

Peptide Array, Dengue Virus Type 3 (DEN-3), Philippines/H87/1956, NS5 Protein

Catalog No. NR-4204

This reagent is the tangible property of the U.S. Government.

Product Description: The 156-peptide array spans the NS5 protein of Dengue virus type 3, Philippines/H87/1956 (GenPept: AAA99437). Peptides are 13- to 17-mers, with 11 to 13 amino acid overlaps.

Lot: N1029-1 to N1029-156

The following information applies to all peptides:

- Appearance
- Mass spectral analysis
- Counter Ion

White lyophilized powder
 Correct MW by MALDI-TOF
 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 156	11/3/2006	17	1 GTGSQGETLGEKWKKKL 17	1847.12	-1.36	87.6%	76.4%
2 of 156	11/3/2006	17	6 GETLGEKWKKLNQLSR 22	2015.36	-1.52	90.5%	74.7%
3 of 156	11/3/2006	17	12 KWKKLNQLSRKEFDLY 28	2224.65	-1.58	97.7%	73.6%
4 of 156	11/3/2006	17	18 NQLSRKEFDLYKKSGIT 34	2027.33	-1.14	98.0%	78.1%
5 of 156	11/3/2006	17	23 KEFDLYKKSGITEVDRT 39	2029.30	-1.11	95.8%	78.1%
6 of 156	11/3/2006	17	29 KKSGITEVDRTEAKEGL 45	1861.10	-1.11	97.6%	76.6%
7 of 156	11/3/2006	17	34 TEVDRTEAKEGLKRGEI 50	1931.15	-1.31	91.5%	77.2%
8 of 156	11/3/2006	17	39 TEAKEGLKRGEITHHAV 55	1876.12	-0.9	93.8%	73.3%
9 of 156	11/3/2006	17	45 LKRGEITHHAVSRGSAK 61	1847.13	-0.81	98.7%	69.8%
10 of 156	11/3/2006	17	51 THHAVSRGSAKLQWFVE 67	1953.21	-0.4	98.5%	77.4%
11 of 156	11/3/2006	16	57 RGSACLQWFVERNMVI 72	1934.31	-0.14	98.7%	80.9%
12 of 156	11/3/2006	17	62 LQWFVERNMVIEGRVI 78	2086.51	0.25	82.8%	85.9%
13 of 156	11/3/2006	17	68 RNMVIEGRVIDLGCGR 84	1885.26	-0.07	97.4%	80.5%
14 of 156	11/3/2006	17	73 PEGRVIDLGCGRGGWSY 89	1822.05	-0.45	94.6%	84.2%
15 of 156	11/3/2006	17	79 DLGCGRGGWSYYCAGLK 95	1806.07	-0.22	89.7%	84.1%
16 of 156	11/3/2006	17	85 GGWSYYCAGLKKVTEVR 101	1917.23	-0.32	96.8%	80.8%
17 of 156	11/3/2006	17	91 CAGLKKVTEVRGYTKGG 107	1767.10	-0.44	99.9%	75.6%
18 of 156	11/3/2006	16	97 VTEVRGYTKGGPGHEE 112	1715.85	-1.23	96.6%	79.0%
19 of 156	11/3/2006	17	102 GYTKGGPGHEEPPMST 118	1743.93	-1.05	96.6%	83.6%
20 of 156	11/3/2006	17	108 PGHEEPPMSTYGWNIV 124	1913.16	-0.48	92.9%	89.4%
21 of 156	11/3/2006	17	114 VPMSTYGWNIVKLMSGK 130	1911.33	0.14	95.6%	84.8%
22 of 156	11/3/2006	16	120 GWNIVKLMSGKDVLYL 135	1870.26	0.41	93.8%	84.5%
23 of 156	11/3/2006	17	125 KLMSGKDVLYLPPEKCD 141	1970.35	-0.52	98.0%	81.2%
24 of 156	11/3/2006	17	131 DVLYLPPEKCDTLLCDI 147	1984.34	0.28	98.0%	89.7%

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Table 1

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
25 of 156	11/3/2006	17	137 PEKCDTLLCDIGESSPS 153	1794.00	-0.44	84.6%	88.7%
26 of 156	11/3/2006	16	143 LLCDIGESSPSPTVEE 158	1675.84	-0.12	97.5%	88.0%
27 of 156	11/3/2006	17	148 GESSPSPTVEESRTIRV 164	1830.98	-0.87	87.8%	84.3%
28 of 156	11/3/2006	16	154 PTVEESRTIRVLKMVE 169	1887.25	-0.27	97.4%	80.5%
29 of 156	11/3/2006	17	159 SRTIRVLKMVEPWLNK 175	2084.53	-0.52	95.4%	78.5%
30 of 156	11/3/2006	17	165 LKMVEPWLNKQFCIKV 181	2090.60	-0.03	99.8%	82.1%
31 of 156	11/3/2006	16	171 WLKNNQFCIKVLNPYM 186	2011.46	-0.13	93.2%	85.5%
32 of 156	11/3/2006	17	175 NQFCIKVLNPYMPVIE 191	2009.44	0.31	99.4%	89.8%
33 of 156	11/3/2006	17	181 VLNPYMPVIEHLERLQ 197	2052.44	-0.04	92.7%	85.7%
34 of 156	11/3/2006	17	187 PTVIEHLERLQRKHGG 203	2001.36	-0.86	97.7%	74.5%
35 of 156	11/3/2006	17	193 LERLQRKHGGMLVRNPL 209	2017.45	-0.72	98.5%	74.7%
36 of 156	11/3/2006	17	199 KHGGMLVRNPLSRNSTH 215	1904.20	-1.02	83.6%	73.6%
37 of 156	11/3/2006	16	205 VRNPLSRNSTHEMYWI 220	2003.29	-0.9	94.9%	81.5%
38 of 156	11/3/2006	17	210 SRNSTHEMYWISNGTGN 226	1954.08	-1.3	80.2%	85.1%
39 of 156	11/3/2006	17	215 HEMYWISNGTGNIVSSV 231	1894.11	-0.03	97.1%	89.3%
40 of 156	11/3/2006	17	221 SNGTGNIVSSVNMVSRL 237	1734.96	0.18	99.5%	88.4%
41 of 156	11/3/2006	17	227 IVSSVNMVSRLLLNRFT 243	1949.36	0.83	93.5%	85.1%
42 of 156	11/3/2006	16	233 MVSRLLLNRFTMTHRR 248	2031.50	-0.29	95.9%	74.8%
43 of 156	11/3/2006	17	238 LLNRFTMTHRRPTIEKD 254	2128.50	-1.06	97.3%	75.7%
44 of 156	11/3/2006	17	244 MTHRRPTIEKVDLGAG 260	1896.17	-0.84	91.9%	76.9%
45 of 156	11/3/2006	17	250 TIEKVDLGAGTRHVNA 266	1795.99	-0.44	90.4%	79.8%
46 of 156	11/3/2006	17	256 DLGAGTRHVNAEPETPN 272	1777.88	-1.12	97.5%	83.9%
47 of 156	11/3/2006	17	262 RHVNAEPETPNMDVIGE 278	1908.09	-0.96	92.1%	84.8%
48 of 156	11/3/2006	17	268 PETPNMDVIGERIKRIK 284	1996.38	-0.91	94.8%	77.8%
49 of 156	11/3/2006	17	274 DVIGERIKRIKEEHSST 290	1997.26	-1.12	99.5%	74.5%
50 of 156	11/3/2006	17	280 IKRIKEEHSSTWHYDDE 296	2173.34	-1.86	89.7%	76.1%
51 of 156	11/3/2006	17	284 KEEHSSTWHYDDENPYK 300	2165.23	-2.51	90.0%	79.2%
52 of 156	11/3/2006	17	290 TWHYDDENPYKTHWAYHG 306	2183.30	-1.86	91.5%	82.7%
53 of 156	11/3/2006	17	295 DENPYKTHWAYHGSYEVK 311	2087.25	-1.61	94.4%	82.1%
54 of 156	11/3/2006	16	301 THWAYHGSYEVKATGSA 316	1727.87	-0.52	93.3%	83.5%
55 of 156	11/3/2006	17	306 GSYEVKATGSASSMING 322	1658.82	-0.18	95.9%	87.9%
56 of 156	11/3/2006	17	312 ATGSASSMINGVVKLLT 328	1648.95	0.82	97.3%	87.9%
57 of 156	11/3/2006	17	318 SMINGVVKLLTKPWDVV 334	1899.34	0.68	90.7%	84.7%
58 of 156	11/3/2006	17	324 VKLLTKPWDVVPMTQM 340	1985.50	0.46	83.4%	85.3%
59 of 156	11/3/2006	17	330 PWDVVPMTQMAMTDTT 346	1923.27	0.16	96.8%	89.4%
60 of 156	11/3/2006	17	336 MVTQMAMTDTTPFGQQR 352	1943.27	-0.52	90.0%	89.5%
61 of 156	11/3/2006	17	342 MDTTPFGQQRVFKEKV 358	2012.33	-0.85	88.6%	81.5%
62 of 156	11/3/2006	17	348 FGQQRVFKEKVDTRTPR 364	2092.41	-1.45	83.8%	75.4%
63 of 156	11/3/2006	17	354 FKEKVDTRTPRMPGTR 370	2016.37	-1.57	85.5%	74.7%
64 of 156	11/3/2006	17	360 TRTPRMPGTRKVMET 376	1971.39	-0.96	85.8%	77.6%
65 of 156	11/3/2006	17	366 MPGTRKVMETAEWLWR 382	2104.54	-0.41	81.6%	82.2%
66 of 156	11/3/2006	17	372 VMEITAEWLWRTLGRNK 388	2103.49	-0.41	90.3%	82.2%
67 of 156	11/3/2006	16	377 AEWLWRTLGRNKRPR 392	2052.43	-1.26	84.9%	75.0%
68 of 156	11/3/2006	17	382 RTLGRNKRPRCTREEF 398	2132.50	-1.61	85.9%	72.8%
69 of 156	11/3/2006	17	388 KRPRCTREEFTKKVRT 404	2148.58	-1.59	89.9%	70.2%
70 of 156	11/3/2006	17	394 TREEFTKKVRTNAAMGA 410	1910.20	-0.91	87.2%	77.0%

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Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
71 of 156	11/3/2006	17	400 KKVRTNAAMGAVFTEEN 416	1866.14	-0.56	83.6%	80.4%
72 of 156	11/3/2006	17	406 AAMGAVFTEENQWDSAR 422	1883.04	-0.51	82.2%	89.2%
73 of 156	11/3/2006	17	412 FTEENQWDSARA AVEDE 428	1997.03	-1.32	88.8%	89.8%
74 of 156	11/3/2006	17	418 WDSARA AVEDEEFWKL V 434	2051.26	-0.48	86.6%	85.7%
75 of 156	11/3/2006	17	424 AVEDEEFWKL VDREREL 440	2163.39	-1.04	86.3%	82.6%
76 of 156	11/3/2006	16	430 FWKL VDRERELHKL GK 445	2054.44	-1.08	82.2%	72.0%
77 of 156	11/3/2006	17	435 DRERELHKL GKCGSCVY 451	1993.31	-0.98	84.0%	74.5%
78 of 156	11/3/2006	17	441 HKLGKCGSCVYNMMGKR 457	1912.37	-0.55	80.7%	73.7%
79 of 156	11/3/2006	17	447 GSCVYNMMGKREKLGE 463	1930.31	-0.92	85.7%	77.2%
80 of 156	11/3/2006	17	453 MMGKREKLGEFGKAKG 469	1895.34	-1.2	80.5%	70.4%
81 of 156	11/3/2006	17	459 KKLGEFGKAKGSRWIY 475	1939.31	-0.77	85.7%	73.9%
82 of 156	11/3/2006	17	465 GKAKGSRWIYMWLGAR 481	1951.34	-0.37	81.3%	77.4%
83 of 156	11/3/2006	17	471 RAIWYMWLGARYLEFEA 487	2175.56	0.08	83.3%	86.4%
84 of 156	11/3/2006	17	477 WLGARYLEFEALGFLNE 493	2028.31	0.17	82.1%	89.9%
85 of 156	11/3/2006	17	483 LEFEALGFLNEDHWFSR 499	2110.33	-0.34	86.1%	86.1%
86 of 156	11/3/2006	17	489 GFLNEDHWFSRENSYSG 505	2045.13	-1.25	81.3%	85.7%
87 of 156	11/3/2006	17	495 HWFSRENSYSGVEGEGL 511	1954.06	-0.98	81.2%	85.1%
88 of 156	11/3/2006	17	501 NSYSGVEGEGLHKLGYI 517	1823.01	-0.42	86.6%	84.2%
89 of 156	11/3/2006	16	506 VEGEGLHKLGYILRDI 521	1812.12	0	82.9%	79.9%
90 of 156	11/3/2006	17	511 LHKLG YILRDISKIPGG 527	1880.28	0.06	82.7%	76.7%
91 of 156	11/3/2006	17	517 ILRDISKIPGGAMYADD 533	1835.13	-0.04	81.7%	84.3%
92 of 156	11/3/2006	17	523 KIPGGAMYADDTAGWDT 539	1768.93	-0.53	89.0%	88.6%
93 of 156	11/3/2006	17	529 MYADDTAGWDTRITEDD 545	1975.05	-1.19	80.5%	89.7%
94 of 156	11/3/2006	17	535 AGWDTRITEDDLHNEEK 551	2029.12	-1.69	89.0%	81.7%
95 of 156	11/3/2006	17	541 ITEDDLHNEEKITQQMD 557	2059.21	-1.49	90.5%	85.8%
96 of 156	11/3/2006	17	547 HNEEKITQQMDPEHRQL 563	2133.34	-2.05	85.1%	78.9%
97 of 156	11/3/2006	17	553 TQQMDPEHRQLANAIFK 569	2027.31	-1.08	83.7%	81.6%
98 of 156	11/3/2006	17	558 PEHRQLANAIFKLTYQN 574	2043.33	-0.84	83.5%	81.8%
99 of 156	11/3/2006	17	564 ANAIFKLTYQNKVVKVQ 580	1964.36	-0.02	84.3%	81.2%
100 of 156	11/3/2006	17	570 LTYQNKVVKVQRPTPKG 586	1956.34	-0.98	91.1%	77.4%
101 of 156	11/3/2006	17	576 VVKVQRPTPKGTVMDII 592	1881.33	0.2	85.0%	80.5%
102 of 156	11/3/2006	17	582 PTPKGTVMDIISRKDQR 598	1942.28	-1.06	83.0%	77.3%
103 of 156	11/3/2006	17	588 VMDIISRKDQRGSGQVG 604	1846.11	-0.61	80.5%	80.2%
104 of 156	11/3/2006	17	594 RKDQRGSGQVGTYGLNT 610	1837.00	-1.41	87.1%	80.1%
105 of 156	11/3/2006	17	600 SGQVGTYGLNTFTNMEA 616	1789.95	-0.29	82.9%	88.7%
106 of 156	11/3/2006	17	606 YGLNTFTNMEAQLIRQM 622	2030.37	-0.27	88.3%	89.9%
107 of 156	11/3/2006	17	612 TNMEAQLIRQMEGEGVL 628	1919.22	-0.3	82.8%	89.4%
108 of 156	11/3/2006	17	618 LIRQMEGEGVLSKADLE 634	1888.19	-0.22	81.1%	84.7%
109 of 156	11/3/2006	17	624 GEGVLSKADLENPHPLE 640	1804.99	-0.71	87.6%	84.1%
110 of 156	11/3/2006	17	630 KADLENPHPLEKKITQW 646	2047.36	-1.37	89.4%	78.2%
111 of 156	11/3/2006	17	636 PHPLEKKITQWLETGKV 652	2004.38	-0.88	81.5%	77.9%
112 of 156	11/3/2006	17	642 KITQWLETKGVERLKR M 658	2116.58	-0.92	82.7%	75.6%
113 of 156	11/3/2006	17	647 LETKGVERLKRMAISGD 663	1903.25	-0.56	86.7%	77.0%
114 of 156	11/3/2006	17	652 VERLKRMAISGDDCVVK 668	1919.31	-0.08	88.7%	77.1%
115 of 156	11/3/2006	17	658 MAISGDDCVVKPIDDRF 674	1881.17	0.07	82.3%	84.6%
116 of 156	11/3/2006	17	664 DCVVKPIDDRFANALLA 680	1860.18	0.42	87.5%	84.5%
117 of 156	11/3/2006	17	670 IDDRFANALLALNDMGK 686	1877.17	-0.02	81.8%	84.6%

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Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
118 of 156	11/3/2006	16	676 NALLALNDMGKVRKDI 691	1771.13	-0.07	82.8%	79.5%
119 of 156	11/3/2006	15	681 LNDMGKVRKDIPQWQ 695	1828.14	-1.22	85.6%	80.0%
120 of 156	11/3/2006	17	685 GKVRKDIPQWQPSKGWH 701	2047.37	-1.64	88.7%	75.0%
121 of 156	11/3/2006	16	691 IPQWQPSKGWHDWQQV 706	2020.26	-1.44	86.8%	85.5%
122 of 156	11/3/2006	17	696 PSKGWHDWQQVPFCSHH 712	2076.30	-1.26	86.5%	78.5%
123 of 156	11/3/2006	17	702 DWQQVPFCSHHFHELM 718	2154.48	-0.26	85.9%	82.5%
124 of 156	11/3/2006	17	708 FCSHHFHELMKDGRKL 724	2098.50	-0.47	84.8%	72.5%
125 of 156	11/3/2006	16	714 HELIMKDGRKLVVPCR 729	1894.35	-0.26	81.1%	73.5%
126 of 156	11/3/2006	17	719 KDGRKLVVPCRQDELI 735	1966.35	-0.67	88.1%	77.5%
127 of 156	11/3/2006	16	725 VVPCRQDELIGRARI 740	1822.18	-0.13	88.8%	80.0%
128 of 156	11/3/2006	17	730 QDELIGRARISQGAGW 746	1854.07	-0.65	81.5%	84.4%
129 of 156	11/3/2006	17	736 GRARISQGAGWSLRETA 752	1816.02	-0.66	87.3%	79.9%
130 of 156	11/3/2006	17	741 SQGAGWSLRETACLGKA 757	1734.97	-0.25	83.6%	83.5%
131 of 156	11/3/2006	17	747 SLRETACLGKAYAQMWT 763	1929.26	-0.16	84.4%	84.9%
132 of 156	11/3/2006	17	753 CLGKAYAQMWTLMYFHR 769	2119.58	0.04	80.6%	82.3%
133 of 156	11/3/2006	17	759 AQMWTLMYFHRRDLRLA 775	2208.66	-0.29	87.3%	79.5%
134 of 156	11/3/2006	15	765 MYFHRRDLRLASNAI 779	1863.19	-0.36	88.1%	76.6%
135 of 156	11/3/2006	17	769 RRDRLASNAICSAVPV 785	1841.18	0.28	87.6%	80.2%
136 of 156	11/3/2006	16	775 ASNAICSAVPVHWVPT 790	1651.92	0.74	90.4%	87.9%
137 of 156	11/3/2006	16	780 CSAVPVHWVPTSRTTW 795	1827.11	0.03	93.1%	84.2%
138 of 156	11/3/2006	17	785 VHWVPTSRTTWSIHAHH 801	2052.30	-0.57	82.2%	75.0%
139 of 156	11/3/2006	17	791 SRTTWSIHAHHQWMTTE 807	2109.33	-1.12	89.4%	78.7%
140 of 156	11/3/2006	17	797 IHAHHQWMTTEDMLTVW 813	2136.46	-0.35	83.9%	82.4%
141 of 156	11/3/2006	17	803 WMTTEDMLTVWNRVWIE 819	2210.58	-0.16	Unknown ^c	90.7%
142 of 156	11/3/2006	17	809 MLTVWNRVWIEDNPWME 825	2219.59	-0.38	81.1%	90.7%
143 of 156	11/3/2006	17	815 RVWIEDNPWMEDKTPVT 831	2116.40	-1.03	81.9%	86.1%
144 of 156	11/3/2006	16	821 NPWMEDKTPVTTWEDV 836	1948.15	-1.14	82.1%	89.5%
145 of 156	11/3/2006	17	826 DKTPVTTWEDVPYLGKR 842	2005.28	-1.09	81.4%	81.5%
146 of 156	11/3/2006	17	832 TWEDVPYLGKREDQWCG 848	2082.30	-1.27	80.2%	85.9%
147 of 156	11/3/2006	17	838 YLGKREDQWCGSLIGLT 854	1939.24	-0.32	90.4%	85.0%
148 of 156	11/3/2006	17	844 DQWCGSLIGLTSRATWA 860	1865.11	0.06	84.6%	89.1%
149 of 156	11/3/2006	17	850 LIGLTSRATWAQNILTA 866	1829.15	0.59	85.6%	88.9%
150 of 156	11/3/2006	16	856 RATWAQNILTAIQQVR 871	1869.17	-0.18	88.6%	84.5%
151 of 156	11/3/2006	17	860 AQNILTAIQQVRSIGN 876	1839.14	0.29	96.5%	89.0%
152 of 156	11/3/2006	17	866 AIQQVRSIGNEEFLDY 882	1995.24	-0.15	83.3%	89.7%
153 of 156	11/3/2006	17	872 SLIGNEEFLDYMPMKR 888	2030.37	-0.51	89.6%	85.6%
154 of 156	11/3/2006	17	876 NEEFLDYMPMKRFRKE 892	2220.57	-1.46	91.4%	79.6%
155 of 156	11/3/2006	17	882 YMPSMKRFRKEEESGA 898	2075.37	-1.61	Unknown ^c	78.5%
156 of 156	11/3/2006	13	888 RFRKEEESGAIW 900	1636.80	-1.53	95.8%	78.2%

^a% full-length

^bRemainder is salt and water

^cPeptide incompatible with HPLC conditions

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 156	Expected					3.00	4.00			2.00	4.00				1.00	2.00	1.00		
	Actual					2.97	4.09			1.75	4.01				0.91	1.91	0.00 ^a		
2 of 156	Expected		1.00	1.00		3.00	2.00			3.00	4.00				1.00	1.00	1.00		
	Actual		1.00	1.01		2.82	2.07			2.72	4.05				0.81	0.75	0.00 ^a		
3 of 156	Expected		1.00	2.00		2.00				3.00	5.00		1.00		1.00		1.00	1.00	
	Actual		1.14	2.00		1.90				2.72	4.86		1.16		0.92		0.00 ^a	1.06	
4 of 156	Expected		1.00	2.00		2.00	1.00		1.00	2.00	3.00		1.00		2.00	1.00		1.00	
	Actual		1.00	1.76		1.82	1.00		0.90	1.74	2.76		0.97		1.70	1.07		0.87	
5 of 156	Expected		1.00	2.00		2.00	1.00		1.00	1.00	3.00		1.00		1.00	2.00		1.00	1.00
	Actual		1.14	1.93		1.85	1.11		1.00	1.03	2.81		1.14		0.97	1.92		0.91	1.00
6 of 156	Expected	1.00	1.00	1.00		3.00	2.00		1.00	1.00	3.00				1.00	2.00			1.00
	Actual	1.08	1.00	0.91		2.76	2.01		0.93	0.99	2.77				0.86	1.69			0.96
7 of 156	Expected	1.00	2.00	1.00		4.00	2.00		1.00	1.00	2.00					2.00			1.00
	Actual	1.13	2.00	0.94		3.95	2.19		1.02	1.04	1.77					1.87			0.96
8 of 156	Expected	2.00	1.00			3.00	2.00	2.00	1.00	1.00	2.00					2.00			1.00
	Actual	2.00	1.08			2.74	1.97	2.00	0.98	1.03	1.74					1.79			1.01
9 of 156	Expected	2.00	2.00			1.00	2.00	2.00	1.00	1.00	2.00				2.00	1.00			1.00
	Actual	2.14	2.07			0.94	1.96	2.00	0.94	1.01	1.98				1.80	0.93			0.99
10 of 156	Expected	2.00	1.00			2.00	1.00	2.00		1.00	1.00		1.00		2.00	1.00	1.00		2.00
	Actual	2.07	1.03			1.87	1.08	2.00		0.99	1.04		1.02		1.87	0.99	0.00 ^a		1.81
11 of 156	Expected	1.00	2.00	1.00		2.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00		1.00		2.00
	Actual	1.22	2.19	1.00		1.80	1.14		0.54 ^b	0.99	0.87	0.99	0.93		0.96		0.00 ^a		1.38 ^b
12 of 156	Expected		2.00	1.00		3.00	1.00		2.00	1.00		1.00	1.00	1.00			1.00		3.00
	Actual		2.12	1.01		2.82	1.14		0.91 ^b	0.94		0.94	0.89	1.00			0.00 ^a		1.56 ^b
13 of 156	Expected		3.00	2.00	1.00	1.00	3.00		2.00	1.00		1.00		1.00					2.00
	Actual		3.00	1.93	0.54 ^c	1.00	3.01		0.86 ^b	0.97		0.95		1.00					0.85 ^b
14 of 156	Expected		2.00	1.00	1.00	1.00	5.00		1.00	1.00				1.00	1.00		1.00	1.00	1.00
	Actual		1.96	1.06	0.49 ^c	1.07	5.02		0.45 ^b	0.96				1.00	1.00		0.00 ^a	0.81	0.50 ^b
15 of 156	Expected	1.00	1.00	1.00	2.00	0.00	5.00			2.00	1.00				1.00		1.00	2.00	
	Actual	1.07	1.00	0.91	0.97 ^c	0.00	4.81			1.72	1.08				0.91		0.00 ^a	2.17	
16 of 156	Expected	1.00	1.00		1.00	1.00	3.00			1.00	2.00				1.00	1.00	1.00	2.00	2.00
	Actual	1.08	0.72		0.67 ^c	0.93	3.16			0.91	1.95				1.00	1.06	0.00 ^a	1.94	1.73
17 of 156	Expected	1.00	1.00		1.00	1.00	4.00			1.00	3.00					2.00		1.00	2.00
	Actual	1.11	1.00		0.59 ^c	0.81	3.77			1.02	2.77					1.98		1.05	1.74
18 of 156	Expected		1.00			3.00	4.00	1.00			1.00			1.00		2.00		1.00	2.00
	Actual		0.94			2.77	4.00	1.13			1.17			1.25		1.88		0.94	1.70
19 of 156	Expected					2.00	4.00	1.00			1.00	1.00		3.00	1.00	2.00		1.00	1.00
	Actual					1.83	3.79	1.26			1.10	1.06		2.78	0.96	1.81		1.00	0.98
20 of 156	Expected			1.00		2.00	2.00	1.00	1.00		0.00	1.00		3.00	1.00	1.00	1.00	1.00	2.00
	Actual			1.00		1.83	2.04	1.10	0.53 ^b		0.00	0.90		2.90	0.99	0.96	0.00 ^a	0.92	1.38 ^b
21 of 156	Expected			1.00		0.00	2.00		1.00	1.00	2.00	2.00		1.00	2.00	1.00	1.00	1.00	2.00
	Actual			1.07		0.00	2.06		0.56 ^b	0.98	1.71	1.77		1.08	1.73	1.00	0.00 ^a	0.82	1.36 ^b
22 of 156	Expected			2.00		0.00	2.00		1.00	2.00	2.00	1.00	1.00		1.00		1.00	1.00	2.00
	Actual			1.89		0.00	2.29		0.55 ^b	1.80	1.77	0.92	0.90		1.00		0.00 ^a	1.00	1.44 ^b
23 of 156	Expected			2.00	1.00	1.00	1.00			2.00	3.00	1.00	1.00	2.00	1.00			1.00	1.00
	Actual			1.78	0.45 ^c	0.97	1.16			1.81	2.72	0.96	0.91	2.00	0.98			0.78	0.84
24 of 156	Expected			3.00	2.00	1.00			1.00	3.00	1.00		1.00	2.00	0.00	1.00		1.00	1.00
	Actual			2.94	0.91 ^c	1.06			0.99	2.87	0.95		1.01	2.00	0.00	0.99		1.00	0.93

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)
25 of 156	Expected			2.00	2.00	2.00	1.00		1.00	2.00	1.00			2.00	3.00	1.00			
	Actual			2.00	0.55 ^c	1.90	1.02		1.06	2.02	0.98			1.98	2.75	0.97			
26 of 156	Expected			1.00	1.00	3.00	1.00		1.00	2.00				2.00	3.00	1.00			1.00
	Actual			1.00	0.56 ^c	2.81	0.89		1.01	1.88				1.96	2.76	0.81			0.87
27 of 156	Expected		2.00			3.00	1.00		1.00					2.00	4.00	2.00			2.00
	Actual		2.13			2.92	1.15		0.89					2.13	3.85	1.81			2.00
28 of 156	Expected		2.00			3.00			1.00	1.00	1.00	1.00		1.00	1.00	2.00			3.00
	Actual		2.06			2.83			0.75	0.91	1.13	1.01		1.17	1.00	1.80			2.73
29 of 156	Expected		2.00	2.00		1.00			1.00	2.00	2.00	1.00		1.00	1.00	1.00	1.00		2.00
	Actual		2.25	1.84		0.88			0.78	1.77	1.72	0.93		1.29	1.00	0.85	0.00 ^a		1.73
30 of 156	Expected		0.00	2.00	1.00	2.00			1.00	2.00	3.00	1.00	1.00	1.00				1.00	2.00
	Actual		0.00	2.06	0.59 ^c	1.92			0.86	1.98	2.99	1.07	1.09	1.21			0.00 ^a		1.93
31 of 156	Expected		0.00	3.00	1.00	1.00			1.00	2.00	2.00	1.00	1.00	1.00			1.00	1.00	1.00
	Actual		0.00	2.79	0.54 ^c	1.00			0.82	1.78	1.96	0.75	1.01	1.09			0.00 ^a	0.95	0.90
32 of 156	Expected		0.00	2.00	1.00	2.00			2.00	1.00	1.00	1.00	1.00	2.00		1.00		1.00	2.00
	Actual		0.00	1.94	0.57 ^c	1.99			1.44 ^b	0.95	1.03	0.93	1.01	2.00		1.03		0.94	1.51 ^b
33 of 156	Expected		1.00	1.00		3.00		1.00	1.00	3.00		1.00		2.00		1.00		1.00	2.00
	Actual		1.10	1.06		3.03		0.93	0.70 ^b	2.73		0.86		2.00		0.89		0.76	1.40 ^b
34 of 156	Expected		2.00			3.00	2.00	2.00	1.00	2.00	1.00	1.00		1.00		1.00			1.00
	Actual		2.00			2.73	2.05	1.94	0.70 ^b	1.92	1.04	0.93		1.18		1.03			0.64 ^b
35 of 156	Expected		3.00	1.00		2.00	2.00	1.00	0.00	4.00	1.00	1.00		1.00					1.00
	Actual		3.00	0.98		1.84	1.91	1.08	0.00	3.80	1.00	0.89		1.04					0.88
36 of 156	Expected		2.00	2.00		0.00	2.00	2.00	0.00	2.00	1.00	1.00		1.00	2.00	1.00			1.00
	Actual		2.00	1.85		0.00	2.07	2.10	0.00	1.91	1.01	1.02		1.12	1.76	1.12			0.90
37 of 156	Expected		2.00	2.00		1.00		1.00	1.00	1.00		1.00		1.00	2.00	1.00	1.00	1.00	1.00
	Actual		1.93	2.03		1.02		1.00	0.97	1.04		0.94		1.15	1.78	1.02	0.00 ^a	0.90	0.87
38 of 156	Expected		1.00	3.00		1.00	2.00	1.00	1.00			1.00			3.00	2.00	1.00	1.00	
	Actual		1.21	2.79		1.08	2.10	1.26	1.01			0.94			2.77	1.82	0.00 ^a	1.00	
39 of 156	Expected		0.00	2.00		1.00	2.00	1.00	2.00			1.00			3.00	1.00	1.00	1.00	2.00
	Actual		0.00	2.03		0.96	2.12	1.17	1.62 ^b			0.85			2.97	1.00	0.00 ^a	0.98	1.66 ^b
40 of 156	Expected		1.00	3.00			2.00		1.00	1.00		1.00			4.00	1.00			3.00
	Actual		1.31	2.93			2.10		0.51 ^b	1.13		0.93			3.84	1.00			2.56 ^b
41 of 156	Expected		2.00	2.00					1.00	3.00		1.00	1.00		3.00	1.00			3.00
	Actual		2.32	1.90					0.74 ^b	2.75		0.86	1.11		2.75	1.00			2.17 ^b
42 of 156	Expected		4.00	1.00				1.00		3.00		2.00	1.00		1.00	2.00			1.00
	Actual		3.83	1.09				1.03		2.75		1.73	1.00		1.01	2.00			1.03
43 of 156	Expected		3.00	2.00		1.00		1.00	1.00	2.00	1.00	1.00	1.00	1.00		3.00			0.00
	Actual		2.77	1.96		0.97		1.09	0.99	2.02	1.11	1.00	1.05	1.17		2.72			0.00
44 of 156	Expected	1.00	2.00	2.00		1.00	2.00	1.00	1.00	1.00	1.00	1.00		1.00		2.00			1.00
	Actual	0.83	1.96	1.87		1.00	1.72	1.00	0.91	0.98	0.93	0.89		1.03		1.89			0.95
45 of 156	Expected	2.00	1.00	3.00		1.00	2.00	1.00	1.00	1.00	1.00					2.00			2.00
	Actual	1.81	0.82	2.78		1.05	2.00	0.75	1.07	1.16	1.09					1.77			1.79
46 of 156	Expected	2.00	1.00	3.00		2.00	2.00	1.00		1.00				2.00		2.00			1.00
	Actual	2.10	1.01	2.76		1.86	1.92	0.95		1.02				2.00		1.88			0.89
47 of 156	Expected	1.00	1.00	3.00		3.00	1.00	1.00	1.00			1.00		2.00		1.00			2.00
	Actual	1.07	1.00	2.82		2.79	0.98	0.93	0.47 ^b			0.94		1.94		0.90			1.22 ^b
48 of 156	Expected		2.00	2.00		2.00	1.00	0.00	3.00		2.00	1.00		2.00		1.00			1.00
	Actual		1.92	1.90		1.85	1.02	0.00	1.99 ^b		1.71	0.86		2.00		1.05			0.48 ^b

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)
49 of 156	Expected		2.00	1.00		3.00	1.00	1.00	3.00		2.00				2.00	1.00			1.00
	Actual		1.87	1.00		2.74	1.00	1.04	1.87 ^b		2.12				1.71	1.05			0.50 ^b
50 of 156	Expected		1.00	2.00		3.00		2.00	2.00		2.00				2.00	1.00	1.00	1.00	
	Actual		0.98	2.20		2.86		1.88	1.76		2.03				1.93	1.00	0.00 ^a	0.85	
51 of 156	Expected		0.00	3.00		3.00		2.00			2.00			1.00	2.00	1.00	1.00	2.00	
	Actual		0.00	2.92		2.82		1.82			2.00			1.20	1.80	1.01	0.00 ^a	1.79	
52 of 156	Expected	1.00	0.00	3.00		1.00	1.00	2.00			1.00			1.00		2.00	2.00	3.00	
	Actual	1.00	0.00	2.71		1.03	0.77	1.71			1.01			1.14		1.69	0.00 ^a	2.75	
53 of 156	Expected	1.00	0.00	2.00		2.00	1.00	1.00			2.00			1.00	1.00	1.00	1.00	3.00	1.00
	Actual	1.12	0.00	1.92		2.02	1.11	1.09			1.76			1.18	1.00	1.00	0.00 ^a	2.87	0.90
54 of 156	Expected	3.00	0.00			1.00	2.00	1.00			1.00				2.00	2.00	1.00	2.00	1.00
	Actual	3.00	0.00			1.16	2.25	1.24			0.93				1.88	1.89	0.00 ^a	1.91	0.99
55 of 156	Expected	2.00		1.00		1.00	3.00		1.00		1.00	1.00			4.00	1.00		1.00	1.00
	Actual	1.92		0.91		0.88	3.15		0.78		0.96	0.88			4.01	0.83		1.00	0.78
56 of 156	Expected	2.00		1.00			2.00		1.00	2.00	1.00	1.00			3.00	2.00			2.00
	Actual	2.17		1.00			2.27		1.04	1.99	0.94	1.04			2.80	1.90			0.76 ^b
57 of 156	Expected			2.00			1.00		1.00	2.00	2.00	1.00		1.00	1.00	1.00	1.00		4.00
	Actual			1.79			1.15		0.98	1.84	1.80	0.73		1.06	0.95	1.00	0.00 ^a		1.63 ^b
58 of 156	Expected			1.00		1.00				2.00	2.00	2.00		2.00		2.00	1.00		4.00
	Actual			1.00		0.97				1.86	1.85	2.01		2.08		1.79	0.00 ^a		2.86 ^b
59 of 156	Expected	1.00		2.00		1.00						3.00		2.00		4.00	1.00		3.00
	Actual	1.22		2.00		0.88						3.19		2.13		3.75	0.00 ^a		1.94 ^b
60 of 156	Expected	1.00	1.00	1.00		3.00	1.00					3.00	1.00	1.00		4.00			1.00
	Actual	1.11	1.22	0.93		2.94	1.10					2.79	1.11	1.00		3.09			0.92
61 of 156	Expected		1.00	1.00		3.00	1.00				2.00	1.00	2.00	1.00		3.00			2.00
	Actual		1.14	1.05		3.00	1.07				1.85	0.89	1.76	1.15		2.89			1.88
62 of 156	Expected		3.00	1.00		3.00	1.00				2.00	0.00	2.00	1.00		2.00			2.00
	Actual		2.68	1.04		2.79	1.12				1.87	0.00	1.85	1.17		2.00			1.79
63 of 156	Expected		3.00	1.00		1.00	1.00				2.00	1.00	1.00	3.00		3.00			1.00
	Actual		3.00	0.95		1.01	1.19				1.79	0.95	1.01	2.93		2.84			0.89
64 of 156	Expected		3.00			1.00	1.00		1.00		1.00	2.00		3.00		4.00			1.00
	Actual		3.00			0.97	1.25		1.04		0.90	1.94		2.96		3.68			0.96
65 of 156	Expected	1.00	2.00			2.00	1.00		1.00	1.00	1.00	2.00		1.00		2.00	2.00		1.00
	Actual	0.93	2.04			2.00	0.93		0.87	0.90	0.97	1.76		1.12		1.76	0.00 ^a		0.90
66 of 156	Expected	1.00	2.00	1.00		2.00	1.00		1.00	2.00	1.00	1.00				2.00	2.00		1.00
	Actual	1.11	2.16	0.97		1.92	1.17		0.96	1.98	0.97	0.95				2.00	0.00 ^a		0.90
67 of 156	Expected	1.00	4.00	1.00		1.00	1.00			3.00	1.00			1.00		1.00	2.00		
	Actual	1.19	3.87	0.97		1.00	1.16			2.72	0.98			1.14		1.28	0.00 ^a		
68 of 156	Expected		5.00	1.00	1.00	2.00	1.00			2.00	1.00		1.00	1.00		2.00			
	Actual		4.94	0.95	0.52 ^c	1.92	1.12			1.83	0.95		1.13	1.08		2.00			
69 of 156	Expected		4.00		1.00	2.00				1.00	3.00		1.00	1.00		3.00			1.00
	Actual		3.85		0.50 ^c	2.30				0.97	2.95		1.00	1.26		2.76			1.29
70 of 156	Expected	3.00	2.00	1.00		2.00	1.00				2.00	1.00	1.00			3.00			1.00
	Actual	2.85	1.79	1.15		2.16	0.73				1.79	1.00	0.88			2.71			0.74
71 of 156	Expected	3.00	1.00	2.00		2.00	1.00				2.00	1.00	1.00			2.00			2.00
	Actual	3.00	0.75	2.14		2.10	1.19				1.88	0.96	0.77			1.74			1.86
72 of 156	Expected	4.00	1.00	2.00		3.00	1.00					1.00	1.00		1.00	1.00	1.00		1.00
	Actual	3.71	1.15	2.16		2.93	1.17					0.97	0.89		1.00	0.90	0.00 ^a		0.81

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)
73 of 156	Expected	3.00	1.00	3.00		5.00							1.00		1.00	1.00	1.00		1.00
	Actual	2.73	1.14	2.91		4.86							0.85		1.10	1.00	0.00 ^a		0.98
74 of 156	Expected	3.00	1.00	2.00		3.00				1.00	1.00		1.00		1.00		2.00		2.00
	Actual	2.91	1.23	2.00		3.01				0.82	0.84		0.95		1.10		0.00 ^a		1.88
75 of 156	Expected	1.00	2.00	2.00		5.00				2.00	1.00		1.00				1.00		2.00
	Actual	1.14	2.20	2.12		4.73				1.88	1.00		0.94				0.00 ^a		1.91
76 of 156	Expected		2.00	1.00		2.00	1.00	1.00		3.00	3.00		1.00				1.00		1.00
	Actual		2.00	1.04		1.88	0.91	1.04		2.71	2.76		0.85				0.00 ^a		1.06
77 of 156	Expected		2.00	1.00	2.00	2.00	2.00	1.00		2.00	2.00				1.00			1.00	1.00
	Actual		1.82	0.94	0.96 ^c	1.96	2.27	1.09		1.91	2.00				1.00			0.91	0.94
78 of 156	Expected		1.00	1.00	2.00		3.00	1.00		1.00	3.00	2.00			1.00			1.00	1.00
	Actual		1.21	1.10	0.99 ^c		3.13	1.00		0.85	2.74	1.83			1.12			0.91	0.88
79 of 156	Expected		1.00	1.00	1.00	2.00	3.00			1.00	3.00	2.00			1.00			1.00	1.00
	Actual		1.26	1.00	0.49 ^c	1.82	3.13			1.06	2.93	1.91			0.75			1.03	1.00
80 of 156	Expected	1.00	1.00			2.00	4.00			1.00	5.00	2.00	1.00					0.00	
	Actual	1.00	1.27			2.16	4.16			0.85	4.78	1.71	0.91					0.00	
81 of 156	Expected	2.00	1.00			1.00	3.00		1.00	1.00	4.00		1.00		1.00		1.00	1.00	
	Actual	2.00	1.05			1.02	3.20		0.87	0.86	3.97		0.94		1.09		0.00 ^a	1.14	
82 of 156	Expected	3.00	2.00				3.00		1.00	1.00	2.00	1.00			1.00		2.00	1.00	
	Actual	2.73	2.13				3.10		0.84	0.81	1.87	0.97			1.00		0.00 ^a	1.07	
83 of 156	Expected	3.00	2.00			2.00	1.00		1.00	2.00		1.00	1.00				2.00	2.00	
	Actual	2.87	2.13			2.00	1.23		0.83	1.73		1.02	0.95				0.00 ^a	1.96	
84 of 156	Expected	2.00	1.00	1.00		3.00	2.00			4.00			2.00				1.00	1.00	
	Actual	1.84	1.18	1.06		3.00	1.88			3.73			1.77				0.00 ^a	0.91	
85 of 156	Expected	1.00	1.00	2.00		3.00	1.00	1.00		3.00			3.00		1.00		1.00		
	Actual	0.98	1.00	2.02		2.77	1.02	0.94		3.01			2.87		0.94		0.00 ^a		
86 of 156	Expected		1.00	3.00		2.00	2.00	1.00		1.00			2.00		3.00		1.00	1.00	
	Actual		1.08	3.00		2.03	1.73	1.20		0.91			1.80		2.93		0.00 ^a	0.71	
87 of 156	Expected		1.00	1.00		3.00	3.00	1.00		1.00			1.00		3.00		1.00	1.00	1.00
	Actual		1.00	0.85		2.80	3.09	1.08		0.72			0.82		2.95		0.00 ^a	1.00	0.82
88 of 156	Expected		0.00	1.00		2.00	4.00	1.00	1.00	2.00	1.00				2.00			2.00	1.00
	Actual		0.00	1.11		2.06	4.00	1.32	0.91	1.88	0.96				2.05			1.91	1.07
89 of 156	Expected		1.00	1.00		2.00	3.00	1.00	2.00	3.00	1.00							1.00	1.00
	Actual		1.14	1.00		1.71	3.03	1.26	1.74	2.77	0.84							1.00	0.89
90 of 156	Expected		1.00	1.00			3.00	1.00	3.00	3.00	2.00			1.00	1.00			1.00	
	Actual		1.16	0.84			3.01	1.02	2.88	2.91	1.93			1.07	0.80			1.11	
91 of 156	Expected	2.00	1.00	3.00			2.00		3.00	1.00	1.00	1.00		1.00	1.00			1.00	
	Actual	2.10	1.06	3.00			1.91		2.73	0.93	0.96	0.81		1.11	1.07			0.89	
92 of 156	Expected	3.00		3.00			3.00		1.00		1.00	1.00		1.00		2.00	1.00	1.00	
	Actual	2.79		2.77			3.00		1.00		0.82	0.95		1.09		1.78	0.00 ^a	1.13	
93 of 156	Expected	2.00	1.00	5.00		1.00	1.00		1.00			1.00				3.00	1.00	1.00	
	Actual	1.96	1.10	4.79		1.06	1.15		0.99			1.00				2.73	0.00 ^a	0.98	
94 of 156	Expected	1.00	1.00	4.00		3.00	1.00	1.00	1.00	1.00	1.00					2.00	1.00		
	Actual	1.20	0.95	4.00		2.96	1.02	1.03	0.97	0.87	1.07					1.79	0.00 ^a		
95 of 156	Expected			4.00		5.00		1.00	2.00	1.00	1.00	1.00				2.00			
	Actual			4.18		5.00		1.03	1.79	0.93	1.01	0.93				1.70			
96 of 156	Expected		1.00	2.00		6.00		2.00	1.00	1.00	1.00	1.00		1.00		1.00			
	Actual		1.09	1.72		5.65		1.95	0.89	0.87	0.74	1.02		1.12		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)
97 of 156	Expected	2.00	1.00	2.00		4.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00			
	Actual	1.76	1.09	1.73		3.81		1.10	0.72	0.90	0.70	0.88	0.72	1.00		0.82			
98 of 156	Expected	2.00	1.00	2.00		3.00		1.00	1.00	2.00	1.00		1.00	1.00		1.00		1.00	
	Actual	1.95	1.00	1.94		3.02		1.04	0.79	1.81	0.96		0.76	1.12		1.00		0.94	
99 of 156	Expected	2.00	0.00	2.00		2.00			1.00	1.00	3.00		1.00			1.00		1.00	3.00
	Actual	2.20	0.00	2.10		2.00			0.94	0.88	2.77		0.74			0.90		1.08	1.76 ^b
100 of 156	Expected		1.00	1.00		2.00	1.00			1.00	3.00			2.00		2.00		1.00	3.00
	Actual		1.07	1.13		2.15	0.97			0.97	2.78			1.97		1.74		1.00	2.32 ^b
101 of 156	Expected		1.00	1.00		1.00	1.00		2.00		2.00	1.00		2.00		2.00			4.00
	Actual		1.23	1.00		0.89	1.07		1.02 ^b		1.85	0.87		2.03		1.81			2.60 ^b
102 of 156	Expected		2.00	2.00		1.00	1.00		2.00		2.00	1.00		2.00	1.00	2.00			1.00
	Actual		2.00	0.00		1.11	1.09		0.94 ^b		1.86	0.82		1.99	1.01	1.66			1.02
103 of 156	Expected		2.00	2.00		2.00	3.00		2.00		1.00	1.00			2.00				2.00
	Actual		2.23	2.18		1.89	3.00		1.01 ^b		0.99	0.90			1.89				1.85
104 of 156	Expected		2.00	2.00		2.00	4.00			1.00	1.00				1.00	2.00		1.00	1.00
	Actual		1.74	1.91		2.02	4.15			1.04	0.87				0.81	1.73		1.00	1.04
105 of 156	Expected	1.00	0.00	2.00		2.00	3.00			1.00		1.00	1.00		1.00	3.00		1.00	1.00
	Actual	0.94	0.00	1.78		1.73	3.28			1.03		1.04	1.00		1.02	2.92		1.10	1.03
106 of 156	Expected	1.00	1.00	2.00		3.00	1.00		1.00	2.00		2.00	1.00			2.00		1.00	
	Actual	0.98	1.20	1.89		2.76	1.10		0.86	1.72		1.77	1.00			1.74		1.02	
107 of 156	Expected	1.00	1.00	1.00		5.00	2.00		1.00	2.00		2.00				1.00			1.00
	Actual	1.13	1.20	1.00		4.97	1.91		0.85	1.80		1.76				1.00			0.91
108 of 156	Expected	1.00	1.00	1.00		4.00	2.00		1.00	3.00	1.00	1.00			1.00				1.00
	Actual	1.08	1.05	1.00		3.74	2.26		0.82	2.78	0.98	0.88			1.02				0.85
109 of 156	Expected	1.00		2.00		3.00	2.00	1.00		3.00	1.00			2.00	1.00				1.00
	Actual	0.99		1.71		2.83	2.04	1.27		2.70	0.89			2.00	1.01				0.90
110 of 156	Expected	1.00		2.00		3.00		1.00	1.00	2.00	3.00			2.00		1.00	1.00		
	Actual	1.00		1.79		2.72		1.21	0.87	1.89	3.03			1.74		0.82	0.00 ^a		
111 of 156	Expected					3.00	1.00	1.00	1.00	2.00	3.00			2.00		2.00	1.00		1.00
	Actual					2.92	1.21	1.16	0.95	1.82	2.73			1.92		1.87	0.00 ^a		1.00
112 of 156	Expected		2.00			3.00	1.00		1.00	2.00	3.00	1.00				2.00	1.00		1.00
	Actual		1.96			2.88	1.04		0.90	1.93	3.02	1.14				1.91	0.00 ^a		1.00
113 of 156	Expected	1.00	2.00	1.00		2.00	2.00		1.00	2.00	2.00	1.00			1.00	1.00			1.00
	Actual	0.90	2.00	1.03		1.71	1.73		0.89	1.75	1.98	0.94			0.89	1.05			0.81
114 of 156	Expected	1.00	2.00	2.00	1.00	1.00	1.00		1.00	1.00	2.00	1.00			1.00				3.00
	Actual	0.94	1.85	1.83	0.51 ^c	0.89	1.07		1.01	0.98	2.00	0.98			0.95				1.89 ^b
115 of 156	Expected	1.00	1.00	4.00	1.00		1.00		2.00	0.00	1.00	1.00	1.00	1.00	1.00				2.00
	Actual	1.00	1.09	3.78	0.57 ^c		1.09		1.93	0.00	0.96	0.96	0.92	1.03	0.95				1.05 ^b
116 of 156	Expected	3.00	1.00	4.00	1.00				1.00	2.00	1.00		1.00	1.00					2.00
	Actual	3.02	1.03	3.76	0.58 ^c				1.01	1.95	0.96		0.99	1.02					1.03 ^b
117 of 156	Expected	3.00	1.00	5.00			1.00		1.00	3.00	1.00	1.00	1.00						
	Actual	2.91	1.13	4.79			1.08		1.11	2.82	0.93	1.00	1.18						
118 of 156	Expected	2.00	1.00	4.00			1.00		1.00	3.00	2.00	1.00							1.00
	Actual	1.87	1.08	3.95			1.19		0.98	2.74	1.86	1.00							0.95
119 of 156	Expected		1.00	3.00		2.00	1.00		1.00	1.00	2.00	1.00		1.00			1.00		1.00
	Actual		0.89	2.76		1.73	1.00		0.91	1.03	1.71	0.94		1.01			0.00 ^a		0.74
120 of 156	Expected		1.00	1.00		2.00	2.00	1.00	1.00		3.00			2.00	1.00		2.00		1.00
	Actual		0.95	0.94		1.74	2.23	1.25	1.09		2.93			2.00	1.04		0.00 ^a		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)
121 of 156	Expected			1.00		4.00	1.00	1.00	1.00		1.00			2.00	1.00		3.00		1.00
	Actual			0.73		3.77	1.00	1.03	0.99		0.95			2.00	0.86		0.00 ^a		0.86
122 of 156	Expected			1.00	1.00	2.00	1.00	3.00			1.00		1.00	2.00	2.00		2.00		1.00
	Actual			0.77	0.66 ^c	1.72	1.18	2.98			1.06		1.03	2.00	1.90		0.00 ^a		1.03
123 of 156	Expected			1.00	1.00	3.00		3.00	1.00	1.00		1.00	2.00	1.00	1.00		1.00		1.00
	Actual			0.91	0.58 ^c	2.82		3.04	0.93	1.07		0.99	1.88	1.00	1.01		0.00 ^a		0.89
124 of 156	Expected		1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.00	1.00	2.00		1.00				
	Actual		1.10	1.00	0.47 ^c	1.02	1.07	3.15	0.91	1.87	1.69	0.98	1.73		1.04				
125 of 156	Expected		2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00		1.00					2.00
	Actual		1.96	0.86	0.49 ^c	0.85	1.11	1.13	0.89	1.77	1.85	0.94		1.00					0.93 ^b
126 of 156	Expected		2.00	2.00	1.00	2.00	1.00		1.00	2.00	2.00			2.00					2.00
	Actual		2.00	1.82	0.48 ^c	1.87	1.12		0.98	1.81	1.83			1.94					0.98 ^b
127 of 156	Expected	1.00	3.00	1.00	1.00	2.00	1.00		2.00	1.00				2.00					2.00
	Actual	1.00	2.73	0.93	0.47 ^c	1.76	1.04		1.91	1.00				1.83					0.84 ^b
128 of 156	Expected	2.00	2.00	1.00		3.00	3.00		2.00	1.00				1.00	1.00		1.00		
	Actual	1.99	2.00	0.95		2.77	3.03		1.72	0.95				1.11	0.99		0.00 ^a		
129 of 156	Expected	3.00	3.00			2.00	3.00		1.00	1.00					2.00	1.00	1.00		
	Actual	2.75	2.70			1.96	3.11		0.83	0.99					1.92	1.00	0.00 ^a		
130 of 156	Expected	3.00	1.00		1.00	2.00	3.00			2.00	1.00				2.00	1.00	1.00		
	Actual	2.76	1.09		0.46 ^c	1.92	3.05			2.00	0.95				1.82	1.00	0.00 ^a		
131 of 156	Expected	3.00	1.00		1.00	2.00	1.00			2.00	1.00	1.00			1.00	2.00	1.00	1.00	
	Actual	3.00	0.95		0.42 ^c	1.90	1.08			1.93	1.00	0.97			0.88	1.92	0.00 ^a	1.04	
132 of 156	Expected	2.00	1.00		1.00	1.00	1.00	1.00		2.00	1.00	2.00	1.00			1.00	1.00	2.00	
	Actual	1.75	1.09		0.47 ^c	0.85	1.04	0.98		1.77	0.76	1.76	0.87			1.00	0.00 ^a	1.77	
133 of 156	Expected	2.00	3.00	1.00		1.00		1.00		3.00		2.00	1.00			1.00	1.00	1.00	
	Actual	2.06	2.82	1.00		1.03		1.02		2.71		1.71	0.93			1.12	0.00 ^a	0.97	
134 of 156	Expected	2.00	3.00	2.00				1.00	1.00	2.00		1.00	1.00		1.00			1.00	
	Actual	1.83	2.70	1.70				1.12	1.00	1.85		1.00	0.98		1.09			1.13	
135 of 156	Expected	3.00	3.00	2.00	1.00				1.00	2.00				1.00	2.00				2.00
	Actual	2.96	2.92	1.94	0.46 ^c				1.05	1.94				1.25	2.01				2.00
136 of 156	Expected	3.00		1.00	1.00			1.00	1.00					2.00	2.00	1.00	1.00		3.00
	Actual	3.08		0.93	0.54 ^c			0.93	1.05					2.45	1.76	1.00	0.00 ^a		2.89
137 of 156	Expected	1.00	1.00		1.00			1.00						2.00	2.00	3.00	2.00		3.00
	Actual	1.14	1.14		0.53 ^c			0.93						2.19	2.00	2.75	0.00 ^a		2.87
138 of 156	Expected	1.00	1.00					4.00	1.00					1.00	2.00	3.00	2.00		2.00
	Actual	1.12	1.15					3.75	1.00					1.10	1.97	2.91	0.00 ^a		1.92
139 of 156	Expected	1.00	1.00			2.00		3.00	1.00			1.00			2.00	4.00	2.00		
	Actual	1.12	1.07			1.82		3.15	1.09			1.02			2.00	3.69	0.00 ^a		
140 of 156	Expected	1.00	0.00	1.00		2.00		3.00	1.00	1.00		2.00				3.00	2.00		1.00
	Actual	0.98	0.00	0.96		1.79		3.01	0.88	1.06		2.15				2.66	0.00 ^a		1.05
141 of 156	Expected		1.00	2.00		2.00			1.00	1.00		2.00				3.00	3.00		2.00
	Actual		1.12	2.00		1.93			1.04	1.10		1.91				2.63	0.00 ^a		1.71
142 of 156	Expected		1.00	3.00		2.00			1.00	1.00		2.00		1.00		1.00	3.00		2.00
	Actual		1.07	2.79		1.86			0.91	0.97		1.98		1.05		1.00	0.00 ^a		1.77
143 of 156	Expected		1.00	3.00		2.00			1.00		1.00	1.00		2.00		2.00	2.00		2.00
	Actual		1.18	2.81		1.86			1.00		0.87	0.94		2.06		1.74	0.00 ^a		1.94
144 of 156	Expected			3.00		2.00					1.00	1.00		2.00		3.00	2.00		2.00
	Actual			2.88		2.00					1.02	1.07		2.12		2.72	0.00 ^a		1.93

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)
145 of 156	Expected		1.00	2.00		1.00	1.00			1.00	2.00			2.00		3.00	1.00	1.00	2.00
	Actual		1.00	1.74		0.82	1.08			0.86	1.84			1.91		2.79	0.00 ^a	1.00	1.83
146 of 156	Expected		1.00	2.00	1.00	3.00	2.00			1.00	1.00			1.00		1.00	2.00	1.00	1.00
	Actual		1.11	1.79	0.50 ^c	2.71	2.00			0.98	0.94			1.08		0.93	0.00 ^a	1.12	1.00
147 of 156	Expected		1.00	1.00	1.00	2.00	3.00		1.00	3.00	1.00				1.00	1.00	1.00	1.00	
	Actual		1.07	0.89	0.45 ^c	1.70	2.89		0.90	2.69	0.77				0.99	1.04	0.00 ^a	1.00	
148 of 156	Expected	2.00	1.00	1.00	1.00	1.00	2.00		1.00	2.00					2.00	2.00	2.00		
	Actual	2.00	1.16	0.94	0.47 ^c	0.77	1.98		1.06	1.84					1.70	1.62	0.00 ^a		
149 of 156	Expected	3.00	1.00	1.00		1.00	1.00		2.00	3.00					1.00	3.00	1.00		
	Actual	3.01	1.26	0.99		1.04	1.27		1.94	2.90					1.06	2.78	0.00 ^a		
150 of 156	Expected	3.00	2.00	1.00		3.00	0.00		2.00	1.00						2.00	1.00		1.00
	Actual	3.00	2.13	0.98		2.92	0.00		1.93	1.06						1.95	0.00 ^a		0.97
151 of 156	Expected	2.00	1.00	2.00		3.00	1.00		3.00	2.00					1.00	1.00			1.00
	Actual	1.93	1.00	1.89		2.77	1.06		2.98	1.84					0.96	1.01			1.00
152 of 156	Expected	1.00	1.00	2.00		4.00	1.00		2.00	2.00			1.00		1.00			1.00	1.00
	Actual	1.04	0.95	1.88		3.77	1.14		1.78	1.87			0.99		0.95			0.98	1.00
153 of 156	Expected		1.00	2.00		2.00	1.00		1.00	2.00	1.00	2.00	1.00	1.00	2.00			1.00	
	Actual		1.23	1.71		1.72	1.11		0.93	1.85	0.79	1.78	1.03	1.00	1.77			1.00	
154 of 156	Expected		2.00	2.00		3.00				1.00	2.00	2.00	2.00	1.00	1.00			1.00	
	Actual		2.07	1.79		3.00				0.92	1.79	1.79	1.71	1.05	0.91			1.00	
155 of 156	Expected	1.00	2.00			4.00	1.00				2.00	2.00	1.00	1.00	2.00			1.00	
	Actual	1.03	1.99			3.76	0.97				1.84	1.80	0.94	0.94	1.96			1.00	
156 of 156	Expected	1.00	2.00			4.00	1.00		1.00		1.00		1.00		1.00		1.00		
	Actual	1.04	2.00			3.94	1.13		0.87		0.80		0.96		0.93		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 partially destroyed during hydrolysis

Date: 30 APR 200

Signature: Signature on File

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