

Peptide Array, Influenza Virus A/California/04/2009 (H1N1)pdm09 Hemagglutinin Protein

Catalog No. NR-15433

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Product Description: The 139-peptide array spans the hemagglutinin protein of the A/California/04/2009 (H1N1)pdm09 strain of influenza virus (GenPept: ACQ76318). Peptides are 14- to 15-mers, with 11 amino acid overlaps. **Note: Peptides 89, 133, 134, 135 and 136 are provided in crude form.**

Lot: T3232-1 to 139

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by MALDI-TOF
- Counter Ion Trifluoroacetate

Peptide-specific information is shown in the two tables below.

Table 1							
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
1 of 139	7/23/2005	15	1 MKAILVLLYTFATA 15	1654.13	0.92	80.0%	87.9%
2 of 139	7/23/2005	15	5 LVLLYTFATANADT 19	1611.89	0.79	87.4%	87.6%
3 of 139	7/23/2005	15	9 LYTFATANADTLCIG 23	1573.82	0.74	83.3%	87.3%
4 of 139	7/23/2005	15	13 ATANADTLCIGYHAN 27	1534.70	0.55	88.6%	87.1%
5 of 139	7/23/2005	15	17 ADTLCIGYHANNSTD 31	1594.69	0.46	96.4%	87.5%
6 of 139	7/23/2005	15	21 CIGYHANNSTDVDT 35	1610.68	0.42	91.6%	87.6%
7 of 139	7/23/2005	15	25 HANNSTDVDTVLEK 39	1643.74	0.22	88.0%	82.8%
8 of 139	7/23/2005	15	29 STDVDTVLEKNVTV 43	1620.78	0.33	94.7%	87.7%
9 of 139	7/23/2005	15	33 VDTVLEKNVTVTHSV 47	1640.85	0.46	94.2%	82.8%
10 of 139	7/23/2005	15	37 LEKNVTVTHSVNLE 51	1695.93	0.55	89.1%	83.2%
11 of 139	7/23/2005	15	41 VTVTHSVNLEDKHN 55	1705.88	0.44	89.2%	78.9%
12 of 139	7/23/2005	15	45 HSVNLEDKHNGLKC 59	1706.93	0.39	84.6%	75.0%
13 of 139	7/23/2005	15	49 LLEDKHNGLCKLRG 63	1724.06	0.25	93.3%	71.6%
14 of 139	7/23/2005	15	53 KHNGKLCKLRGVAPL 67	1634.03	0.38	89.4%	70.5%
15 of 139	7/23/2005	15	57 KLCKLRGVAPLHLGK 71	1633.09	0.45	82.1%	70.5%
16 of 139	7/23/2005	15	61 LRGVAPLHLGKCNIA 75	1561.92	0.65	84.7%	77.4%
17 of 139	7/23/2005	15	65 APLHLGKCNIAWIL 79	1605.98	0.9	84.2%	82.4%
18 of 139	7/23/2005	15	69 LGKCNIAWILGNPE 83	1584.86	0.76	95.6%	87.4%
19 of 139	7/23/2005	15	73 NIAGWILGNPECESL 87	1615.83	0.78	82.3%	87.6%
20 of 139	7/23/2005	15	77 WILGNPECESLSTAS 91	1606.79	0.63	80.9%	87.6%
21 of 139	7/23/2005	15	81 NPECESLSTASSWSY 95	1660.76	0.46	80.8%	87.9%
22 of 139	7/23/2005	15	85 ESLSTASSWSYIVET 99	1659.80	0.49	87.5%	87.9%
23 of 139	7/23/2005	15	89 TASSWSYIVETPSSD 103	1629.73	0.41	95.0%	87.7%
24 of 139	7/23/2005	15	93 WSYIVETPSSDNGTC 107	1658.77	0.54	94.1%	87.9%
25 of 139	7/23/2005	15	97 VETPSSDNGTCYPGD 111	1541.57	0.27	89.5%	87.1%
26 of 139	7/23/2005	15	101 SSDNGTCYPGDFIDY 115	1653.70	0.42	97.0%	87.9%
27 of 139	7/23/2005	15	105 GTCYPGDFIDYEELR 119	1777.94	0.39	90.8%	88.6%
28 of 139	7/23/2005	15	109 PGDFIDYEELREQLS 123	1810.95	0.26	90.1%	88.8%
29 of 139	7/23/2005	15	113 IDYEELREQLSSVSS 127	1754.88	0.22	100.0%	88.5%
30 of 139	7/23/2005	15	117 ELREQLSSVSSFERF 131	1814.00	0.26	94.6%	84.1%

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Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
31 of 139	7/23/2005	15	121 QLSSVSSFERFEIFP 135	1772.99	0.54	87.7%	88.6%
32 of 139	7/23/2005	15	125 VSSFERFEIFPKTSS 139	1760.99	0.4	83.2%	83.7%
33 of 139	7/23/2005	15	129 ERFEIFPKTSSWPNH 143	1875.10	0.45	93.6%	80.4%
34 of 139	7/23/2005	15	133 IFPKTSSWPNHDSNK 147	1757.94	0.4	88.8%	79.4%
35 of 139	7/23/2005	15	137 TSSWPNHDSNKGVTA 151	1600.68	0.3	97.3%	82.4%
36 of 139	7/23/2005	15	141 PNHDSNKGVTAACPH 155	1547.68	0.32	98.6%	77.2%
37 of 139	7/23/2005	15	145 SNKGVTAACPHAGAK 159	1411.64	0.25	87.3%	75.6%
38 of 139	7/23/2005	15	149 VTAACPHAGAKSFYK 163	1550.85	0.39	86.9%	77.3%
39 of 139	7/23/2005	15	153 CPHAGAKSFYKNLIW 167	1735.07	0.67	100.0%	79.2%
40 of 139	7/23/2005	15	157 GAKSFYKNLIWLVKK 171	1795.23	0.56	90.7%	75.9%
41 of 139	7/23/2005	15	161 FYKNLIWLVKKGNSY 175	1873.24	0.7	99.2%	80.4%
42 of 139	7/23/2005	15	165 LIWLVKKGNSYPKLS 179	1746.14	0.64	90.4%	79.3%
43 of 139	7/23/2005	15	169 VKKGNSYPKLSKSYI 183	1712.04	0.26	82.3%	75.0%
44 of 139	7/23/2005	15	173 NSYPKLSKSYINDKG 187	1713.92	0.23	86.1%	79.0%
45 of 139	7/23/2005	15	177 KLSKSYINDKGKEVL 191	1722.03	0.17	84.7%	75.1%
46 of 139	7/23/2005	15	181 SYINDKGKEVLVLWG 195	1720.99	0.53	91.1%	83.4%
47 of 139	7/23/2005	15	185 DKGKEVLVLWGIHHP 199	1728.03	0.5	90.2%	75.2%
48 of 139	7/23/2005	15	189 EVLVLWGIHHPSTSA 203	1645.89	0.71	84.7%	82.8%
49 of 139	7/23/2005	15	193 LWGIHHPSTSADQQS 207	1663.78	0.4	96.4%	82.9%
50 of 139	7/23/2005	15	197 HHPSTSADQQSLYQN 211	1712.76	0.22	92.3%	83.4%
51 of 139	7/23/2005	15	201 TSADQQSLYQNADTY 215	1704.75	0.21	97.6%	88.2%
52 of 139	7/23/2005	15	205 QQSLYQNADTYVFG 219	1732.87	0.5	92.1%	88.4%
53 of 139	7/23/2005	15	209 YQNADTYVFGSSRY 223	1769.90	0.41	92.2%	88.6%
54 of 139	7/23/2005	15	213 DTYVFGSSRYSKKF 227	1784.02	0.29	98.3%	79.6%
55 of 139	7/23/2005	15	217 FVGSSRYSKKFKPEI 231	1773.09	0.24	96.4%	75.7%
56 of 139	7/23/2005	15	221 SRYSKKFKPEIAIRP 235	1820.21	0.16	89.7%	72.7%
57 of 139	7/23/2005	15	225 KFKPEIAIRPKVRD 239	1825.27	0.06	84.9%	69.6%
58 of 139	7/23/2005	15	229 PEIAIRPKVRDQEGR 243	1764.04	0.02	81.8%	75.6%
59 of 139	7/23/2005	15	233 IRPKVRDQEGRMNYY 247	1925.21	0.12	81.9%	77.2%
60 of 139	7/23/2005	15	237 VRDQEGRMNYYWTLV 251	1930.18	0.45	80.6%	84.9%
61 of 139	7/23/2005	15	241 EGRMNYYWTLVEPGD 255	1830.02	0.46	80.3%	88.9%
62 of 139	7/23/2005	15	245 NYYWTLVEPGDKITF 259	1846.09	0.67	80.6%	89.0%
63 of 139	7/23/2005	15	249 TLVEPGDKITFEATG 263	1577.78	0.35	84.7%	87.4%
64 of 139	7/23/2005	15	253 PGDKITFEATGNLVV 267	1560.78	0.5	85.5%	87.3%
65 of 139	7/23/2005	15	257 ITFEATGNLVVPRYA 271	1650.92	0.63	92.2%	87.9%
66 of 139	7/23/2005	15	261 ATGNLVVPRYAFAME 275	1638.94	0.6	85.1%	87.8%
67 of 139	7/23/2005	15	265 LVVPRYAFAMERNAG 279	1694.02	0.51	92.4%	83.2%
68 of 139	7/23/2005	15	269 RYAFAMERNAGSGII 283	1655.93	0.43	81.7%	82.9%
69 of 139	7/23/2005	15	273 AMERNAGSGIIISDT 287	1534.73	0.37	92.2%	87.1%
70 of 139	7/23/2005	15	277 NAGSGIIISDTPVHD 291	1495.61	0.47	86.0%	86.8%
71 of 139	7/23/2005	15	281 GIIISDTPVHDCNTT 295	1585.75	0.59	84.9%	87.4%
72 of 139	7/23/2005	15	285 SDTPVHDCNTTCQTP 299	1618.72	0.38	90.7%	87.7%
73 of 139	7/23/2005	15	289 VHDCNTTCQTPKGAI 303	1587.80	0.44	93.9%	82.3%
74 of 139	7/23/2005	15	293 NTTTCQTPKGAINSL 307	1548.75	0.47	87.4%	87.2%
75 of 139	7/23/2005	15	297 QTPKGAINSLPFQN 311	1615.82	0.49	88.8%	87.6%
76 of 139	7/23/2005	15	301 GAINSLPFQNIHPI 315	1621.86	0.8	81.5%	87.7%
77 of 139	7/23/2005	15	305 TSLPFQNIHPITIGK 319	1665.96	0.69	92.3%	83.0%
78 of 139	7/23/2005	15	309 FQNIHPITIGKCPKY 323	1759.11	0.66	98.3%	79.4%
79 of 139	7/23/2005	15	313 HPITIGKCPKYVKST 327	1672.04	0.43	94.7%	74.6%
80 of 139	7/23/2005	15	317 IGKCPKYVKSTKLRL 331	1734.20	0.33	100.0%	71.7%
81 of 139	7/23/2005	15	321 PKYVKSTKLRLATGL 335	1675.08	0.32	96.1%	74.6%
82 of 139	7/23/2005	15	325 KSTKLRLATGLRNIP 339	1668.04	0.33	90.9%	74.5%
83 of 139	7/23/2005	15	329 LRLATGLRNIPSIQS 343	1638.94	0.55	90.0%	82.7%
84 of 139	7/23/2005	15	333 TGLRNIPSIQSRGLF 347	1658.92	0.54	87.6%	82.9%
85 of 139	7/23/2005	15	337 NIPSIQSRGLFGAIA 351	1543.80	0.63	82.3%	87.1%

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Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
86 of 139	7/23/2005	15	341 IQSRGLFGAIAGFIE 355	1578.85	0.63	86.5%	87.4%
87 of 139	7/23/2005	15	345 GLFGAIAAGFIEGGWT 359	1495.72	0.76	Crude	86.8%
88 of 139	7/23/2005	15	349 AIAAGFIEGGWTGMVD 363	1523.75	0.64	88.1%	87.0%
89 of 139	7/23/2005	15	353 FIEGGWTGMVDGWY 367	1674.86	0.69	93.4%	88.0%
90 of 139	7/23/2005	15	357 GWTGMVDGWYGYHHQ 371	1793.94	0.56	96.2%	84.0%
91 of 139	7/23/2005	15	361 MVDGWYGYHHQNEQ 375	1820.91	0.38	87.8%	84.2%
92 of 139	7/23/2005	15	365 WYGYHHQNEQSGYA 379	1796.84	0.35	88.8%	84.0%
93 of 139	7/23/2005	15	369 HHQNEQSGYAADLK 383	1654.73	0.08	91.6%	78.4%
94 of 139	7/23/2005	15	373 EQSGYAADLKSTQN 387	1568.64	0.08	90.9%	87.3%
95 of 139	7/23/2005	15	377 GYAADLKSTQNAIDE 391	1595.72	0.19	88.8%	87.5%
96 of 139	7/23/2005	15	381 DLKSTQNAIDEITNK 395	1689.86	0.19	80.6%	83.2%
97 of 139	7/23/2005	15	385 TQNAIDEITNKVNSV 399	1645.79	0.4	93.9%	87.8%
98 of 139	7/23/2005	15	389 IDEITNKVNSVIEKM 403	1733.02	0.43	97.4%	83.5%
99 of 139	7/23/2005	15	393 TNKVNSVIEKMNTQF 407	1753.01	0.45	96.0%	83.7%
100 of 139	7/23/2005	15	397 NSVIEKMNTQFTAVG 411	1638.87	0.49	86.1%	87.8%
101 of 139	7/23/2005	15	401 EKMNTQFTAVGKEFN 415	1743.98	0.31	84.9%	83.6%
102 of 139	7/23/2005	15	405 TQFTAVGKEFNHLEK 419	1748.98	0.31	81.7%	79.3%
103 of 139	7/23/2005	15	409 AVGKEFNHLEKRIEN 423	1784.02	0.22	86.2%	75.8%
104 of 139	7/23/2005	15	413 EFNHLEKRIENLNKK 427	1912.19	0.2	92.0%	73.7%
105 of 139	7/23/2005	15	417 LEKRIENLNKKVDDG 431	1771.01	0.05	83.2%	75.7%
106 of 139	7/23/2005	15	421 IENLNKKVDDGFLLD 435	1732.95	0.42	84.3%	83.5%
107 of 139	7/23/2005	15	425 NKKVDDGFLLDIWTY 439	1828.02	0.46	86.2%	84.2%
108 of 139	7/23/2005	15	429 DDGFLLDIWTYNAEL 443	1784.96	0.67	86.9%	88.7%
109 of 139	7/23/2005	15	433 LDIWTYNAELVLE 447	1805.12	0.92	97.7%	88.8%
110 of 139	7/23/2005	15	437 TYNAELVLEENERT 451	1778.01	0.54	80.8%	88.6%
111 of 139	7/23/2005	15	441 ELLVLEENERTLDYH 455	1857.10	0.53	84.5%	84.4%
112 of 139	7/23/2005	15	445 LLENERTLDYHDSNV 459	1817.93	0.33	86.1%	84.2%
113 of 139	7/23/2005	15	449 ERTLTYHDSNVKNLY 463	1867.01	0.26	89.1%	80.4%
114 of 139	7/23/2005	15	453 DYHDSNVKNLYEKVR 467	1880.05	0.15	92.1%	76.7%
115 of 139	7/23/2005	15	457 SNVKNLYEKVRSQLK 471	1806.10	0.21	90.1%	76.0%
116 of 139	7/23/2005	15	461 NLYEKVRSQLKNNAK 475	1805.08	0.19	86.6%	76.0%
117 of 139	7/23/2005	15	465 KVRSQLKNNAKEIGN 479	1698.95	0.13	100.0%	74.9%
118 of 139	7/23/2005	15	469 QLKNNAKEIGNGCFE 483	1664.86	0.36	98.2%	83.0%
119 of 139	7/23/2005	15	473 NAKEIGNGCFEFYHK 487	1756.97	0.42	80.6%	79.4%
120 of 139	7/23/2005	15	477 IGNGCFEFYHKCDNT 491	1747.92	0.57	88.6%	83.6%
121 of 139	7/23/2005	15	481 CFEFYHKCDNTCMES 495	1857.10	0.55	86.8%	84.4%
122 of 139	7/23/2005	15	485 YHKCDNTCMESVKNG 499	1728.94	0.31	94.2%	79.1%
123 of 139	7/23/2005	15	489 DNTCMESVKNGTYDY 503	1739.86	0.29	100.0%	88.4%
124 of 139	7/23/2005	15	493 MESVKNGTYDYPKYS 507	1781.98	0.23	88.4%	83.9%
125 of 139	7/23/2005	15	497 KNGTYDYPKYSEEAK 511	1792.96	-0.02	84.0%	79.7%
126 of 139	7/23/2005	15	501 YDYPKYSEEAKLNRE 515	1905.09	0.03	88.0%	80.7%
127 of 139	7/23/2005	15	505 KYSEEAKLNREEIDG 519	1780.94	-0.07	87.8%	79.6%
128 of 139	7/23/2005	15	509 EAKLNREEIDGVKLE 523	1742.97	0.07	80.8%	79.3%
129 of 139	7/23/2005	15	513 NREEIDGVKLESTRI 527	1758.96	0.11	90.8%	79.4%
130 of 139	7/23/2005	15	517 IDGVKLESTRIYQIL 531	1748.06	0.5	99.0%	83.6%
131 of 139	7/23/2005	15	521 KLESTRIYQILAIYS 535	1798.14	0.56	84.9%	84.0%
132 of 139	7/23/2005	15	525 TRIYQILAIYSTVAS 539	1699.01	0.67	84.4%	88.2%
133 of 139	7/23/2005	15	529 QILAIYSTVASSLVL 543	1577.90	0.84	Crude	87.4%
134 of 139	7/23/2005	15	533 YYSTVASSLVLVSVL 547	1550.86	0.88	Crude	87.2%
135 of 139	7/23/2005	15	537 VASSLVLVSVLGAIS 551	1414.71	0.82	Crude	86.1%
136 of 139	7/23/2005	15	541 LVLVSVLGAISFWMC 555	1638.07	1.17	Crude	87.8%
137 of 139	7/23/2005	15	545 VSLGAISFWMCSNGS 559	1558.80	0.82	82.8%	87.2%
138 of 139	7/23/2005	15	549 AISFWMCSNGSLQCR 563	1703.00	0.76	97.5%	88.2%
139 of 139	7/23/2005	14	553 WMCSNGSLQCRICI 566	1613.95	0.91	97.1%	87.6%

^a% full-length

^bRemainder is salt and water

Table 2 - Amino Acid Analysis

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
1 of 139	Expected	3.00							1.00	3.00	1.00	1.00	1.00			2.00		1.00	2.00
	Actual	3.01							0.87	2.88	0.89	0.87	1.00			2.16		1.01	0.47 ^a
2 of 139	Expected	3.00		2.00						3.00			1.00			3.00		1.00	2.00
	Actual	3.00		2.06						2.82			1.05			2.85		0.91	0.55 ^a
3 of 139	Expected	3.00		2.00	1.00		1.00		1.00	2.00			1.00			3.00		1.00	
	Actual	3.00		1.86	0.49 ^b		1.02		0.98	1.86			0.86			2.82		0.93	
4 of 139	Expected	4.00		3.00	1.00		1.00	1.00	1.00	1.00						2.00		1.00	
	Actual	4.00		3.05	0.47 ^b		0.85	0.79	0.93	1.09						1.87		0.86	
5 of 139	Expected	2.00		4.00	1.00		1.00	1.00	1.00	1.00					1.00	2.00		1.00	
	Actual	2.00		4.10	0.43 ^b		0.91	0.99	0.84	1.19					1.08	1.95		0.79	
6 of 139	Expected	1.00		4.00	1.00		1.00	1.00	1.00						1.00	3.00		1.00	1.00
	Actual	0.96		4.24	0.45 ^b		0.95	1.00	0.95						1.06	2.90		0.82	1.13
7 of 139	Expected	1.00		4.00		1.00	0.00	1.00		1.00	1.00				1.00	3.00			2.00
	Actual	0.96		4.00		1.02	0.00	0.97		0.95	1.03				1.01	2.73			2.12
8 of 139	Expected			3.00		1.00				1.00	1.00				1.00	4.00			4.00
	Actual			3.00		0.87				0.80	0.99				0.92	3.56			3.73
9 of 139	Expected			2.00		1.00		1.00		1.00	1.00				1.00	3.00			5.00
	Actual			2.00		1.11		1.03		1.02	0.98				1.06	2.68			4.70
10 of 139	Expected			2.00		2.00		1.00		3.00	1.00				1.00	2.00			3.00
	Actual			1.94		2.00		0.91		3.03	1.11				0.90	1.68			3.04
11 of 139	Expected			3.00		1.00		2.00		2.00	1.00				1.00	2.00			3.00
	Actual			2.79		1.01		1.87		2.00	1.09				0.89	1.68			3.00
12 of 139	Expected			3.00	1.00	1.00	1.00	2.00		3.00	2.00				1.00				1.00
	Actual			2.66	0.43 ^b	0.88	1.00	2.06		3.00	1.76				0.82				0.95
13 of 139	Expected		1.00	2.00	1.00	1.00	2.00	1.00		4.00	3.00								
	Actual		1.07	2.00	0.43 ^b	1.05	2.11	1.04		3.81	2.82								
14 of 139	Expected	1.00	1.00	1.00	1.00		2.00	1.00		3.00	3.00			1.00					1.00
	Actual	0.79	1.03	0.89	0.61 ^b		2.08	0.89		2.60	2.68			1.00					0.95
15 of 139	Expected	1.00	1.00		1.00		2.00	1.00		4.00	3.00			1.00					1.00
	Actual	0.75	1.00		0.74 ^b		2.05	0.92		3.72	2.80			1.05					1.01
16 of 139	Expected	2.00	1.00	1.00	1.00		2.00	1.00	1.00	3.00	1.00			1.00					1.00
	Actual	1.99	0.95	0.79	0.58 ^b		2.07	1.03	0.98	2.99	0.88			1.00					0.89
17 of 139	Expected	2.00		1.00	1.00		2.00	1.00	2.00	3.00	1.00			1.00			1.00		
	Actual	1.92		1.00	0.46 ^b		2.01	0.98	1.85	2.72	0.99			1.02			1.00		0.00 ^c
18 of 139	Expected	1.00		2.00	1.00	1.00	3.00			2.00	2.00			1.00					1.00
	Actual	0.97		2.08	0.43 ^b	1.04	3.15		1.99	1.81	1.00			1.09					0.00 ^c
19 of 139	Expected	1.00		2.00	1.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00				1.00
	Actual	0.89		2.16	0.65 ^b	2.12	1.99		2.05	2.00				0.92	0.98				0.00 ^c
20 of 139	Expected	1.00		1.00	1.00	2.00	1.00		1.00	2.00				1.00	3.00	1.00	1.00		
	Actual	0.88		0.79	0.42 ^b	2.02	1.06		0.88	1.87				1.05	3.19	0.82	0.00 ^c		
21 of 139	Expected	1.00		1.00	1.00	2.00				1.00				1.00	5.00	1.00	1.00	1.00	
	Actual	1.00		0.81	0.52 ^b	1.81				1.07				0.91	4.90	0.97	0.00 ^c	1.03	
22 of 139	Expected	1.00				2.00			1.00	1.00					5.00	2.00	1.00	1.00	1.00
	Actual	1.12				2.18			0.49 ^a	0.90					5.00	1.91	0.00 ^c	0.83	0.45 ^a
23 of 139	Expected	1.00		1.00		1.00			1.00					1.00	5.00	2.00	1.00	1.00	1.00
	Actual	1.08		1.10		1.00			0.46 ^a					0.95	4.93	1.78	0.00 ^c	0.83	0.39 ^a
24 of 139	Expected			2.00	1.00	1.00	1.00		1.00					1.00	3.00	2.00	1.00	1.00	1.00
	Actual			2.00	0.62 ^b	0.84	1.02		0.39 ^a					1.05	3.09	1.65	0.00 ^c	0.84	0.28 ^a
25 of 139	Expected			3.00	1.00	1.00	2.00							2.00	2.00	2.00			1.00
	Actual			3.09	0.43 ^b	0.85	1.91							1.87	1.87	1.62			1.07
26 of 139	Expected			4.00	1.00		2.00		1.00				1.00	1.00	2.00	1.00			2.00
	Actual			4.07	0.57 ^b		2.07		0.93				0.85	1.00	1.93	0.65			1.79
27 of 139	Expected		1.00	2.00	1.00	2.00	2.00		1.00	1.00				1.00	1.00				2.00
	Actual		1.08	2.13	0.54 ^b	1.95	2.13		0.81	0.95				0.71	1.00				2.00
28 of 139	Expected		1.00	2.00		4.00	1.00		1.00	2.00				1.00	1.00	1.00			1.00
	Actual		1.13	1.72		3.90	1.06		0.79	1.70				0.83	1.00	0.99			1.13
29 of 139	Expected		1.00	1.00		4.00			1.00	2.00					4.00				1.00
	Actual		0.94	1.12		4.08			0.95	2.00					3.86				0.95
30 of 139	Expected		2.00			4.00				2.00				2.00	4.00				1.00
	Actual		2.12			4.00				2.00				1.94	3.85				1.00

Table 2 - Amino Acid Analysis

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
31 of 139	Expected		1.00			3.00			1.00	1.00			3.00	1.00	4.00				1.00
	Actual		1.11			3.02			0.98	0.85			2.74	1.00	4.08				0.88
32 of 139	Expected		1.00			2.00			1.00		1.00		3.00	1.00	4.00	1.00			1.00
	Actual		1.04			1.80			1.04		0.94		2.69	1.00	3.65	1.07			0.88
33 of 139	Expected		1.00	1.00		2.00		1.00	1.00		1.00		2.00	2.00	2.00	1.00	1.00		
	Actual		0.97	1.13		1.97		0.84	0.93		1.08		1.98	1.78	1.94	1.00	0.00 ^c		
34 of 139	Expected			3.00				1.00	1.00		2.00		1.00	2.00	3.00	1.00	1.00		
	Actual			3.17				0.86	1.00		2.01		1.02	1.87	2.78	0.98	0.00 ^c		
35 of 139	Expected	1.00		3.00			1.00	1.00			1.00			1.00	3.00	2.00	1.00		1.00
	Actual	0.94		3.13			1.06	1.05			1.00			0.93	2.84	1.82	0.00 ^c		0.97
36 of 139	Expected	2.00		3.00	1.00		1.00	2.00			1.00			2.00	1.00	1.00			1.00
	Actual	2.15		3.11	0.47 ^b		1.06	2.01			0.97			2.00	0.80	0.93			1.01
37 of 139	Expected	4.00		1.00	1.00		2.00	1.00			2.00			1.00	1.00	1.00			1.00
	Actual	4.01		1.12	0.48 ^b		1.95	1.03			1.99			0.98	0.96	1.02			0.97
38 of 139	Expected	4.00			1.00		1.00	1.00			2.00		1.00	1.00	1.00	1.00		1.00	1.00
	Actual	4.13			0.43 ^b		1.05	1.03			1.97		0.98	0.97	0.92	0.89		1.00	0.91
39 of 139	Expected	2.00		1.00	1.00		1.00	1.00	1.00	1.00	2.00		1.00	1.00	1.00		1.00	1.00	
	Actual	2.15		1.09	0.39 ^b		1.28	1.14	0.97	0.92	1.96		1.00	0.96	1.08		0.00 ^c	0.90	
40 of 139	Expected	1.00		1.00			1.00		1.00	2.00	4.00		1.00		1.00		1.00	1.00	1.00
	Actual	0.96		1.00			1.08		0.97	1.72	3.80		0.95		1.13		0.00 ^c	0.97	0.97
41 of 139	Expected			2.00			1.00		1.00	2.00	3.00		1.00		1.00		1.00	2.00	1.00
	Actual			1.91			1.02		0.97	1.79	3.10		0.99		1.00		0.00 ^c	1.84	1.00
42 of 139	Expected			1.00			1.00		1.00	3.00	3.00			1.00	2.00		1.00	1.00	1.00
	Actual			0.96			1.03		0.69	2.94	2.75			1.00	1.80		0.00 ^c	0.94	0.84
43 of 139	Expected			1.00			1.00		1.00	1.00	4.00			1.00	3.00			2.00	1.00
	Actual			0.88			1.15		0.90	0.97	3.67			1.10	3.01			1.95	0.92
44 of 139	Expected			3.00			1.00		1.00	1.00	3.00			1.00	3.00			2.00	
	Actual			3.00			1.26		0.76	0.84	3.03			0.92	2.93			2.03	
45 of 139	Expected			2.00		1.00	1.00		1.00	2.00	4.00				2.00			1.00	1.00
	Actual			1.97		1.00	0.00		1.01	1.95	4.01				2.06			0.96	0.94
46 of 139	Expected			2.00		1.00	2.00		1.00	2.00	2.00				1.00		1.00	1.00	2.00
	Actual			2.03		1.04	2.26		0.89	1.70	2.00				0.95		0.00 ^c	0.95	1.75
47 of 139	Expected			1.00		1.00	2.00	2.00	1.00	2.00	2.00			1.00			1.00		2.00
	Actual			1.00		1.14	1.98	1.74	0.98	1.89	2.06			1.05			0.00 ^c		1.79
48 of 139	Expected	1.00				1.00	1.00	2.00	1.00	2.00				1.00	2.00	1.00	1.00		2.00
	Actual	1.14				0.97	1.18	1.78	0.98	1.94				1.18	2.00	1.10	0.00 ^c		1.61
49 of 139	Expected	1.00		1.00		2.00	1.00	2.00	1.00	1.00				1.00	3.00	1.00	1.00		
	Actual	1.06		0.97		1.94	1.07	1.90	1.00	0.98				1.08	2.70	1.03	0.00 ^c		
50 of 139	Expected	1.00		2.00		3.00		2.00		1.00				1.00	3.00	1.00		1.00	
	Actual	1.00		1.89		2.93		1.82		1.01				1.00	2.73	1.00		0.92	
51 of 139	Expected	2.00		3.00		3.00				1.00					2.00	2.00		2.00	
	Actual	1.95		2.98		3.15				1.00					1.98	2.05		1.95	
52 of 139	Expected	1.00		2.00		3.00	1.00			1.00			1.00		1.00	1.00		2.00	2.00
	Actual	1.00		2.05		2.81	1.00			0.96			0.87		0.95	0.97		1.92	1.81
53 of 139	Expected	1.00	1.00	2.00		1.00	1.00						1.00		2.00	1.00		3.00	2.00
	Actual	1.11	1.14	1.98		1.00	1.01						1.03		1.93	1.01		2.72	1.93
54 of 139	Expected		1.00	1.00			1.00				2.00		2.00		3.00	1.00		2.00	2.00
	Actual		1.13	1.02			1.03				1.96		2.00		2.90	1.06		1.91	1.73
55 of 139	Expected		1.00			1.00	1.00		1.00		3.00		2.00	1.00	3.00			1.00	1.00
	Actual		0.91			0.93	0.96		1.05		2.99		1.87	1.01	2.59			1.03	0.90
56 of 139	Expected	1.00	2.00			1.00			2.00		3.00		1.00	2.00	2.00			1.00	
	Actual	0.84	1.61			0.90			2.06		3.01		0.96	2.07	2.01			1.01	
57 of 139	Expected	1.00	2.00	1.00		1.00			2.00		4.00		1.00	2.00					1.00
	Actual	0.89	1.92	1.00		0.93			1.98		4.07		0.96	2.12					0.94
58 of 139	Expected	1.00	3.00	1.00		3.00	1.00		2.00		1.00			2.00					1.00
	Actual	0.89	2.82	0.94		2.90	1.13		1.96		1.07			2.00					0.88
59 of 139	Expected		3.00	2.00		2.00	1.00		1.00		1.00	1.00		1.00				2.00	1.00
	Actual		2.78	1.85		1.92	0.96		0.73		1.15	0.92		1.00				2.15	0.85
60 of 139	Expected		2.00	2.00		2.00	1.00			1.00		1.00				1.00	1.00	2.00	2.00
	Actual		1.81	2.18		2.12	0.98			0.90		1.02				0.97	0.00 ^c	2.00	2.01

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
61 of 139	Expected		1.00	2.00		2.00	2.00			1.00		1.00		1.00		1.00	1.00	2.00	1.00
	Actual		1.14	2.00		1.93	2.16			0.78		0.99		0.86		0.98	0.00 ^c	1.95	1.00
62 of 139	Expected			2.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00		2.00	1.00	2.00	1.00
	Actual			1.95		1.11	1.05		0.87	0.94	1.14		0.80	1.00		1.87	0.00 ^c	1.87	0.89
63 of 139	Expected	1.00		1.00		2.00	2.00		1.00	1.00	1.00		1.00	1.00		3.00			1.00
	Actual	1.18		1.12		2.17	2.15		0.85	0.89	1.05		0.78	1.00		2.71			0.95
64 of 139	Expected	1.00		2.00		1.00	2.00		1.00	1.00	1.00		1.00	1.00		2.00			2.00
	Actual	1.12		2.04		1.13	2.00		0.96	0.94	0.95		1.01	0.90		1.73			0.85 ^a
65 of 139	Expected	2.00	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00		2.00		1.00	2.00
	Actual	2.00	1.07	1.02		1.06	1.03		0.81	0.78			0.88	0.98		1.67		0.88	0.77 ^a
66 of 139	Expected	3.00	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00		1.00		1.00	2.00
	Actual	3.00	1.13	0.99		1.02	1.00			0.78		0.78	1.04	0.92		1.00		0.88	0.75 ^a
67 of 139	Expected	3.00	2.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00				1.00	2.00
	Actual	3.12	2.25	1.01		1.01	1.09			0.75		0.86	1.07	1.00				0.98	0.73 ^a
68 of 139	Expected	3.00	2.00	1.00		1.00	2.00		2.00			1.00	1.00		1.00			1.00	
	Actual	3.00	2.06	0.89		0.99	2.06		0.73 ^a			0.79	0.98		0.94			0.85	
69 of 139	Expected	2.00	1.00	2.00		1.00	2.00		3.00			1.00			2.00	1.00			
	Actual	2.00	1.09	1.91		0.94	2.17		1.25 ^a			0.82			1.82	1.05			
70 of 139	Expected	1.00		3.00			2.00	1.00	3.00					1.00	2.00	1.00			1.00
	Actual	1.11		2.95			2.03	0.95	1.78 ^a					0.96	1.98	0.90			1.00
71 of 139	Expected			3.00	1.00		1.00	1.00	3.00					1.00	1.00	3.00			1.00
	Actual			3.05	0.64 ^b		1.08	0.95	1.23 ^a					1.03	0.98	3.01			1.00
72 of 139	Expected			3.00	2.00	1.00			1.00					2.00	1.00	4.00			1.00
	Actual			3.03	0.76 ^b	1.09		0.98						2.17	1.05	3.81			1.00
73 of 139	Expected	1.00		2.00	2.00	1.00	1.00	1.00	1.00		1.00			1.00		3.00			1.00
	Actual	1.18		2.04	0.66 ^b	0.96	1.19	0.95	1.01		0.98			1.00		2.67			1.05
74 of 139	Expected	1.00		2.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00	1.00	4.00			
	Actual	1.12		1.96	0.53 ^b	1.07	1.02		0.85	0.99	1.02			1.00	1.04	3.77			
75 of 139	Expected	1.00		2.00		2.00	1.00	1.00	1.00	1.00	1.00		1.00	2.00	1.00	2.00			
	Actual	1.10		1.97		2.00	0.96		0.92	0.97	1.08		0.80	2.00	0.85	1.79			
76 of 139	Expected	1.00		2.00		1.00	1.00	1.00	3.00	1.00			1.00	2.00	1.00	1.00			
	Actual	0.96		1.97		1.03	0.98	1.05	3.09	0.99			0.96	2.00	0.95	0.91			
77 of 139	Expected			1.00		1.00	1.00	1.00	3.00	1.00	1.00		1.00	2.00	1.00	2.00			
	Actual			0.96		0.98	0.97	1.01	3.02	0.97	0.88		0.97	2.00	0.99	1.60			
78 of 139	Expected			1.00	1.00	1.00	1.00	1.00	3.00		2.00		1.00	2.00		1.00		1.00	
	Actual			0.86	0.52 ^b	0.89	0.92	0.83	2.81		2.14		1.03	2.00		0.95		1.01	
79 of 139	Expected				1.00		1.00	1.00	2.00		3.00			2.00	1.00	2.00		1.00	1.00
	Actual				0.47 ^b		1.04	0.94	1.81		3.00			2.00	0.88	1.83		0.90	1.00
80 of 139	Expected		1.00			1.00			1.00	2.00	4.00			1.00	1.00	1.00		1.00	1.00
	Actual		0.96			0.50 ^b			0.82	1.04	1.92	3.70		1.01	1.17	0.91		1.07	0.86
81 of 139	Expected	1.00	1.00				1.00			3.00	3.00			1.00	1.00	2.00		1.00	1.00
	Actual	1.00	0.93				1.08			3.02	3.16			0.96	0.98	1.93		1.01	0.96
82 of 139	Expected	1.00	2.00	1.00			1.00		1.00	3.00	2.00			1.00	1.00	2.00			
	Actual	0.90	2.01	0.96			1.13		0.99	2.77	2.00			1.08	1.11	1.94			
83 of 139	Expected	1.00	2.00	1.00		1.00	1.00		2.00	3.00				1.00	2.00	1.00			
	Actual	1.00	2.11	1.07		0.90	1.00		1.86	3.06				0.98	2.19	1.02			
84 of 139	Expected		2.00	1.00		1.00	2.00		2.00	2.00			1.00	1.00	2.00	1.00			
	Actual		2.09	1.06		0.93	2.08		1.78	2.03			0.90	1.00	2.05	0.94			
85 of 139	Expected	2.00	1.00	1.00		1.00	2.00		3.00	1.00			1.00	1.00	2.00				
	Actual	2.00	1.19	1.00		0.80	2.07		2.77	1.06			1.03	0.85	1.85				
86 of 139	Expected	2.00	1.00			2.00	3.00		3.00	1.00			2.00		1.00				
	Actual	2.14	1.00			2.02	3.07		2.89	0.98			1.85		0.89				
87 of 139	Expected	2.00				1.00	5.00		2.00	1.00			2.00			1.00	1.00		
	Actual	1.63				0.78	4.56		1.71	0.82			1.89			0.82	0.00 ^c		
88 of 139	Expected	2.00		1.00		1.00	4.00		2.00			1.00	1.00			1.00	1.00		1.00
	Actual	2.00		1.10		0.87	4.04		1.78			1.09	0.99			1.08	0.00 ^c		0.99
89 of 139	Expected			1.00		1.00	5.00		1.00			1.00	1.00			1.00	2.00	1.00	1.00
	Actual			0.94		0.95	5.11		0.90			1.04	0.91			1.00	0.00 ^c	0.95	1.02
90 of 139	Expected			1.00		1.00	4.00	2.00				1.00				1.00	2.00	2.00	1.00
	Actual			0.90		1.00	4.16	2.01				0.96				0.98	0.00 ^c	2.08	0.84

Table 2 - Amino Acid Analysis

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
91 of 139	Expected			2.00		3.00	3.00	2.00				1.00					1.00	2.00	1.00
	Actual			2.11		2.80	3.23	1.86				1.00					0.00 ^c	2.08	0.92
92 of 139	Expected	1.00				3.00	3.00	2.00							1.00			1.00	3.00
	Actual	0.98		0.68		2.96	3.14	2.00							0.83		0.00 ^c	2.93	
93 of 139	Expected	2.00		2.00		3.00	2.00	2.00		1.00	1.00				1.00				1.00
	Actual	2.00		2.05		2.79	1.88	1.88		1.00	0.97				0.85				0.91
94 of 139	Expected	2.00		2.00		3.00	2.00			1.00	1.00				2.00	1.00			1.00
	Actual	1.79		1.85		2.95	1.99			1.10	1.00				1.90	0.94			1.09
95 of 139	Expected	3.00		3.00		2.00	1.00		1.00	1.00	1.00				1.00	1.00			1.00
	Actual	3.00		3.02		2.06	0.93		0.84	0.84	0.92				0.89	0.90			0.92
96 of 139	Expected	1.00		4.00		2.00			2.00	1.00	2.00				1.00	2.00			
	Actual	1.06		3.98		2.20			1.81	1.00	2.02				0.83	1.78			
97 of 139	Expected	1.00		4.00		2.00			2.00		1.00				1.00	2.00			2.00
	Actual	1.00		3.86		1.88			1.97		0.80				0.85	1.86			1.74
98 of 139	Expected			3.00		2.00			3.00		2.00	1.00			1.00	1.00			2.00
	Actual			2.90		2.00			2.33 ^a		1.84	1.03			0.95	1.05			1.19 ^a
99 of 139	Expected			3.00		2.00			1.00		2.00	1.00	1.00		1.00	2.00			2.00
	Actual			2.76		1.89			0.44 ^a		1.93	0.98	1.00		0.81	1.69			0.77 ^a
100 of 139	Expected	1.00		2.00		2.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	2.00			2.00
	Actual	1.00		1.94		1.72	0.84		0.42 ^a		1.13	0.89	1.04		0.72	1.91			1.33 ^a
101 of 139	Expected	1.00		2.00		3.00	1.00				2.00	1.00	2.00			2.00			1.00
	Actual	1.00		1.94		2.74	0.81				2.10	0.88	2.07			1.62			0.98
102 of 139	Expected	1.00		1.00		3.00	1.00	1.00		1.00	2.00		2.00			2.00			1.00
	Actual	1.00		1.06		2.91	0.73	0.85		0.77	2.18		1.84			1.66			0.89
103 of 139	Expected	1.00	1.00	2.00		3.00	1.00	1.00	1.00	1.00	2.00				1.00				1.00
	Actual	1.00	0.98	2.03		2.86	0.83	0.87	0.95	0.98	2.18		0.96						0.85
104 of 139	Expected		1.00	3.00		3.00		1.00	1.00	2.00	3.00		1.00						
	Actual		0.91	3.16		3.06		0.88	1.00	1.97	3.10		0.89						
105 of 139	Expected		1.00	4.00		2.00	1.00		1.00	2.00	3.00								1.00
	Actual		0.91	4.19		1.92	1.04		0.94	1.88	2.93								1.00
106 of 139	Expected			5.00		1.00	1.00		2.00	2.00	2.00		1.00						1.00
	Actual			4.15		0.96	1.07		1.86	1.88	2.12		1.00						0.86
107 of 139	Expected			5.00		1.00		1.00	1.00	1.00	2.00		1.00			1.00	1.00	1.00	1.00
	Actual			5.18		1.05		1.06	0.97	1.97			0.95			0.89	0.00 ^c	1.00	0.78
108 of 139	Expected	1.00		4.00		1.00	1.00		1.00	3.00						1.00	1.00	1.00	
	Actual	1.01		3.70		0.99	1.03		0.96	2.91			0.99			1.00	0.00 ^c	0.85	
109 of 139	Expected	1.00		2.00		2.00			1.00	5.00							1.00	1.00	1.00
	Actual	1.08		2.00		1.93			0.93	4.94							0.99	0.00 ^c	0.90
110 of 139	Expected	1.00	1.00	2.00		3.00				4.00						2.00		1.00	1.00
	Actual	1.00	1.12	2.19		2.92				3.80						2.04		0.81	0.96
111 of 139	Expected		1.00	2.00		3.00		1.00		5.00						1.00		1.00	1.00
	Actual		1.13	1.80		3.16		1.15		4.79						0.99		1.16	1.00
112 of 139	Expected		1.00	4.00		2.00		1.00		3.00					1.00	1.00		1.00	1.00
	Actual		0.92	4.00		2.06		0.93		3.03					1.12	0.75		1.19	0.98
113 of 139	Expected		1.00	4.00		1.00		1.00		2.00	1.00				1.00	1.00		2.00	1.00
	Actual		0.90	3.98		1.02		0.90		1.73	1.02				1.06	0.76		2.00	0.97
114 of 139	Expected		1.00	4.00		1.00		1.00		1.00	2.00				1.00			2.00	2.00
	Actual		0.95	4.00		0.92		0.84		0.93	1.83				1.05			2.07	2.04
115 of 139	Expected		1.00	2.00		2.00				2.00	3.00				2.00			1.00	2.00
	Actual		0.99	1.90		2.20				1.88	3.01				2.04			1.00	1.90
116 of 139	Expected	1.00	1.00	3.00		2.00				2.00	3.00				1.00			1.00	1.00
	Actual	0.97	1.00	3.03		2.07				1.78	2.78				0.93			1.06	0.99
117 of 139	Expected	1.00	1.00	3.00		2.00	1.00		1.00	1.00	3.00				1.00				1.00
	Actual	1.07	0.82	3.16		2.27	0.99		1.00	0.92	2.93				0.93				0.86
118 of 139	Expected	1.00		3.00	1.00	3.00	2.00		1.00	1.00	2.00		1.00						
	Actual	1.03		2.97	0.56 ^b	2.90	1.73		1.00	0.86	1.83		1.01						
119 of 139	Expected	1.00		2.00	1.00	2.00	2.00	1.00	1.00		2.00		2.00						1.00
	Actual	0.92		2.06	0.51 ^b	2.16	2.02	0.87	1.00		1.94		2.07						1.06
120 of 139	Expected			3.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00		2.00			1.00			1.00
	Actual			2.98	0.52 ^b	1.01	1.92	0.91	1.10		0.98		2.01			1.00			0.86

Table 2 - Amino Acid Analysis

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
121 of 139	Expected			2.00	3.00	2.00		1.00			1.00	1.00	2.00		1.00	1.00		1.00	
	Actual			2.08	1.37 ^b	2.14		1.00			1.03	0.99	0.00		0.98	0.84		0.00	
122 of 139	Expected			3.00	2.00	1.00	1.00	1.00			2.00	1.00			1.00	1.00		1.00	1.00
	Actual			2.90	0.77 ^b	1.07	1.13	0.85			2.01	0.81			0.85	0.66		1.00	0.95
123 of 139	Expected			4.00	1.00	1.00	1.00				1.00	1.00			1.00	2.00		2.00	1.00
	Actual			4.00	0.46 ^b	1.02	1.11				0.80	0.85			0.75	1.62		1.85	0.97
124 of 139	Expected			2.00		1.00	1.00				2.00	1.00		1.00	2.00	1.00		3.00	1.00
	Actual			1.93		1.08	1.02				2.03	1.00		1.00	2.04	0.95		3.00	0.95
125 of 139	Expected	1.00		2.00		2.00	1.00				3.00				1.00	1.00	1.00		3.00
	Actual	0.89		2.00		2.13	0.98				2.82				0.91	1.01	1.03		2.85
126 of 139	Expected	1.00	1.00	2.00		3.00				1.00	2.00				1.00	1.00			3.00
	Actual	0.90	1.11	2.00		2.77				0.90	1.81				0.95	1.08			2.95
127 of 139	Expected	1.00	1.00	2.00		4.00	1.00		1.00	1.00	2.00				1.00				1.00
	Actual	0.95	1.00	2.05		3.90	0.96		0.77	0.92	1.86				0.96				0.94
128 of 139	Expected	1.00	1.00	2.00		4.00	1.00		1.00	2.00	2.00								1.00
	Actual	0.92	0.95	2.12		4.10	1.00		0.84	2.00	2.00								0.80
129 of 139	Expected		2.00	2.00		3.00	1.00		2.00	1.00	1.00				1.00	1.00			1.00
	Actual		2.00	1.65		3.03	0.97		1.74	1.03	0.91				0.99	0.88			0.96
130 of 139	Expected		1.00	1.00		2.00	1.00		3.00	2.00	1.00				1.00	1.00		1.00	1.00
	Actual		1.00	0.84		2.07	0.97		2.85	1.71	1.01				1.03	1.02		0.79	0.60
131 of 139	Expected	1.00	1.00			2.00			3.00	2.00	1.00				2.00	1.00		2.00	
	Actual	1.00	0.79			2.16			2.78	1.78	1.00				2.04	0.83		1.87	
132 of 139	Expected	2.00	1.00			1.00			3.00	1.00					2.00	2.00		2.00	1.00
	Actual	1.82	0.88			0.98			3.18	0.96					1.89	2.00		1.92	1.04
133 of 139	Expected	2.00				1.00			2.00	3.00					3.00	1.00		1.00	2.00
	Actual	2.00				0.72			1.54	2.60					2.74	0.74		0.69	1.65
134 of 139	Expected	1.00							1.00	3.00					4.00	1.00		1.00	4.00
	Actual	1.19							1.00	2.94					3.73	0.79		0.80	2.40 ^a
135 of 139	Expected	2.00					1.00		1.00	3.00					4.00				4.00
	Actual	2.11					1.10		1.00	2.90					3.53				2.13 ^a
136 of 139	Expected	1.00			1.00		1.00		1.00	3.00		1.00	1.00		2.00		1.00		3.00
	Actual	1.00			0.50 ^b		0.97		1.07	2.70		0.82	1.01		1.67		0.00 ^c		0.77 ^a
137 of 139	Expected	1.00		1.00	1.00		2.00		1.00	1.00		1.00	1.00		4.00		1.00		1.00
	Actual	1.13		1.00	0.53 ^b		2.04		0.99	0.93		0.91	1.09		3.84		0.00 ^c		0.90
138 of 139	Expected	1.00	1.00	1.00	2.00	1.00	1.00		1.00	1.00					3.00		1.00		
	Actual	0.88	0.98	1.00	0.91 ^b	1.09	0.90		0.78	1.08		0.84	0.90		2.70		0.00 ^c		
139 of 139	Expected		1.00	1.00	3.00	1.00	1.00		2.00	1.00		1.00			2.00		1.00		
	Actual		1.04	0.90	1.47 ^b	0.97	1.00		1.97	1.00		0.85			1.80		0.00 ^c		

^aVal-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis

^bCys was partially destroyed during hydrolysis

^cTrp was completely destroyed during hydrolysis

Date: 22 MAY 2013

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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