDR	401.2507	2	27		0	27.0
3364	IPI00117846.1	KPENIMLLDK	601.3254	2	28		0	28.0
3365	IPI00314905.3	DSSENSEAITKER	733.3601	2	16	c b5	52.95	69.0
3366	IPI00314905.3	DSSENSEAITKER	733.3602	2	18		0	18.0
3367	IPI00314905.3	EFLNSR	766.3739	1	28		0	28.0
3368	IPI00314905.3	HLETHSSPAK	610.3326	2	19	y7	5.85	24.9
3369	IPI00380896.1	EAESGGGGGK	424.7404	2	37	c b9	5.15	42.2
3370	IPI00380896.1	QLEEEIKAK	1087.5962	1	18	y4	44.5	62.5
3371	IPI00379877.1	AEDSIENISTTIK	710.8621	2	22	y4	15.6	37.6
3372	IPI00379877.1	HIIKTTNALN	619.3306	2	17	y8	5.35	22.4
3373	IPI00379877.1	KEMPINIQE	551.7806	2	26		0	26.0
3374	IPI00135070.1	FLLQHNLR	520.7967	2	25	c b6	5.85	30.9
3375	IPI00230534.1	KMQVQMKE	527.8062	2	20		0	20.0
3376	IPI00230534.1	LGEEDAGAR	459.2509	2	29		0	29.0
3377	IPI00378501.1	ATAEKLK	380.7138	2	28	y5	75.6	103.6
3378	IPI00378501.1	EEQKVALIMLEVQK	894.9544	2	15		0	15.0
3379	IPI00378501.1	FNIAELMAK	1053.5447	1	16		0	16.0
3380	IPI00350771.2	CHNVINK	885.5718	1	26		0	26.0
3381	IPI00350771.2	LFTKDLNQSASQSLQ	841.4128	2	17		0	17.0
3382	IPI00350771.2	TICSLLDK	475.2443	2	24	c b5	7.7	31.7
3383	IPI00277811.4	FSCDIEQ	449.7374	2	26		0	26.0
3384	IPI00277811.4	RLLQQKMSLDGNPRAIHGPSE	626.8472	4	15		0	15.0
3385	IPI00350664.2	ARFSDFYQALEVLRK	615.0015	3	19	y5	7.7	26.7
3386	IPI00350664.2	ENGALL	309.2066	2	28		0	28.0
3387	IPI00225431.1	AIQDKLK	408.2421	2	32	y4	62.3	94.3
3388	IPI00225431.1	KQTVAEQMMM	405.2225	3	20		0	20.0
3389	IPI00225431.1	LGSLVDSDEEDNFSQTAR	992.4618	2	15	y++11	5.15	20.2
3390	IPI00225431.1	LGSLVDSDEEDNFSQTAR	992.4610	2	18	y++11	5.35	23.4
3391	IPI00119817.1	GVA AQEV LK	458.2310	2	17		0	17.0
3392	IPI00119817.1	VLGLPAMQR	492.8263	2	38	y7	13.65	51.7
3393	IPI00137127.3	QDEVINLLN	529.8179	2	21		0	21.0
3394	IPI00137127.3	QDEVINLLN	530.3027	2	22		0	22.0
3395	IPI00228788.2	QGGRHGK	370.1995	2	21	c b6	1.4	22.4
3396	IPI00387204.1	WRARQLVKN	586.8103	2	16		0	16.0
3397	IPI00379929.1	IVTNNIK	401.7447	2	18		0	18.0
3398	IPI00379929.1	KNEFL	326.1621	2	22		0	22.0
3399	IPI00379929.1	YHNTPEK	888.4754	1	17		0	17.0
3400	IPI00387457.1	GFIDSARQNNLELK	803.4039	2	19		0	19.0

3401	IPI00387457.1	KAGYMGSSDDHHSR	771.3952	2	19	y5	6.6	25.6
3402	IPI00387457.1	LSESMAQV	433.2260	2	17	c b6	0.7	17.7
3403	IPI00350671.2	QININVSDPHNT	677.4144	2	15	y7	1.6	16.6
3404	IPI00350671.2	RDISRF	793.4672	1	21		0	21.0
3405	IPI00125484.4	AGQSTEE	361.2158	2	24	c b6	6.2	30.2
3406	IPI00125484.4	FITLGAKKK	503.2740	2	27		0	27.0
3407	IPI00125484.4	KIGILYCR	341.5456	3	15		0	15.0
3408	IPI00125484.4	LQCQPL	380.1981	2	21		0	21.0
3409	IPI00330157.1	LLIGTK	322.7083	2	33	c b5	27.2	60.2
3410	IPI00330157.1	SRMEVVSILLR	434.8970	3	32	c b4	1.05	33.1
3411	IPI00131114.1	IMALAVGSK	453.2583	2	41	y7	5.55	46.6
3412	IPI00131114.1	LVPPQPVHVQ	557.8034	2	22	b4	7.1	29.1
3413	IPI00273679.3	FIGDYIQLTWTAPGK	570.6510	3	24	y7	1.25	25.3
3414	IPI00273679.3	IYGPR	303.1652	2	17		0	17.0
3415	IPI00273679.3	PNFLLTDNLRIGPR	895.9501	2	17		0	17.0
3416	IPI00349207.2	LLTSVLLDK	501.2840	2	21	c b8	31.95	53.0
3417	IPI00408645.1	GMLASGTPNLVIP	643.8512	2	24		0	24.0
3418	IPI00408645.1	KMPKLK	372.7348	2	19		0	19.0
3419	IPI00119935.2	GDVIVLGMITQLK	693.8947	2	24	y8	5.15	29.2
3420	IPI00119935.2	IIDAVEKQP	507.2909	2	18		0	18.0
3421	IPI00119935.2	IIIFREDLVNK	680.9752	2	17		0	17.0
3422	IPI00125442.1	ETQEDGR	417.7052	2	18	y5	14.55	32.6
3423	IPI00125442.1	SPCTSRRLTGLLDR	544.6149	3	22		0	22.0
3424	IPI00378446.1	ACVHLLQREK	627.3407	2	20	c b4	1.05	21.1
3425	IPI00378446.1	EQQKMLQQEQA	690.8133	2	19		0	19.0
3426	IPI00378446.1	QSQQQLQAQ	466.7694	2	18	y6	1.05	19.1
3427	IPI00378446.1	SSIEVREAQARLR	379.6928	4	16		0	16.0
3428	IPI00222467.1	ASKSSEARL	474.7355	2	21	y7	1.75	22.8
3429	IPI00222467.1	LKVRAGHSSE	404.5151	3	17	c b6	1.6	18.6
3430	IPI00311780.3	DKNFSKMGKK	591.8280	2	18		0	18.0
3431	IPI00311780.3	ELEEDLKG	487.7325	2	17	y6	13.65	30.7
3432	IPI00311780.3	KEVQILKGLNL	419.2691	3	17		0	17.0
3433	IPI00322006.2	LSEILR	365.7265	2	40	y5	52.95	93.0
3434	IPI00129191.1	EVPIR	613.4401	1	20		0	20.0
3435	IPI00129193.1	CTNELYWLDQ	671.3745	2	20	c b7	5.55	25.6
3436	IPI00129193.1	EAAKARSGQREK	666.3224	2	18		0	18.0
3437	IPI00342702.3	IGPQNK	328.7081	2	31	y5	7.7	38.7
3438	IPI00342702.3	SYLIGER	419.2329	2	20		0	20.0
3439	IPI00229931.1	EIELENDLQPLQ	720.8748	2	17		0	17.0
3440	IPI00130794.1	APATEASK	774.4612	1	20		0	20.0
3441	IPI00130794.1	DAQGQPQ	373.2085	2	20		0	20.0

3442	IPI00226328.2	KDGASPFQRRAR	616.8052	2	21		0	21.0
3443	IPI00226328.2	QIASIVQ	758.4430	1	20		0	20.0
3444	IPI00226270.2	QSLLRK	373.2321	2	34		0	34.0
3445	IPI00226270.2	VTASNQLLR	501.2905	2	28	y7	5.85	33.9
3446	IPI00129404.1	QNTSLINQK	523.8061	2	21		0	21.0
3447	IPI00265452.3	LAQAFLE	316.5310	3	16		0	16.0
3448	IPI00123624.2	DLSPYR	375.6855	2	26		0	26.0
3449	IPI00137087.3	ARSGTNCLLENLVISNGEK	654.7149	3	36	y7	22.4	58.4
3450	IPI00137087.3	HGNLVSGGVDKRQMASFQESVGETSSQSVVVAVDRIFTGS	1107.0114	4	20		0	20.0
3451	IPI00380792.1	PMIHC	433.2157	3	17		0	17.0
3452	IPI00337844.1	AKEYDLAKK	533.2645	2	29	y7	85.6	114.6
3453	IPI00337844.1	KAVVSPPK	413.2635	2	16		0	16.0
3454	IPI00130444.1	EGSTAQLIINT	573.7689	2	23		0	23.0
3455	IPI00130444.1	MSSNSFAYNEQS	461.1808	3	15	b4	6.6	21.6
3456	IPI00116394.1	DKEMNSQ	869.5059	1	17		0	17.0
3457	IPI00116394.1	ENSDPPISELSIEN	816.3983	2	17		0	17.0
3458	IPI00116394.1	QSQDPPAQK	500.2177	2	16	c b8	1.95	18.0
3459	IPI00134554.1	DFIGQVHKT	586.7768	2	19	y8	21.2	40.2
3460	IPI00134554.1	QTPSSAPR	422.2379	2	19	c b5	6.6	25.6
3461	IPI00307900.1	GHVLHLR	416.2514	2	27	y4	27.2	54.2
3462	IPI00307900.1	SSAKVILT	409.7532	2	18		0	18.0
3463	IPI00307900.1	YISKEDIAEE	598.7947	2	23	y8	5.15	28.2
3464	IPI00350413.2	DNPGMTMPAPRISGVE	771.3995	2	16		0	16.0
3465	IPI00350413.2	VLQTM	949.9861	2	18		0	18.0
3466	IPI00226576.1	QSCNFALR	498.8194	2	28	b4	0.9	28.9
3467	IPI00409937.1	ELAQIIK	815.5023	1	41		0	41.0
3468	IPI00409937.1	ELAQIIK	408.2472	2	46		0	46.0
3469	IPI00406770.1	KLYKGVMLETYRNLN	465.5070	4	15		0	15.0
3470	IPI00406770.1	KPYECNQCGKSFANHSNLKR	813.3850	3	17		0	17.0
3471	IPI00319287.1	GRVKR	308.1825	2	15		0	15.0
3472	IPI00319287.1	INKSSGIVEASRIMNLYQFIQLYKDITSQ	1121.2045	3	15		0	15.0
3473	IPI00128358.1	AEIADGMAYLNAK	692.3491	2	16		0	16.0
3474	IPI00128358.1	ELGQGSFGMVYEGNAK	852.4252	2	16	c b4	15.6	31.6
3475	IPI00128358.1	TLVTF	580.3340	1	21		0	21.0
3476	IPI00111556.1	RGEPHVTR	317.8421	3	22		0	22.0
3477	IPI00223052.1	NLPQSLLR	941.6714	1	23		0	23.0
3478	IPI00223052.1	NLPQSLLR	941.5921	1	24		0	24.0
3479	IPI00223052.1	TPENINK	816.4624	1	32		0	32.0
3480	IPI00124744.1	MFAQQKVT	485.7286	2	16		0	16.0
3481	IPI00123501.1	GGGGGSGGGGNRGGFNRS	634.0060	3	20		0	20.0
3482	IPI00123501.1	LDQTNVYGSAQR	676.3787	2	15	y7	21.2	36.2

3483	IPI00123501.1	LDQTNVYGSAQR	676.3740	2	15	y7	21.2	36.2
3484	IPI00123501.1	LDQTNVYGSAQR	676.3786	2	15	y7	12.15	27.2
3485	IPI00123501.1	LDQTNVYGSAQR	676.3786	2	15	y7	12.15	27.2
3486	IPI00123501.1	LDQTNVYGSAQR	676.3739	2	18	y7	31.95	50.0
3487	IPI00123501.1	LDQTNVYGSAQR	676.3739	2	18	y7	31.95	50.0
3488	IPI00224069.1	KIIGDADRK	508.3112	2	18	y7	5.55	23.6
3489	IPI00224069.1	KVLEALK	400.7535	2	28	c b4	29.45	57.5
3490	IPI00108049.1	INELQNE	430.2300	2	18		0	18.0
3491	IPI00108049.1	LSVRLLK	828.5481	1	21		0	21.0
3492	IPI00227851.1	ASISSPSEEDAAEMPELLEK	717.0421	3	15		0	15.0
3493	IPI00227851.1	FESWEDDQVPK	690.3945	2	19	y4	49.1	68.1
3494	IPI00227851.1	KTSEEFVR	498.2621	2	20	y5	15.6	35.6
3495	IPI00227851.1	NSIAMQEQMLACKGFL	921.4438	2	16	y7	5.55	21.6
3496	IPI00125034.1	EALVDQADDFSG	634.2274	2	15	b9	12.15	27.2
3497	IPI00125034.1	RVDDR	330.7023	2	20	y4	6.6	26.6
3498	IPI00172226.3	GVALVR	307.7086	2	28	c b5	6.6	34.6
3499	IPI00172226.3	LIDLDIGGK	472.3027	2	25	c b6	23.75	48.8
3500	IPI00172226.3	NFECFGDK	339.8502	3	19		0	19.0
3501	IPI00117343.1	LENTNLSATTSLSLR	540.9506	3	21		0	21.0
3502	IPI00117343.1	LGYVDEAGTVKLAGR	774.8674	2	25		0	25.0
3503	IPI00404424.1	GVNTRLRDR	465.7776	2	21	c b7	1.25	22.3
3504	IPI00404424.1	KPTLTIQ	800.5427	1	17	P y6	1.6	18.6
3505	IPI00126589.1	ELAAEL	323.1732	2	17		0	17.0
3506	IPI00126589.1	KTQPKLSAL	493.2253	2	16	b8	1.95	18.0
3507	IPI00381118.1	HVEDSK	357.7187	2	26	c b5	14.55	40.6
3508	IPI00381118.1	ILIASNNK	873.4164	1	24		0	24.0
3509	IPI00342879.2	IPACLCK	431.2486	2	20	P y6	14.55	34.6
3510	IPI00342879.2	KLTEQLQAAEK	630.3282	2	20	y++10	1.95	22.0
3511	IPI00342879.2	RSLEKQSDSAGGIYQYDNYEEVAM	924.4728	3	16		0	16.0
3512	IPI00223904.1	YKAVVK	354.1955	2	24	y5	1.25	25.3
3513	IPI00357734.2	FQRTNQSSFLK	678.8973	2	17	y4	0.9	17.9
3514	IPI00357734.2	FQRTNQSSFLK	678.8973	2	17		0	17.0
3515	IPI00357734.2	FQRTNQSSFLK	678.9221	2	20	y4	0.2	20.2
3516	IPI00357734.2	FQRTNQSSFLK	678.9221	2	21	y4	0.55	21.6
3517	IPI00357734.2	FQRTNQSSFLK	678.9077	2	22		0	22.0
3518	IPI00357734.2	FQRTNQSSFLK	678.8973	2	22	y4	0.35	22.4
3519	IPI00113539.2	IAWESPQGQVS	401.8826	3	17		0	17.0
3520	IPI00113539.2	KDNRGNLLQCVCT	789.9499	2	17	y6	5.85	22.9
3521	IPI00113539.2	NTFAEITGLSPGV	653.8537	2	23		0	23.0
3522	IPI00378873.1	MLIQLPSAS	326.1716	3	23		0	23.0
3523	IPI00379692.1	VLAGLIR	371.2242	2	24	y4	16.9	40.9

3524	IPI00109234.2	AFSVAPFDQNLSIDGK	855.4727	2	17		0	17.0
3525	IPI00109234.2	AFSVAPFDQNLSIDGK	855.4728	2	31		0	31.0
3526	IPI00109234.2	DSAPELNVSSSE	618.2681	2	17		0	17.0
3527	IPI00109234.2	ITRIEVDG	902.4420	1	17	y4	49.1	66.1
3528	IPI00126861.2	GVLLGR	307.7086	2	26		0	26.0
3529	IPI00126861.2	SVEVSDPVPAGDLVK	756.4246	2	33	P y7	49.6	82.6
3530	IPI00136238.1	MASQLQ	368.2041	2	16		0	16.0
3531	IPI00136238.1	SNVISYVTVND	649.3197	2	16	y8	21.2	37.2
3532	IPI00136238.1	VFEMLEQNLYDFLK	895.4155	2	16	y4	29.45	45.5
3533	IPI00221483.2	MAAAVATVQR	517.7504	2	24		0	24.0
3534	IPI00263048.1	EEAVEIHSEGQPGQQSQAQLHASLAK	604.7358	5	17		0	17.0
3535	IPI00227091.2	AMEKEATDK	519.7769	2	22		0	22.0
3536	IPI00227091.2	HLALQLQDSQK	641.7854	2	16		0	16.0
3537	IPI00227091.2	ILSMQ	304.2000	2	16	y4	0.7	16.7
3538	IPI00227091.2	SSLEEQIR	481.7929	2	30		0	30.0
3539	IPI00318798.1	LNGVDALR	429.7342	2	34		0	34.0
3540	IPI00133813.5	ANAHLVAAFEK	586.2990	2	25		0	25.0
3541	IPI00133813.5	EGLQMY	378.7039	2	26	c b4	49.1	75.1
3542	IPI00406571.1	AAGNLKLK	815.4943	1	23		0	23.0
3543	IPI00406571.1	EDIQRGLNDYLEK	797.3650	2	20		0	20.0
3544	IPI00406571.1	FELINK	382.7116	2	15		0	15.0
3545	IPI00406571.1	TLLNSKRQE	544.8109	2	18	y7	22.4	40.4
3546	IPI00406571.1	VIDVHAR	405.2352	2	24	y5	23.75	47.8
3547	IPI00116002.1	CNDILHVTDTMFQGR	912.4339	2	21		0	21.0
3548	IPI00116002.1	EKMTML	768.3967	1	25		0	25.0
3549	IPI00111110.1	AQHSIQLESR	585.7890	2	15		0	15.0
3550	IPI00111110.1	EYNNDEK	304.8310	3	15		0	15.0
3551	IPI00111110.1	NVAIL	530.3551	1	29		0	29.0
3552	IPI00138860.1	QFNAQILEMAQANSAGIS	632.3701	3	17		0	17.0
3553	IPI00138860.1	RMKMEMDE	1101.5094	1	15		0	15.0
3554	IPI00343008.2	NQRLVEK	887.5390	1	28		0	28.0
3555	IPI00343008.2	SSSEQVVLGQVPNKQK	577.0108	3	19	b6	25.35	44.4
3556	IPI00120119.1	HLDVAYNLLEGHTELAPLWLL	806.7099	3	18	b4	29.45	47.5
3557	IPI00379373.1	EYNEYQ	423.7371	2	28	c b4	16.9	44.9
3558	IPI00379373.1	IFVGTSGTIR	575.2954	2	22	y8	5.35	27.4
3559	IPI00379373.1	IFVGTSGTIR	575.2971	2	27	y9	4.95	32.0
3560	IPI00379373.1	IQDIK	308.6869	2	22		0	22.0
3561	IPI00378585.1	EHTLQASNQSEII	735.9000	2	19		0	19.0
3562	IPI00378585.1	LQTVKSLAG	458.7482	2	16		0	16.0
3563	IPI00379876.1	EIQSGPQ	380.2261	2	32	y5	14.55	46.6
3564	IPI00340991.2	DPNMKGAM	440.2376	2	18		0	18.0

3565	IPI00119755.1	FSQLVPLLAR	557.8528	2	42	P y5	65.15	107.2
3566	IPI00134095.1	DQVSKTSIGWLR	695.9016	2	25	y5	7.7	32.7
3567	IPI00134095.1	VSQALDAR	430.2356	2	21	y5	6.6	27.6
3568	IPI00135652.1	DALELNK	401.7370	2	22	y5	52.95	75.0
3569	IPI00135652.1	EFLIFLLPLINIQLK	486.7872	4	17		0	17.0
3570	IPI00353560.3	AELTMK	821.4930	1	18		0	18.0
3571	IPI00353560.3	ELSKPVAQPWMAPPVPRAK	1060.0349	2	16		0	16.0
3572	IPI00353560.3	HGRVMS	343.7027	2	18	y5	7.1	25.1
3573	IPI00353560.3	LKAMQAVQQEGAGGQ	758.8341	2	16		0	16.0
3574	IPI00110560.3	ECETAIAALNSCLR	804.4018	2	18	c b5	6.6	24.6
3575	IPI00110560.3	GQRDVDNALR	572.3349	2	15	c b6	1.25	16.3
3576	IPI00110560.3	HPGDPEQQR	384.5562	3	17		0	17.0
3577	IPI00110560.3	NLEKDLQEIKAAAR	533.6110	3	17	y++12	4.8	21.8
3578	IPI00346752.2	DSFLTTLVR	526.2312	2	21	y5	7.1	28.1
3579	IPI00346752.2	EENLQTK	431.2271	2	22		0	22.0
3580	IPI00346752.2	SEQQITANPAEKEESK	895.9503	2	19		0	19.0
3581	IPI00153556.1	MFSLKNVLYFQAGLGVLANMSLL	863.4703	3	16		0	16.0
3582	IPI00283526.5	IDMVMAAQPR	566.7562	2	17	b5	38.2	55.2
3583	IPI00283526.5	LATVNVALNMLGELDKK	915.4801	2	16	y++11	13.65	29.7
3584	IPI00283526.5	LLPITSRIYMLLQR	578.3145	3	18	y5	1.25	19.3
3585	IPI00283526.5	NCLTVLAARNPAK	714.8989	2	22	y9	20.1	42.1
3586	IPI00409293.1	VSNHSGEK	429.2581	2	34		0	34.0
3587	IPI00336794.1	EVNPTLK	400.7713	2	32	c b5	1.4	33.4
3588	IPI00336794.1	KNPQENLK	486.7958	2	25		0	25.0
3589	IPI00336794.1	KSMGENTMK	521.7636	2	17		0	17.0
3590	IPI00153809.1	CVNIPTVR	479.7876	2	21	c b6	5.55	26.6
3591	IPI00153809.1	KGQLVAAGK	436.7694	2	32		0	32.0