

Peptide Array, Influenza Virus A/California/07/2009 (H1N1)pdm09 Hemagglutinin Protein

Catalog No. NR-19244

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Product Description: The 139-peptide array spans the hemagglutinin (HA) protein of the A/California/07/2009 (H1N1)pdm09 strain of influenza virus (GenPept: ACQ55359). Peptides are 14- or 15-mers, with 11 amino acid overlaps.

Lot: PF0810-1

Note: The lot numbers of the individual peptides are shown on the vial labels and in Table 1 below.

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by Electrospray Ionization
- Counter Ion Trifluoroacetate

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

Table 1							
Peptide	Lot #	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
1 of 139	A0800	08/02/2010	15	1-MKAILVLLYTFATA-15	1654.20	pass by MS	86.2%
2 of 139	A0303	06/03/2010	15	5-LVLLYTFATANADT-19	1619.07	pass by MS	71.7%
3 of 139	A0416	06/01/2010	15	9-LYTFATANADTLGIG-23	1575.40	pass by MS	73.3%
4 of 139	A0253	05/27/2010	15	13-ATANADTLGIGYHAN-27	1534.67	97.1%	77.6%
5 of 139	A0297	06/02/2010	15	17-ADTLGIGYHANNSTD-31	1594.00	97.3%	73.4%
6 of 139	A0298	06/02/2010	15	21-CIGYHANNSTDVDT-35	1610.00	92.4%	75.2%
7 of 139	A0304	06/03/2010	15	25-HANNSTDVDTVLEK-39	1643.47	97.7%	75.3%
8 of 139	A0305	06/04/2010	15	29-STDTVDTVLEKNVTV-43	1619.93	98.6%	74.1%
9 of 139	A0316	06/04/2010	15	33-VDTVLEKNVTVTHSV-47	1640.20	90.9%	74.5%
10 of 139	A0543	07/02/2010	15	37-LEKNVTVTHSVNLE-51	1695.40	97.5%	74.4%
11 of 139	A0306	06/03/2010	15	41-VTVTHSVNLEDKHN-55	1705.93	95.9%	72.4%
12 of 139	A0307	06/03/2010	15	45-HSVNLEDKHNGKLC-59	1706.33	98.5%	68.5%
13 of 139	A0322	06/04/2010	15	49-LLEDKHNGKLCCLRG-63	1723.67	97.5%	75.5%
14 of 139	A0339	06/08/2010	15	53-KHNGKLCCLRGVAPL-67	1632.93	96.1%	74.2%
15 of 139	A0323	06/04/2010	15	57-KLCKLRGVAPLHLGK-71	1632.53	93.6%	81.5%
16 of 139	A0393	06/14/2010	15	61-LRGVAPLHLGKCNIA-75	1561.67	98.1%	74.7%
17 of 139	A0340	06/08/2010	15	65-APLHLGKCNIAWIL-79	1604.67	99.2%	80.2%
18 of 139	A0341	06/08/2010	15	69-LGKCNIAWILGNPE-83	1583.40	97.8%	78.2%
19 of 139	A0342	06/08/2010	15	73-NIAGWILGNPECESL-87	1614.47	99.2%	76.0%
20 of 139	A0464	06/22/2010	15	77-WILGNPECESLSTAS-91	1606.33	93.6%	79.5%
21 of 139	A2297	08/26/2010	15	81-NPECESLSTASSWSY-95	1661.40	90.5%	86.3%
22 of 139	A0329	06/08/2010	15	85-ESLSTASSWSYIVET-99	1659.33	90.3%	75.1%
23 of 139	A0292	06/02/2010	15	89-TASSWSYIVETPSSD-103	1629.27	93.8%	74.4%
24 of 139	A0350	06/09/2010	15	93-WSYIVETPSSDNGTC-107	1657.13	90.1%	83.1%
25 of 139	A0451	06/21/2010	15	97-VETPSSDNGTCYPGD-111	1541.27	84.6%	76.7%
26 of 139	A0351	06/10/2010	15	101-SSDNGTCYPGDFIDY-115	1653.53	90.9%	76.3%

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Peptide	Lot #	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
27 of 139	A0363	06/11/2010	15	105-GTCYPGDFIDYEELR-119	1777.60	96.3%	75.9%
28 of 139	A0499	06/28/2010	15	109-PGDFIDYEELREQLS-123	1811.46	99.5%	79.5%
29 of 139	A0352	06/09/2010	15	113-IDYEELREQLSSVSS-127	1753.60	98.2%	74.1%
30 of 139	A0353	06/09/2010	15	117-ELREQLSSVSSFERF-131	1813.80	93.4%	82.0%
31 of 139	A0343	06/08/2010	15	121-QLSSVSSFERFEIFP-135	1771.60	90.9%	72.3%
32 of 139	A0344	06/08/2010	15	125-VSSFERFEIFPKTSS-139	1759.87	99.4%	75.5%
33 of 139	A0354	06/09/2010	15	129-ERFEIFPKTSSWPNH-143	1874.73	98.6%	70.5%
34 of 139	A0355	06/09/2010	15	133-IFPKTSSWPNHDSNK-147	1757.27	98.7%	81.9%
35 of 139	A0378	06/14/2010	15	137-TSSWPNHDSNKGVTA-151	1600.47	99.6%	73.3%
36 of 139	A0500	06/30/2010	15	141-PNHDSNKGVTAACPH-155	1546.87	99.6%	71.5%
37 of 139	A0364	06/10/2010	15	145-SNKGVTAACPHAGAK-159	1411.33	97.8%	70.2%
38 of 139	A0365	06/10/2010	15	149-VTAACPHAGAKSFYK-163	1550.53	95.6%	78.5%
39 of 139	A0379	06/11/2010	15	153-CPHAGAKSFYKNLIW-167	1735.00	99.2%	71.7%
40 of 139	A0366	06/11/2010	15	157-GAKSFYKNLIWLK-171	1794.13	97.4%	74.3%
41 of 139	A0428	06/17/2010	15	161-FYKNLIWLKKGNSY-175	1872.47	98.5%	76.5%
42 of 139	A0394	06/14/2010	15	165-LIWLKKGNSYPKLS-179	1745.93	99.0%	73.2%
43 of 139	A0395	06/15/2010	15	169-VKKGNSYPKLSKSYI-183	1711.47	99.0%	72.8%
44 of 139	A0396	06/14/2010	15	173-NSYPKLSKSYINDKG-187	1713.53	98.1%	74.0%
45 of 139	A0397	06/14/2010	15	177-KLSKSYINDKGKVEL-191	1722.07	92.1%	73.4%
46 of 139	A0405	06/16/2010	15	181-SYINDKGKVELVLWG-195	1719.67	97.5%	78.3%
47 of 139	A0406	06/16/2010	15	185-DKGKVELVLWGIHHP-199	1727.33	98.7%	73.4%
48 of 139	A0417	06/16/2010	15	189-EVLVLWGIHHPSTA-203	1645.13	90.1%	74.0%
49 of 139	A0398	06/15/2010	15	193-LWGIHHPSTADQQS-207	1663.33	96.2%	80.9%
50 of 139	A0407	06/16/2010	15	197-HHPSTADQQSLYQN-211	1711.93	98.9%	75.8%
51 of 139	A0399	06/14/2010	15	201-TSADQQSLYQNADAY-215	1673.93	97.2%	77.5%
52 of 139	A2243	08/24/2010	15	205-QQSLYQNADAYVFG-219	1703.00	pass by MS	81.6%
53 of 139	A2263	08/25/2010	15	209-YQNADAYVFGSSRY-223	1739.73	90.7%	77.2%
54 of 139	A0293	06/02/2010	15	213-DAYVFGSSRYSKKF-227	1753.27	95.0%	76.7%
55 of 139	A0294	06/02/2010	15	217-FVGSSRYSKKFKPEI-231	1772.60	97.4%	70.1%
56 of 139	A0408	06/16/2010	15	221-SRYSKKFKPEIAIRP-235	1820.33	99.8%	72.2%
57 of 139	A0409	06/16/2010	15	225-KKFKPEIAIRPKVRD-239	1824.73	99.0%	74.2%
58 of 139	A0410	06/16/2010	15	229-PEIAIRPKVRDQEGR-243	1764.20	99.8%	69.0%
59 of 139	A0418	06/16/2010	15	233-IRPKVRDQEGRMNYY-247	1925.60	97.7%	73.3%
60 of 139	A0419	06/16/2010	15	237-VRDQEGRMNYYWTLV-251	1930.66	98.8%	67.1%
61 of 139	A0465	06/22/2010	15	241-EGRMNYYWTLVEPGD-255	1829.40	97.7%	78.5%
62 of 139	A0501	06/29/2010	15	245-NYYWTLVEPGDKITF-259	1845.67	95.2%	75.6%
63 of 139	A0452	06/21/2010	15	249-TLVEPGDKITFEATG-263	1577.13	95.9%	70.9%
64 of 139	A0466	06/23/2010	15	253-PGDKITFEATGNLVV-267	1560.27	97.5%	72.5%
65 of 139	A0438	06/19/2010	15	257-ITFEATGNLVVPRYA-271	1650.27	93.1%	73.4%
66 of 139	A0476	06/23/2010	15	261-ATGNLVVPRYAFAME-275	1638.60	95.2%	69.7%
67 of 139	A0429	06/17/2010	15	265-LVVPRYAFAMERNAG-279	1693.60	95.2%	74.3%
68 of 139	A0439	06/18/2010	15	269-RYAFAMERNAGSGII-283	1654.60	98.8%	71.8%
69 of 139	A0811	07/30/2010	15	273-AMERNAGSGIIISDT-287	1534.67	96.4%	68.6%
70 of 139	A0477	06/23/2010	15	277-NAGSGIIISDTPVHD-291	1495.20	94.3%	71.6%
71 of 139	A0575	07/08/2010	15	281-GIIISDTPVHDCNTT-295	1585.27	95.8%	78.0%
72 of 139	A0467	06/22/2010	15	285-SDTPVHDCNTTCTP-299	1618.20	92.3%	79.0%
73 of 139	A0478	06/23/2010	15	289-VHDCNTTCTPKGAI-303	1587.40	99.0%	77.8%
74 of 139	A0490	06/25/2010	15	293-NTTCTPKGAINDSL-307	1547.67	99.2%	71.5%
75 of 139	A0502	06/30/2010	15	297-QTPKGAINDSLFPQN-311	1615.00	99.6%	75.5%

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76 of 139	A0491	06/25/2010	15	301-GAINTSLPFQNIHPI-315	1620.73	99.7%	74.8%
77 of 139	A0479	06/23/2010	15	305-TSLPFQNIHPITIGK-319	1665.40	99.1%	69.6%
78 of 139	A0544	07/02/2010	15	309-FQNIHPITIGKCPKY-323	1759.93	99.5%	75.3%
79 of 139	A0535	07/06/2010	15	313-HPITIGKCPKYVKST-327	1671.80	98.1%	70.4%
80 of 139	A0527	06/30/2010	15	317-IGKCPKYVKSTKLRL-331	1734.13	99.2%	76.3%
81 of 139	A0709	07/19/2010	15	321-PKYVKSTKLRLATGL-335	1674.73	98.4%	89.1%
82 of 139	A0330	06/07/2010	15	325-KSTKLRLATGLRNIP-339	1667.67	95.5%	66.4%
83 of 139	A0324	06/04/2010	15	329-LRLATGLRNIPSIQS-343	1638.53	98.5%	82.4%
84 of 139	A0331	06/07/2010	15	333-TGLRNIPSIQSRGLF-347	1658.53	84.9%	77.2%
85 of 139	A0332	06/07/2010	15	337-NIPSIQSRGLFGAIA-351	1543.40	91.3%	73.9%
86 of 139	A0801	07/30/2010	15	341-IQSRGLFGAIAGFIE-355	1578.60	90.2%	81.2%
87 of 139	A0826	08/03/2010	15	345-GLFGAIAFIEGGWT-359	1496.13	88.5%	81.6%
88 of 139	A0697	07/17/2010	15	349-AIAGFIEGGWTGMVD-363	1523.27	90.5%	77.1%
89 of 139	A0601	07/07/2010	15	353-FIEGGWTGMVDGWYG-367	1673.73	96.2%	83.3%
90 of 139	A0682	07/15/2010	15	357-GWTGMVDGWYGYHHQ-371	1793.87	94.4%	69.9%
91 of 139	A0570	07/06/2010	15	361-MVDGWYGYHHQNEQG-375	1820.60	99.3%	73.8%
92 of 139	A0545	07/06/2010	15	365-WYGYHHQNEQSGGYA-379	1796.80	95.0%	79.1%
93 of 139	A0698	07/16/2010	15	369-HHQNEQSGGYAADLK-383	1654.80	98.3%	79.2%
94 of 139	A0735	07/21/2010	15	373-EQSGGYAADLKSTQN-387	1568.47	96.5%	81.0%
95 of 139	A0782	07/27/2010	15	377-GYAADLKSTQNAIDE-391	1595.73	81.8%	85.1%
96 of 139	A0699	07/16/2010	15	381-DLKSTQNAIDEITNK-395	1689.73	98.9%	81.5%
97 of 139	A2363	09/15/2010	15	385-TQNAIDEITNKVNSV-399	1645.07	90.5%	76.1%
98 of 139	A2321	09/07/2010	15	389-IDEITNKVNSVIEKM-403	1733.80	96.3%	88.1%
99 of 139	A2309	08/30/2010	15	393-TNKVNSVIEKMNQF-407	1753.60	90.2%	87.2%
100 of 139	A2298	08/27/2010	15	397-NSVIEKMNQFTAVG-411	1639.53	pass by MS	90.0%
101 of 139	A0791	07/28/2010	15	401-EKMNQFTAVGKEFN-415	1743.13	95.9%	84.1%
102 of 139	A0546	07/02/2010	15	405-TQFTAVGKEFNHLEK-419	1748.73	99.7%	77.5%
103 of 139	A0639	07/13/2010	15	409-AVGKEFNHLEKRIEN-423	1783.80	96.0%	79.4%
104 of 139	A0626	07/12/2010	15	413-EFNHLEKRIENLNKK-427	1911.80	93.5%	82.6%
105 of 139	A0633	07/13/2010	15	417-LEKRIENLNKKVDDG-431	1770.47	98.6%	83.2%
106 of 139	A0571	07/03/2010	15	421-IENLNKKVDDGFLDI-435	1732.80	97.6%	79.6%
107 of 139	A0839	08/05/2010	15	425-NKKVDDGFLDIWTYN-439	1828.73	94.3%	86.1%
108 of 139	A0581	07/07/2010	15	429-DDGFLDIWTYNAELL-443	1785.07	97.8%	82.8%
109 of 139	A0700	07/19/2010	15	433-LDIWTYNAELLVLE-447	1805.33	pass by MS	85.8%
110 of 139	A0981	08/18/2010	15	437-TYNAELLVLENERT-451	1778.40	90.5%	81.4%
111 of 139	A0770	07/26/2010	15	441-ELLVLENERTLDYH-455	1856.73	96.3%	85.9%
112 of 139	A0640	07/13/2010	15	445-LLNERTLDYHDSNV-459	1817.93	99.4%	74.3%
113 of 139	A0572	07/06/2010	15	449-ERTLDYHDSNVKNLY-463	1866.80	96.7%	83.3%
114 of 139	A0627	07/13/2010	15	453-DYHDSNVKNLYEKVR-467	1880.00	99.3%	79.1%
115 of 139	A0573	07/03/2010	15	457-SNVKNLYEKVRSQK-471	1805.87	99.8%	80.3%
116 of 139	A0547	07/02/2010	15	461-NLYEKVRSQKNNNAK-475	1804.73	99.8%	78.0%
117 of 139	A0548	07/06/2010	15	465-KVRSQKNNNAKEIGN-479	1699.13	90.8%	77.2%
118 of 139	A0628	07/13/2010	15	469-QLKNNNAKEIGNGCFE-483	1664.20	99.4%	79.5%
119 of 139	A0536	06/30/2010	15	473-NAKEIGNGCFEFYHK-487	1757.13	99.0%	83.7%
120 of 139	A0654	07/14/2010	15	477-IGNGCFEFYHKCDNT-491	1747.80	98.8%	82.1%
121 of 139	A0602	07/07/2010	15	481-CFEFYHKCDNTCMES-495	1855.53	90.5%	82.1%
122 of 139	A2287	08/26/2010	15	485-YHKCDNTCMESVKNG-499	1728.53	88.6%	75.2%
123 of 139	A0832	08/04/2010	15	489-DNTCMESVKNGTYDY-503	1740.53	92.2%	82.9%
124 of 139	A0655	07/13/2010	15	493-MESVKNGTYDYPKYS-507	1781.67	99.4%	79.9%

Peptide	Lot #	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
125 of 139	A0656	07/13/2010	15	497-KNGTYDYPKYSEEAK-511	1792.93	98.9%	75.8%
126 of 139	A0629	07/13/2010	15	501-YDYPKYSEEAKLNRE-515	1905.27	99.4%	75.8%
127 of 139	A0634	07/13/2010	15	505-KYSEEAKLNREEIDG-519	1780.73	99.8%	78.2%
128 of 139	A0630	07/13/2010	15	509-EAKLNREEIDGVKLE-523	1743.13	98.6%	81.0%
129 of 139	A0683	07/15/2010	15	513-NREEIDGVKLESTRI-527	1758.80	82.7%	80.1%
130 of 139	A0721	07/20/2010	15	517-IDGVKLESTRIYQIL-531	1747.87	93.6%	82.3%
131 of 139	A2327	09/02/2010	15	521-KLESTRIYQILAIYS-535	1798.60	pass by MS	85.6%
132 of 139	A2335	09/10/2010	15	525-TRIQILAIYSTVAS-539	1698.67	pass by MS	70.4%
133 of 139	A2382	09/22/2010	15	529-QILAIYSTVASSLVL-543	1577.13	pass by MS	78.8%
134 of 139	A0756	07/14/2010	15	533-IYSTVASSLVLVVS-547	1549.73	pass by MS	78.4%
135 of 139	A0757	07/14/2010	15	537-VASSLVLVVS LGAIS-551	1414.07	pass by MS	76.0%
136 of 139	A2353	09/15/2010	15	541-LVLVVS LGAISFWMC-555	1638.33	pass by MS	73.0%
137 of 139	A0758	07/23/2010	15	545-VSLGAIWFMC SNGS-559	1557.73	pass by MS	79.1%
138 of 139	A0783	07/28/2010	15	549-AISFWMC SNGSLQCR-563	1702.87	pass by MS	73.7%
139 of 139	A0802	08/02/2010	14	553-WMC SNGSLQCRIC-566	1614.13	pass by MS	78.9%

^a% full-length
^bRemainder is salt and water

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	3.02							0.92	3.23	1.23	0.84	1.15			1.99		0.94	1.68 ^p
2 of 139	Expected	3.00		2.00						3.00			1.00			3.00		1.00	2.00
	Actual	2.84		2.35						3.20			0.97			2.97		0.74	1.95 ^p
3 of 139	Expected	3.00		2.00	1.00		1.00		1.00	2.00			1.00			3.00		1.00	
	Actual	2.91		2.46	0.00 ^c		0.80		0.94	2.03			1.01			2.92		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		3.45	0.00 ^c		0.85	0.91	0.96	1.10						1.88		0.85	
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	1.95		4.50	0.00 ^c		0.83	0.93	1.04	1.08					0.72	2.11		0.83	
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		4.46	0.00 ^c		0.81	0.92	1.00						0.86	3.06		0.77	1.16
7 of 139	Expected	1.00		4.00		1.00		1.00		1.00	1.00				1.00	3.00			2.00
	Actual	0.89		4.29		1.11		0.85		0.93	0.91				0.83	3.03			2.15
8 of 139	Expected			3.00		1.00				1.00	1.00				1.00	4.00			4.00
	Actual			3.24		1.07				0.94	0.93				0.74	3.73			4.35
9 of 139	Expected			2.00		1.00		1.00		1.00	1.00				1.00	3.00			5.00
	Actual			2.37		1.06		0.82		0.91	1.05				0.74	2.71			5.34
10 of 139	Expected			2.00		2.00		1.00		3.00	1.00				1.00	2.00			3.00
	Actual			2.41		2.23		0.79		2.68	0.93				0.72	2.10			3.13
11 of 139	Expected			3.00		1.00		2.00		2.00	1.00				1.00	2.00			3.00
	Actual			3.48		1.07		1.66		1.83	0.94				0.83	2.12			3.08
12 of 139	Expected			3.00	1.00	1.00	1.00	2.00		3.00	2.00				1.00				1.00
	Actual			3.46	0.00 ^c	1.16	0.79	1.78		2.93	2.01				0.79				1.09
13 of 139	Expected		1.00	2.00	1.00	1.00	2.00	1.00		4.00	3.00								
	Actual		0.85	2.44	0.00 ^c	1.18	1.68	0.88		4.04	2.94								
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	0.98	0.86	1.26	0.00 ^c		1.68	0.92		3.12	3.10			0.93					1.15
15 of 139	Expected	1.00	1.00		1.00		2.00	1.00		4.00	3.00			1.00					1.00
	Actual	1.04	0.70		0.00 ^c		1.76	0.96		4.26	3.08			0.99					1.20

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)
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	1.98	0.87	1.24	0.00 ^c		1.70	0.93	1.03	3.17	1.00			0.95					1.14
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	1.96		1.18	0.00 ^c		1.69	0.91	2.08	3.19	1.03			0.94			0.00 ^a		
18 of 139	Expected	1.00		2.00	1.00	1.00	3.00		2.00	2.00	1.00			1.00			1.00		
	Actual	0.93		2.44	0.00 ^c	1.19	2.60		1.98	2.05	0.92			0.90			0.00 ^a		
19 of 139	Expected	1.00		2.00	1.00	2.00	2.00		2.00	2.00				1.00	1.00		1.00		
	Actual	0.93		2.45	0.00 ^c	2.38	1.62		1.94	2.01				0.88	0.79		0.00 ^a		
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	0.96		1.23	0.00 ^c	2.26	0.86		1.00	2.08				0.93	2.60	1.08	0.00 ^a		
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	1.02		1.21	0.00 ^c	2.30				1.01				1.09	4.57	0.97	0.00 ^a	0.83	
22 of 139	Expected	1.00				2.00			1.00	1.00					5.00	2.00	1.00	1.00	1.00
	Actual	1.03				2.18			1.02	1.05					4.66	2.25	0.00 ^a	0.73	1.09
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	1.03		1.20		1.22			0.92 ^b					0.96	4.56	2.35	0.00 ^a	0.71	1.05
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			2.24	0.00 ^c	1.09	0.97		0.77 ^b					1.16	3.08	1.87	0.00 ^a	0.99	0.83 ^b
25 of 139	Expected			3.00	1.00	1.00	2.00							2.00	2.00	2.00		1.00	1.00
	Actual			3.48	0.00 ^c	1.20	1.78							1.89	1.62	1.93		0.86	1.24
26 of 139	Expected			4.00	1.00		2.00		1.00				1.00	1.00	2.00	1.00		2.00	
	Actual			4.42	0.00 ^c		1.86		1.05				1.03	1.01	1.81	1.07		1.76	
27 of 139	Expected		1.00	2.00	1.00	2.00	2.00		1.00	1.00			1.00	1.00		1.00		2.00	
	Actual		0.81	2.41	0.00 ^c	2.48	1.73		1.02	1.01			0.97	0.93		0.85		1.79	
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		0.73	2.29		4.46	0.85		1.02	2.10			0.95	0.92	0.94			0.74	
29 of 139	Expected		1.00	1.00		4.00			1.00	2.00					4.00			1.00	1.00
	Actual		0.84	1.24		4.44			0.94	2.01					3.74			0.74	1.05
30 of 139	Expected		2.00			4.00				2.00			2.00		4.00				1.00
	Actual		1.65			4.36				2.00			1.87		4.05				1.06
31 of 139	Expected		1.00			3.00			1.00	1.00			3.00	1.00	4.00				1.00
	Actual		0.80			3.43			0.93	1.16			3.14	0.95	3.64				0.95
32 of 139	Expected		1.00			2.00			1.00		1.00		3.00	1.00	4.00	1.00			1.00
	Actual		0.87			2.38			1.03		1.01		2.91	0.94	3.64	1.13			1.09
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		0.83	1.22		2.36		0.89	0.97		0.94		1.85	1.84	1.86	1.23	0.00 ^a		
34 of 139	Expected			3.00				1.00	1.00		2.00		1.00	2.00	3.00	1.00	1.00		
	Actual			3.41				0.92	0.96		2.35		0.92	1.82	2.52	1.09	0.00 ^a		
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	0.95		3.49			0.84	0.90			0.95			0.91	2.59	2.32	0.00 ^a		1.04
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	1.93		3.40	0.00 ^c		0.86	1.84			0.97			1.87	0.82	1.26			1.05
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	3.90		1.28	0.00 ^c		1.77	0.91			1.97			0.96	0.90	1.24			1.09
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	4.03			0.00 ^c		0.98	0.94			2.00		0.93	0.98	0.97	1.27		0.79	1.11
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	2.01		1.28	0.00 ^c		0.88	0.96	0.95	1.09	1.98		1.00	0.94	1.02		0.00 ^a	0.89	
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	0.98		1.19			0.89		1.01	2.16	4.00		0.99		0.95		0.00 ^a	0.71	1.13
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			2.50			0.86		0.99	2.13	2.93		0.96		0.87		0.00 ^a	1.62	1.13
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			1.30			0.88		0.99	3.22	2.95			0.95	1.88		0.00 ^a	0.71	1.13
43 of 139	Expected			1.00			1.00		1.00	1.00	4.00			1.00	3.00			2.00	1.00
	Actual			1.29			0.87		1.05	1.12	4.07			0.96	2.77			1.75	1.13
44 of 139	Expected			3.00			1.00		1.00	1.00	3.00			1.00	3.00			2.00	
	Actual			3.49			0.88		1.06	1.13	3.10			0.98	2.66			1.68	

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)
45 of 139	Expected			2.00		1.00	1.00		1.00	2.00	4.00				2.00			1.00	1.00
	Actual			2.39		1.17	0.86		1.00	2.12	3.86				1.67			0.81	1.14
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			2.46		1.11	1.64		0.93	2.00	1.86				0.87		0.00 ^a	1.02	2.12
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			1.22		1.12	1.70	1.86	0.98	2.12	1.87			0.93			0.00 ^a		2.20
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	0.91				1.11	0.88	1.92	0.99	2.13				0.95	1.69	1.17	0.00 ^a		2.25
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	0.97		1.22		2.38	0.86	1.88	0.97	1.06				0.93	2.50	1.23	0.00 ^a		
50 of 139	Expected	1.00		2.00		3.00		2.00		1.00				1.00	3.00	1.00		1.00	
	Actual	0.99		2.19		3.19		1.82		1.07				0.90	2.84	1.25		0.75	
51 of 139	Expected	3.00		3.00		3.00				1.00					2.00	1.00		2.00	
	Actual	2.69		3.47		3.41				0.94					1.64	1.22		1.63	
52 of 139	Expected	2.00		2.00		3.00	1.00			1.00			1.00		1.00			2.00	2.00
	Actual	1.95		2.35		3.31	0.98			0.98			0.85		0.92			1.83	1.83
53 of 139	Expected	2.00	1.00	2.00		1.00	1.00							2.00	2.00			3.00	2.00
	Actual	2.06	0.91	2.35		1.15	0.94						0.83		1.84			2.80	2.11
54 of 139	Expected	1.00	1.00	1.00			1.00				2.00		2.00		3.00			2.00	2.00
	Actual	1.03	0.89	1.29			0.90				1.92		2.01		2.89			1.78	2.28
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			1.06	0.90		1.28		2.94		2.03	1.10	3.09			0.75	0.93
56 of 139	Expected	1.00	2.00			1.00			2.00		3.00		1.00	2.00	2.00			1.00	
	Actual	1.06	1.78			1.01			2.18		2.80		1.01	2.12	2.31			0.72	
57 of 139	Expected	1.00	2.00	1.00		1.00			2.00		4.00		1.00	2.00					1.00
	Actual	0.96	1.77	1.13		1.14			2.16		3.79		1.04	2.13					0.88
58 of 139	Expected	1.00	3.00	1.00		3.00	1.00		2.00		1.00			2.00					1.00
	Actual	1.11	2.61	1.10		3.48	0.89		2.01		0.88			2.05					0.87
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		2.64	2.46		2.38	0.92		1.14		0.91	0.87		1.03				1.78	0.88
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		1.74	2.37		2.33	0.90			1.02		0.77				1.19	0.00 ^a	1.83	1.86
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		0.83	2.26		2.23	1.81			0.98		0.92		0.97		1.23	0.00 ^a	1.90	0.88
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			2.28		1.13	0.94		1.14	1.01	0.92		0.99	1.00		2.12	0.00 ^a	1.53	0.95
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	1.09		1.11		2.27	1.86		1.09	0.99	0.92		0.94	1.00		2.81			0.92
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	1.02		2.20		1.19	1.82		1.08	1.16	0.92		0.94	0.95		2.22			1.50 ^b
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	2.03	0.85	1.12		1.12	0.95		1.11	1.06			1.00	1.03		2.03		0.83	1.87 ^b
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	3.05	0.87	1.15		1.11	0.94			1.17		1.01	1.03	1.06		1.21		0.71	1.69 ^b
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	3.11	1.82	1.13		1.15	0.94			1.12		0.93	1.09	1.09				0.77	1.85 ^b
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	3.07	1.79	1.12		1.11	2.02		1.91 ^b			0.93	1.01		1.29			0.74	
69 of 139	Expected	2.00	1.00	2.00		1.00	2.00		3.00			1.00			2.00	1.00			
	Actual	1.97	1.04	2.27		1.24	2.01		2.62 ^b			0.72			2.19	0.94			
70 of 139	Expected	1.00		3.00			2.00	1.00	3.00					1.00	2.00	1.00			1.00
	Actual	1.05		3.36			2.05	0.80	2.65 ^b					0.94	2.16	1.19			0.81
71 of 139	Expected			3.00	1.00		1.00	1.00	3.00					1.00	1.00	3.00			1.00
	Actual			3.38	0.00 ^c		0.96	0.95	2.58 ^b					1.00	0.96	3.01			1.16
72 of 139	Expected			3.00	2.00	1.00		1.00						2.00	1.00	4.00			1.00
	Actual			3.45	0.00 ^c	1.08		0.85						2.06	1.13	3.55			0.88
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	1.10		2.24	0.00 ^c	1.07	0.97	0.83	1.17		1.01			1.12		2.66			0.84
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	1.03		2.21	0.00 ^c	1.03	0.91		1.10	1.02	0.95			1.01	1.20	3.54			

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)
75 of 139	Expected	1.00		2.00		2.00	1.00		1.00	1.00	1.00		1.00	2.00	1.00	2.00			
	Actual	0.90		2.38		2.46	0.79		0.93	0.97	0.93		0.90	1.72	0.87	2.16			
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	0.94		2.11		1.04	0.88	0.81	2.84	1.01			0.94	1.96	1.19	1.29			
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			1.03		1.01	0.88	0.83	2.90	1.04	0.92		0.98	2.04	1.24	2.14			
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			1.20	0.00 ^c	1.25	0.83	0.70	2.65		2.09		1.03	2.06		1.24		0.96	
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				0.00 ^c		0.96	0.90	2.10		2.78			2.16	1.20	2.17		0.83	0.89
80 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		0.82		0.00 ^c		0.95		1.23	2.06	3.72			1.12	1.28	1.23		0.77	0.83
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	0.95				0.99			3.11	3.37			1.03	0.80	1.88		0.85	1.03
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	0.94	1.71	0.98			0.94		1.14	3.02	1.79			1.06	1.16	2.26			
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	1.02	1.69	0.96		0.98	0.93		1.93	2.98				1.03	2.21	1.26			
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		1.71	0.98		0.99	1.93		1.99	2.00			0.96	1.02	2.14	1.27			
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	2.05	0.89	1.00		1.03	2.06		2.84	1.07			1.02	1.06	1.97				
86 of 139	Expected	2.00	1.00			2.00	3.00		3.00	1.00			2.00		1.00				
	Actual	2.02	0.87			2.28	2.87		2.83	1.05			1.99		1.08				
87 of 139	Expected	2.00				1.00	5.00		2.00	1.00			2.00			1.00	1.00		
	Actual	2.01				0.97	5.19		1.75	1.09			1.97			1.02	0.00 ^a		
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	1.95		1.23		1.25	3.87		1.93			0.78	0.93			1.07	0.00 ^a		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			1.27		1.22	4.51		1.00			0.93	0.93			1.10	0.00 ^a	0.98	1.05
90 of 139	Expected			1.00		1.00	4.00	2.00				1.00				1.00	2.00	2.00	1.00
	Actual			1.21		1.19	3.62	2.27				0.74				1.17	0.00 ^a	1.90	0.90
91 of 139	Expected			2.00		3.00	3.00	2.00				1.00				1.00	2.00	1.00	1.00
	Actual			2.27		3.47	2.85	1.79				0.83				1.00	2.00	1.00	1.00
92 of 139	Expected	1.00		1.00		3.00	3.00	2.00							1.00		1.00	3.00	
	Actual	1.06		1.10		3.42	2.92	1.85							0.81		0.00 ^a	2.84	
93 of 139	Expected	2.00		2.00		3.00	2.00	2.00		1.00	1.00				1.00			1.00	
	Actual	1.90		2.38		3.43	1.76	1.84		0.91	1.12				0.85			0.81	
94 of 139	Expected	2.00		2.00		3.00	2.00			1.00	1.00				2.00	1.00		1.00	
	Actual	1.86		2.41		3.46	1.66			0.93	1.10				1.87	0.95		0.76	
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	2.72		3.32		2.25	0.97		0.92	0.90	0.97				0.94	1.20		0.81	
96 of 139	Expected	1.00		4.00		2.00			2.00	1.00	2.00				1.00	2.00			
	Actual	0.91		4.49		2.39			1.73	0.87	2.11				0.78	1.72			
97 of 139	Expected	1.00		4.00		2.00			2.00		1.00				1.00	2.00			2.00
	Actual	0.86		4.49		2.13			1.85		1.01				0.89	1.83			1.94
98 of 139	Expected			3.00		2.00			3.00		2.00	1.00			1.00	1.00			2.00
	Actual			3.43		2.32			2.60 ^b		2.13	0.80			0.79	1.15			1.79 ^p
99 of 139	Expected			3.00		2.00			1.00		2.00	1.00	1.00		1.00	2.00			2.00
	Actual			3.43		2.35			0.73 ^b		2.10	0.90	1.07		0.86	1.93			1.63 ^p
100 of 139	Expected	1.00		2.00		2.00	1.00		1.00		1.00	1.00	1.00		1.00	2.00			2.00
	Actual	1.01		2.44		2.42	0.96		0.83 ^b		1.12	0.89	0.98		0.73	1.98			1.64 ^p
101 of 139	Expected	1.00		2.00		3.00	1.00				2.00	1.00	2.00			2.00			1.00
	Actual	0.91		2.33		3.49	0.80				2.12	0.71	1.79			1.90			0.95
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	0.92		1.20		3.49	0.80	0.86		0.96	1.86		1.85			2.03			1.01
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	0.84	0.78	2.39		3.48	0.77	1.13	0.86	0.92	2.05		0.84						0.93
104 of 139	Expected		1.00	3.00		3.00		1.00	1.00	2.00	3.00		1.00						
	Actual		0.73	3.42		3.47		1.02	0.83	1.74	3.00		0.78						

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)
105 of 139	Expected		1.00	4.00		2.00	1.00		1.00	2.00	3.00								1.00
	Actual		1.01	4.46		2.32	0.90		0.87	1.71	2.97								0.77
106 of 139	Expected			5.00		1.00	1.00		2.00	2.00	2.00		1.00						1.00
	Actual			5.41		1.10	0.82		1.92	1.99	1.88		0.92						0.97
107 of 139	Expected			5.00			1.00		1.00	1.00	2.00		1.00			1.00	1.00	1.00	1.00
	Actual			5.47			0.79		0.87	0.99	2.25		0.91			0.88	0.00 ^a	0.87	0.97
108 of 139	Expected	1.00		4.00		1.00	1.00		1.00	3.00			1.00			1.00	1.00	1.00	
	Actual	0.89		4.42		1.26	0.77		0.85	2.90			0.93			1.07	0.00 ^a	0.92	
109 of 139	Expected	1.00		2.00		2.00			1.00	5.00						1.00	1.00	1.00	1.00
	Actual	1.03		2.30		2.35			0.90	4.57						0.94	0.00 ^a	0.93	0.97
110 of 139	Expected	1.00	1.00	2.00		3.00				4.00						2.00		1.00	1.00
	Actual	0.96	0.90	2.38		3.43				3.70						1.91		0.89	0.81
111 of 139	Expected		1.00	2.00		3.00		1.00		5.00						1.00		1.00	1.00
	Actual		0.98	2.32		3.35		1.20		4.51						1.05		0.83	0.75
112 of 139	Expected		1.00	4.00		2.00		1.00		3.00					1.00	1.00		1.00	1.00
	Actual		0.77	4.44		2.33		1.26		2.63					0.85	0.99		0.79	0.95
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		0.86	4.44		1.12		0.89		2.05	1.04				0.93	1.01		1.74	0.93
114 of 139	Expected		1.00	4.00		1.00		1.00		1.00	2.00				1.00			2.00	2.00
	Actual		0.77	4.45		1.16		1.23		0.87	2.04				0.99			1.52	1.98
115 of 139	Expected		1.00	2.00		2.00				2.00	3.00				2.00			1.00	2.00
	Actual		0.79	2.40		2.38				2.00	2.82				1.72			0.80	2.08
116 of 139	Expected	1.00	1.00	3.00		2.00				2.00	3.00				1.00			1.00	1.00
	Actual	0.90	0.83	3.44		2.36				2.00	2.81				0.87			0.75	1.04
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	1.06	0.83	3.46		2.21	0.92		0.99	0.98	2.81				0.92				0.82
118 of 139	Expected	1.00		3.00	1.00	3.00	2.00		1.00	1.00	2.00		1.00						
	Actual	0.83		3.45	0.00 ^c	3.47	1.58		0.86	0.91	2.06		0.84						
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	0.91		2.44	0.00 ^c	2.37	1.67	0.90	1.04		1.92		1.92					0.82	
120 of 139	Expected			3.00	2.00	1.00	2.00	1.00	1.00		1.00		2.00			1.00		1.00	
	Actual			3.33	0.00 ^c	1.25	1.68	1.18	0.94		1.08		1.83			0.92		0.80	
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			2.36	0.00 ^c	2.43		0.89			1.07	0.95	1.90		0.80	0.71		0.89	
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			3.40	0.00 ^c	1.24	0.86	1.08			2.11	0.74			0.81	0.79		0.90	1.06
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			4.45	0.00 ^c	1.26	0.90				0.92	0.89			0.98	1.75		2.00	0.85
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			2.41		1.21	0.89				2.25	0.82		0.94	1.83	1.05		2.51	1.09
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		2.39		2.32	0.82				3.24			0.88	0.90	1.00		2.56	
126 of 139	Expected	1.00	1.00	2.00		3.00				1.00	2.00			1.00	1.00			3.00	
	Actual	0.89	0.84	2.39		3.50				0.91	2.14			0.84	0.90			2.59	
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	0.88	0.83	2.41		4.50	0.83		0.91	0.94	2.09				0.87			0.74	
128 of 139	Expected	1.00	1.00	2.00		4.00	1.00		1.00	2.00	2.00								1.00
	Actual	0.86	0.82	2.48		4.46	0.82		0.87	1.83	1.99								0.87
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		1.64	2.35		3.45	0.90		1.74	0.94	1.19				0.95	0.99			0.86
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		0.85	1.20		2.48	0.85		2.93	2.02	1.07				0.85	1.04		0.74	0.96
131 of 139	Expected	1.00	1.00			2.00			3.00	2.00	1.00				2.00	1.00		2.00	
	Actual	1.09	0.79						3.01	2.26	1.25				1.84	0.80		1.50	
132 of 139	Expected	2.00	1.00			1.00			3.00	1.00					2.00	2.00		2.00	1.00
	Actual	2.28	0.83			1.06			2.59	1.00					2.46	1.92		1.66	1.20
133 of 139	Expected	2.00				1.00			2.00	3.00					3.00	1.00		1.00	2.00
	Actual	2.06				0.98			1.87	3.21					2.89	0.96		0.81	2.23

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)
134 of 139	Expected	1.00							1.00	3.00					4.00	1.00		1.00	4.00
	Actual	1.01							0.84	3.37					3.84	1.09		0.71	4.14
135 of 139	Expected	2.00					1.00		1.00	3.00					4.00				4.00
	Actual	2.02					0.96		0.97	3.28					3.66				4.11
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	1.03			0.00 ^c		0.99		1.16	3.12		1.09	1.14		1.96		0.00 ^a		2.51 ^b
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	1.04		1.24	0.00 ^c		1.87		1.04	1.16		0.82	1.04		3.76		0.00 ^a		1.04
138 of 139	Expected	1.00	1.00	1.00	2.00	1.00	1.00		1.00	1.00		1.00	1.00		3.00		1.00		
	Actual	0.98	0.88	1.16	0.00 ^c	1.08	1.00		1.01	1.07		0.85	1.00		2.97		0.00 ^a		
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		0.97	1.17	0.00 ^c	1.29	0.98		1.81	1.07		0.74			1.96		0.00 ^a		

^aTrp was completely destroyed during hydrolysis
^bVal-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis
^cCys was completely destroyed during hydrolysis

Date: 29 MAY 2013

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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