

**Peptide Array, Influenza Virus A/Wisconsin/67/2005 (H3N2) Neuraminidase Protein**

**Catalog No. NR-9475**

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**Product Description:** The 82-peptide array spans the neuraminidase protein of the A/Wisconsin/67/2005 (H3N2) strain of influenza virus (GenPept: ABP52004). Peptides are 12- to 18-mers, with 6 to 13 amino acid overlaps.

**Lot: P98415J**

The following information applies to all peptides:

- Appearance 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)	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
1 of 82	1/22/2008	17	1 MNPNQIITIGSVSLTI 17	1829	88	82.38
2 of 82	1/23/2008	17	7 IITIGSVSLTISTICFF 23	1815	nd <sup>c</sup>	72.18
3 of 82	2/11/2008	12	18 STICFFMQIAIL 29	1387	nd <sup>c</sup>	66.02
4 of 82	2/28/2008	17	19 TICFFMQIAILITTVTL 35	1928	nd <sup>c</sup>	81.37
5 of 82	1/21/2008	17	24 MQIAILITTVTLHFKQY 40	2020	nd <sup>c</sup>	80.91
6 of 82	11/30/2007	18	30 ITTVTLHFKQYEFNSPPN 47	2136	99	80.15
7 of 82	12/19/2007	16	37 FKQYEFNSPPNNQVML 52	1956	97	84.70
8 of 82	12/6/2007	17	42 FNSPPNNQVMLCEPTII 58	1917	85	72.64
9 of 82	12/27/2007	17	48 NQVMLCEPTIERNITE 64	2003	85	83.73
10 of 82	1/22/2008	17	53 CEPTIERNITEIVYLT 69	2007	nd <sup>c</sup>	73.75
11 of 82	1/24/2008	17	58 IERNITEIVYLTNTTIE 74	2022	nd <sup>c</sup>	84.74
12 of 82	1/23/2008	15	63 TEIVYLTNTTIEKEI 77	1767	94	89.55
13 of 82	12/19/2007	17	67 YLTNTTIEKEICPKLAE 83	1966	99	63.00
14 of 82	12/3/2007	17	73 IEKEICPKLAEYRNWSK 89	2107	96	74.77
15 of 82	12/11/2007	17	79 PKLAEYRNWSKPCQNIT 95	2048	91	80.00
16 of 82	12/6/2007	16	85 RNWSKPCQNITGFAPF 100	1866	99	77.97
17 of 82	12/10/2007	17	90 PCQNITGFAPFSKDNSI 106	1839	94	83.01
18 of 82	12/11/2007	17	96 GFAPFSKDNSIRLSAGG 112	1724	88	71.18
19 of 82	12/10/2007	17	102 KDNSIRLSAGGDIWVTR 118	1888	80	85.59
20 of 82	12/6/2007	15	108 LSAGGDIWVTREPYV 122	1663	83	80.14
21 of 82	11/30/2007	17	112 GDIWVTREPYVSCDPDK 128	1980	99	80.28
22 of 82	11/30/2007	17	118 REPYVSCDPDKCYQFAL 134	2034	94	71.61

Table 1

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
23 of 82	11/30/2007	17	124 CDPDKCYQFALGQGTTL 140	1860	100	82.98
24 of 82	11/30/2007	17	130 YQFALGQGTTLNNVHSN 146	1864	97	79.32
25 of 82	11/30/2007	17	135 GQGTTLNNVHSNDTVHD 151	1809	98	78.50
26 of 82	11/30/2007	17	141 NNVHSNDTVHDRTPYRT 157	2026	99	81.71
27 of 82	11/30/2007	17	147 DTVHDRTPYRTLLMNEL 163	2074	93	83.60
28 of 82	1/15/2008	17	153 TPYRTLLMNELGVPFHL 169	2001	85	74.90
29 of 82	11/30/2007	16	159 LMNELGVPFHLGTKQV 174	1783	88	81.71
30 of 82	11/30/2007	15	164 GVPFHLGTKQVCIAW 178	1656	88	80.88
31 of 82	2/7/2008	17	168 HLGTKQVCIAWSSSSSCH 184	1844	nd <sup>c</sup>	73.19
32 of 82	1/7/2008	17	174 VCIAWSSSSCHDGKAWL 190	1850	87	82.12
33 of 82	12/12/2007	17	180 SSSCHDGKAWLHVCVTG 196	1787	95	72.60
34 of 82	12/31/2007	17	186 GKAWLHVCVTGDDKNAT 202	1815	99	80.05
35 of 82	1/30/2008	17	192 VCVTGDDKNATASFIYN 208	1818	84	85.16
36 of 82	12/11/2007	16	198 DKNATASFIYNGRLVD 213	1784	99	79.35
37 of 82	1/23/2008	16	203 ASFIYNGRLVDSIVSW 218	1827	83	88.80
38 of 82	12/27/2007	17	208 NGRLVDSIVSWSKEILR 224	1972	92	78.70
39 of 82	12/18/2007	16	214 SIVSWSKEILRTQESE 229	1892	99	65.70
40 of 82	1/2/2008	17	219 SKEILRTQESECVCIING 235	1909	90	86.13
41 of 82	1/22/2008	17	225 TQESECVCIINGTCTVVM 241	1817	nd <sup>c</sup>	83.08
42 of 82	1/23/2008	16	231 VCINGTCTVVMTDGSA 246	1571	76	76.14
43 of 82	1/30/2008	17	236 TCTVVMTDGSASGKADT 252	1644	nd <sup>c</sup>	63.33
44 of 82	12/14/2007	17	242 TDGSASGKADTKILFIE 258	1753	89	65.92
45 of 82	12/10/2007	17	248 GKADTKILFIEEGKIVH 264	1898	99	68.27
46 of 82	12/20/2007	17	254 ILFIEEGKIVHTSTLSG 270	1844	88	81.90
47 of 82	12/18/2007	17	260 GKIVHTSTLSGSAQHVE 276	1751	99	68.10
48 of 82	12/21/2007	16	266 STLSGSAQHVEECSCY 281	1701	96	71.18
49 of 82	12/18/2007	17	271 SAQHVEECSCYPRYLG 287	1941	99	88.20
50 of 82	12/21/2007	16	275 VEECSCYPRYLGVRVC 290	1876	99	70.59
51 of 82	12/19/2007	17	280 CYPRYLGVRVCVCRDNWK 296	2132	100	78.10
52 of 82	12/31/2007	17	286 GVRVCVCRDNWKGSNRPI 302	1960	90	69.32
53 of 82	1/30/2008	17	292 RDNWKGSNRPIVDINIK 308	2025	~80	82.12
54 of 82	1/17/2008	16	298 SNRPIVDINIKDYSIV 313	1846	89	84.93
55 of 82	1/18/2008	15	303 VDINIKDYSIVSSYV 317	1715	97	84.62
56 of 82	1/8/2008	17	307 IKDYSIVSSYVCSGLVG 323	1790	85	82.33
57 of 82	12/27/2007	17	313 VSSYVCSGLVGDTPRKN 329	1782	92	81.05
58 of 82	12/10/2007	18	319 SGLVGDTPRKNDSSSSSH 336	1831	92	71.35
59 of 82	12/12/2007	17	326 PRKNDSSSSSHCLDPNN 342	1858	83	75.01
60 of 82	12/26/2007	17	332 SSSSHCLDPNNEEGGHG 348	1727	96	71.02
61 of 82	1/17/2008	17	338 LDPNNEEGGHGVKGWAF 354	1827	99	82.08
62 of 82	12/19/2007	17	342 NEEGGHGVKGWAFDDGN 358	1789	99	89.60
63 of 82	12/26/2007	17	348 GVKGWAFDDGNDVVMGR 364	1910	91	81.59
64 of 82	2/7/2008	17	354 FDDGNDVVMGRTISEKL 370	1983	nd <sup>c</sup>	81.80

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
65 of 82	12/26/2007	17	360 VWMGRTISEKLRSGYET 376	2013	97	82.84
66 of 82	12/27/2007	17	366 ISEKLRSGYETFKVIEG 382	1956	93	78.59
67 of 82	1/18/2008	16	372 SGYETFKVIEGWSNP 387	1828	96	82.47
68 of 82	1/2/2008	17	377 FKVIEGWSNPNSKLQIN 393	1974	94	82.33
69 of 82	12/26/2007	17	383 WSNPNSKLQINRQVIVD 399	2011	99	66.56
70 of 82	12/26/2007	17	389 KLQINRQVIVDRGNRSG 405	1953	96	70.92
71 of 82	12/19/2007	17	394 RQVIVDRGNRSGYSGIF 410	1924	99	67.40
72 of 82	1/21/2008	16	400 RGNRSGYSGIFSVEGK 415	1714	88	82.62
73 of 82	1/9/2008	16	405 GYSGIFSVEGKSCINR 420	1717	97	75.20
74 of 82	1/7/2008	17	410 FSVEGKSCINRCFYVEL 426	1994	87	69.68
75 of 82	12/18/2007	17	416 SCINRCFYVELIRGRKE 432	2086	100	82.60
76 of 82	2/6/2008	17	422 FYVELIRGRKEETEVLW 438	2167	nd <sup>c</sup>	63.30
77 of 82	1/22/2008	17	428 RGRKEETEVLWTSNSIV 444	2004	81	82.44
78 of 82	2/18/2008	16	434 TEVLWTSNSIVFCGT 449	1756	nd <sup>c</sup>	79.32
79 of 82	2/12/2008	17	439 TSNSIVFCGTSGTYGT 455	1694	nd <sup>c</sup>	75.33
80 of 82	12/18/2007	17	445 VFCGTSGTYGTGSWPDG 461	1692	86	84.10
81 of 82	12/18/2007	17	451 GTYGTGSWPDGADINLM 467	1755	99	75.80
82 of 82	12/10/2007	13	457 SWPDGADINLMPI 469	1429	99	70.60

<sup>a</sup>% full-length  
<sup>b</sup>Remainder is salt & water  
<sup>c</sup>nd; not done due to hydrophobic nature of the peptide

Note: Actual amino acid results which are not within 20% of expected results are highlighted in red.

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 82	Expected			2.00		1.00	1.00		4.00	1.00	1.00	1.00		1.00	2.00	2.00			1.00
	Actual			1.98		0.96	1.06		3.83	1.04	1.00	0.95		1.01	2.10	2.07			0.99
2 of 82	Expected				1.00		1.00		5.00	1.00			2.00		3.00	3.00			1.00
	Actual				0.00 <sup>a</sup>		1.00		4.93	1.01			2.12		2.96	3.00			1.04
3 of 82	Expected	1.00			1.00	1.00			3.00	1.00		1.00	2.00		1.00	1.00			
	Actual	1.07			0.00 <sup>a</sup>	1.05			2.80	1.07		0.94	2.07		0.99	0.83			
4 of 82	Expected	1.00			1.00	1.00			4.00	2.00		1.00	2.00			4.00			1.00
	Actual	1.04			0.00 <sup>a</sup>	0.26			4.18	2.66		0.91	1.37			5.11			1.60
5 of 82	Expected	1.00				2.00		1.00	3.00	2.00	1.00	1.00	1.00			3.00		1.00	1.00
	Actual	1.03				1.98		1.02	2.75	2.10	0.97	0.98	1.00			2.96		1.01	1.09
6 of 82	Expected			2.00		2.00		1.00	1.00	1.00	1.00		2.00	2.00	1.00	3.00		1.00	1.00
	Actual			2.09		2.03		1.02	1.02	1.03	0.96		2.11	1.87	0.88	2.74		1.05	0.99
7 of 82	Expected			3.00		3.00				1.00	1.00	1.00	2.00	2.00	1.00			1.00	1.00
	Actual			3.05		3.06				1.03	1.02	0.86	1.95	1.90	0.91			1.03	1.10
8 of 82	Expected			3.00	1.00	2.00			2.00	1.00		1.00	1.00	3.00	1.00	1.00			1.00
	Actual			3.07	0.00 <sup>a</sup>	2.05			1.98	1.06		1.01	1.01	2.89	0.95	1.00			0.97

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)
9 of 82	Expected		1.00	2.00	1.00	4.00			3.00	1.00		1.00		1.00		2.00			1.00
	Actual		0.98	2.14	0.00 <sup>a</sup>	4.10			2.70	1.01		0.98		0.98		2.04			1.08
10 of 82	Expected		1.00	1.00	1.00	3.00			4.00	1.00				1.00		3.00		1.00	1.00
	Actual		1.06	1.03	0.00 <sup>a</sup>	2.79			3.93	0.99				1.01		3.03		1.02	1.01
11 of 82	Expected		1.00	2.00		3.00			4.00	1.00						4.00		1.00	1.00
	Actual		1.02	1.90		2.74			3.94	1.04						3.57		0.99	1.10
12 of 82	Expected			1.00		3.00			3.00	1.00	1.00					4.00		1.00	1.00
	Actual			1.07		2.98			2.79	1.05	0.99					3.96		0.97	0.77 <sup>c</sup>
13 of 82	Expected	1.00		1.00	1.00	3.00			2.00	2.00	2.00			1.00		3.00			1.00
	Actual	1.05		1.07	0.00 <sup>a</sup>	3.20			1.71	2.14	2.12			0.91		2.89			1.01
14 of 82	Expected	1.00	1.00	1.00	1.00	3.00			2.00	1.00	3.00			1.00	1.00		1.00	1.00	
	Actual	1.03	1.04	0.97	0.00 <sup>a</sup>	2.87			1.86	1.04	3.19			0.93	0.86		0.00 <sup>b</sup>	1.04	
15 of 82	Expected	1.00	1.00	2.00	1.00	2.00			1.00	1.00	2.00			2.00	1.00	1.00	1.00	1.00	
	Actual	0.90	1.03	2.06	0.00 <sup>a</sup>	2.12			1.07	1.09	1.93			1.99	0.98	0.98	0.00 <sup>b</sup>	0.93	
16 of 82	Expected	1.00	1.00	2.00	1.00	1.00	1.00		1.00		1.00		2.00	2.00	1.00	1.00	1.00		
	Actual	1.05	1.03	2.00	0.00 <sup>a</sup>	0.97	1.04		0.97		0.94		2.10	2.07	0.94	0.95	0.00 <sup>b</sup>		
17 of 82	Expected	1.00		3.00	1.00	1.00	1.00		2.00		1.00		2.00	2.00	2.00	1.00			
	Actual	1.04		3.10	0.00 <sup>a</sup>	0.96	1.04		1.95		0.99		2.09	2.07	1.82	0.93			
18 of 82	Expected	2.00	1.00	2.00			3.00		1.00	1.00	1.00		2.00	1.00	3.00				
	Actual	2.03	1.04	1.89			3.03		1.01	1.02	0.94		1.95	1.05	2.87				
19 of 82	Expected	1.00	2.00	3.00			2.00		2.00	1.00	1.00				2.00	1.00	1.00		1.00
	Actual	1.06	1.94	2.72			2.14		2.03	1.02	1.01				1.92	0.97	0.00 <sup>b</sup>		1.03
20 of 82	Expected	1.00	1.00	1.00		1.00	2.00		1.00	1.00				1.00	1.00	1.00	1.00	1.00	2.00
	Actual	1.00	1.03	1.02		1.01	2.00		1.01	0.98				1.02	0.88	0.96	0.00 <sup>b</sup>	1.03	1.99
21 of 82	Expected		1.00	3.00	1.00	1.00	1.00		1.00		1.00			2.00	1.00	1.00	1.00	1.00	2.00
	Actual		1.01	3.06	0.00 <sup>a</sup>	0.98	1.01		0.98		1.08			2.12	1.02	0.96	0.00 <sup>b</sup>	1.03	1.97
22 of 82	Expected	1.00	1.00	2.00	2.00	2.00				1.00	1.00		1.00	2.00	1.00				2.00
	Actual	0.99	1.01	2.07	0.00 <sup>a</sup>	1.97				0.99	1.03		1.04	1.88	0.72				2.01
23 of 82	Expected	1.00		2.00	2.00	2.00	2.00			2.00	1.00		1.00	1.00					1.00
	Actual	1.05		1.87	0.00 <sup>a</sup>	2.00	2.10			2.09	0.97		1.05	0.95		1.98			1.01
24 of 82	Expected	1.00		3.00		2.00	2.00	1.00		2.00			1.00		1.00	2.00		1.00	1.00
	Actual	1.05		3.02		1.89	2.10	0.96		2.04			1.03		0.90	1.89		1.03	1.00
25 of 82	Expected			5.00		1.00	2.00	2.00		1.00					1.00	3.00			2.00
	Actual			5.12		0.98	2.10	2.00		1.04					0.91	2.94			1.94
26 of 82	Expected		2.00	5.00				2.00						1.00	1.00	3.00		1.00	2.00
	Actual		2.12	5.14				1.93						0.94	1.04	3.13		1.07	1.99
27 of 82	Expected		2.00	3.00		1.00		1.00		3.00		1.00		1.00		3.00		1.00	1.00
	Actual		2.07	3.09		1.01		1.01		3.09		1.00		1.00		2.95		1.02	0.94
28 of 82	Expected		1.00	1.00		1.00	1.00	1.00		4.00		1.00	1.00	2.00		2.00		1.00	1.00
	Actual		0.99	1.04		1.01	1.04	1.01		4.04		0.97	1.02	2.12		1.91		0.94	1.00
29 of 82	Expected			1.00		2.00	2.00	1.00		3.00	1.00	1.00	1.00	1.00		1.00			2.00
	Actual			1.05		1.92	2.05	1.01		3.06	0.98	0.99	1.05	1.00		0.97			1.99
30 of 82	Expected	1.00			1.00	1.00	2.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		2.00
	Actual	1.09			0.00 <sup>a</sup>	0.97	2.12	0.92	1.03	1.05	1.08		0.94	0.97		0.99	0.00 <sup>b</sup>		1.89
31 of 82	Expected	1.00			2.00	1.00	1.00	2.00	1.00	1.00	1.00				4.00	1.00	1.00		1.00
	Actual	1.07			0.00 <sup>a</sup>	1.04	1.03	2.06	1.01	1.01	0.98				3.76	0.92	0.00 <sup>b</sup>		1.04
32 of 82	Expected	2.00		1.00	2.00		1.00	1.00	1.00	1.00	1.00				4.00		1.00		1.00
	Actual	2.02		1.04	0.00 <sup>a</sup>		1.03	1.04	0.98	1.02	0.91				3.67		0.00 <sup>b</sup>		0.97
33 of 82	Expected	1.00		1.00	2.00		2.00	2.00		1.00	1.00				3.00	1.00	1.00		2.00
	Actual	1.03		0.98	0.00 <sup>a</sup>		1.99	2.05		1.00	1.03				2.76	0.94	0.00 <sup>b</sup>		2.10
34 of 82	Expected	2.00		3.00	1.00		2.00	1.00		1.00	2.00					2.00	1.00		2.00
	Actual	2.00		3.09	0.00 <sup>a</sup>		1.97	1.01		0.99	2.03					1.97	0.00 <sup>b</sup>		2.08
35 of 82	Expected	2.00		4.00	1.00		1.00		1.00		1.00		1.00		1.00	2.00		1.00	2.00
	Actual	2.19		3.83	0.00 <sup>a</sup>		1.07		1.09		1.02		1.05		1.03	1.84		1.04	1.74
36 of 82	Expected	2.00	1.00	4.00			1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
	Actual	2.03	1.02	3.89			1.02		1.02	1.03	0.98		1.02		0.97	0.94		1.03	0.99

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)
37 of 82	Expected	1.00	1.00	2.00			1.00		2.00	1.00			1.00		3.00			1.00	2.00
	Actual	1.02	0.99	1.91			1.00		2.12	1.09			0.95		3.16			0.94	1.87
38 of 82	Expected		2.00	2.00		1.00	1.00		2.00	2.00	1.00				3.00				2.00
	Actual		2.00	1.96		1.01	1.07		1.92	2.11	1.04				2.89				2.01
39 of 82	Expected		1.00			4.00			2.00	1.00	1.00				4.00	1.00	1.00		1.00
	Actual		1.05			3.91			1.97	1.06	1.00				3.64	0.93	0.00 <sup>b</sup>		1.04
40 of 82	Expected		1.00	1.00	2.00	4.00	1.00		2.00	1.00	1.00				2.00	1.00			1.00
	Actual		1.04	0.97	0.00 <sup>a</sup>	4.03	1.01		1.91	1.02	1.01				1.95	0.97			1.07
41 of 82	Expected				1.00	3.00	3.00	1.00	1.00			1.00			1.00	3.00			3.00
	Actual			1.00	0.00 <sup>a</sup>	2.83	1.06		1.05			0.97			0.75 <sup>d</sup>	2.82			3.24
42 of 82	Expected	1.00		2.00	2.00		2.00		1.00			1.00			1.00	3.00			3.00
	Actual	1.05		2.03	0.00 <sup>a</sup>		2.16		1.01			0.93			0.95	2.91			2.96
43 of 82	Expected	2.00		2.00	1.00		2.00				1.00	1.00			2.00	4.00			2.00
	Actual	2.04		1.94	0.00 <sup>a</sup>		2.03				1.10	0.96			2.09	3.87			1.94
44 of 82	Expected	2.00		2.00		1.00	2.00		2.00	1.00	2.00		1.00		2.00	2.00			
	Actual	2.03		1.97		0.98	1.95		2.01	1.02	2.14		1.03		1.91	1.92			
45 of 82	Expected	1.00		1.00		2.00	2.00	1.00	3.00	1.00	3.00		1.00			1.00			1.00
	Actual	0.95		0.96		2.06	2.05	1.05	3.03	1.08	3.12		1.08			0.92			0.90
46 of 82	Expected					2.00	2.00	1.00	3.00	2.00	1.00		1.00		2.00	2.00			1.00
	Actual					2.07	2.11	1.03	2.94	2.06	1.07		0.96		1.97	1.99			0.90
47 of 82	Expected	1.00				2.00	2.00	2.00	1.00	1.00	1.00				3.00	2.00			2.00
	Actual	1.05				2.02	2.13	2.02	0.92	1.07	0.98				2.84	1.85			2.03
48 of 82	Expected	1.00			2.00	3.00	1.00	1.00		1.00					4.00	1.00		1.00	1.00
	Actual	1.03			0.00 <sup>a</sup>	2.88	1.06	1.00		0.99					3.79	0.72		1.05	1.04
49 of 82	Expected	1.00	1.00		2.00	3.00	1.00	1.00		1.00				1.00	2.00			2.00	2.00
	Actual	0.92	1.05		0.00 <sup>a</sup>	2.71	1.05	1.01		1.03				0.95	1.78			2.09	2.10
50 of 82	Expected		2.00		3.00	2.00	1.00			1.00				1.00	1.00			2.00	3.00
	Actual		2.06		0.00 <sup>a</sup>	2.00	1.04			1.00				0.90	0.81			2.01	3.07
51 of 82	Expected		3.00	2.00	3.00		1.00			1.00	1.00			1.00			1.00	2.00	2.00
	Actual		3.03	1.90	0.00 <sup>a</sup>		1.01			0.99	1.03			1.01			0.00 <sup>b</sup>	1.98	2.04
52 of 82	Expected		3.00	3.00	2.00		2.00		1.00		1.00			1.00	1.00		1.00		2.00
	Actual		3.05	2.99	0.00 <sup>a</sup>		2.03		0.94		0.96			1.02	0.93		0.00 <sup>b</sup>		2.10
53 of 82	Expected		2.00	5.00			1.00		3.00		2.00			1.00	1.00		1.00		1.00
	Actual		2.02	4.91			0.98		3.17		2.12			0.92	0.73 <sup>d</sup>		0.00 <sup>b</sup>		0.99
54 of 82	Expected		1.00	4.00					4.00		1.00			1.00	2.00			1.00	2.00
	Actual		0.98	4.08					4.05		1.02			0.94	1.94			1.05	1.94
55 of 82	Expected			3.00					3.00		1.00				3.00			2.00	3.00
	Actual			2.95					3.08		1.02				3.06			2.06	3.05
56 of 82	Expected			1.00	1.00		2.00		2.00	1.00	1.00				4.00			2.00	3.00
	Actual			1.06	0.00 <sup>a</sup>		2.01		1.89	1.03	0.94				3.94			2.03	3.00
57 of 82	Expected		1.00	2.00	1.00		2.00			1.00	1.00			1.00	3.00	1.00		1.00	3.00
	Actual		1.01	2.15	0.00 <sup>a</sup>		1.99			0.99	0.95			1.05	2.72	1.00		1.00	2.94
58 of 82	Expected		1.00	3.00			2.00	1.00		1.00	1.00			1.00	6.00	1.00			1.00
	Actual		1.05	3.15			2.14	1.04		0.99	1.02			0.90	5.95	0.93			0.99
59 of 82	Expected		1.00	5.00	1.00			1.00		1.00	1.00			2.00	5.00				
	Actual		1.01	4.90	0.00 <sup>a</sup>			1.02		0.96	0.98			2.10	4.84				
60 of 82	Expected			3.00	1.00	2.00	3.00	2.00		1.00				1.00	4.00				
	Actual			3.21	0.00 <sup>a</sup>	1.93	2.92	2.00		1.09				0.96	4.18				
61 of 82	Expected	1.00		3.00		2.00	4.00	1.00		1.00	1.00		1.00	1.00			1.00		1.00
	Actual	1.02		2.87		1.90	4.01	1.06		0.92	1.04		1.02	0.98			0.00 <sup>b</sup>		1.05
62 of 82	Expected		1.00		4.00		2.00	5.00	1.00			1.00		1.00				1.00	1.00
	Actual		1.01		4.15		1.92	4.96	1.01			0.95		1.02				0.00 <sup>b</sup>	1.03
63 of 82	Expected	1.00	1.00		4.00			4.00			1.00	1.00	1.00				2.00		2.00
	Actual	1.03	1.05		4.00			3.98			0.96	0.96	0.99				0.00 <sup>b</sup>		2.03
64 of 82	Expected		1.00	4.00		1.00	2.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
	Actual		1.01	3.86		1.00	1.97		1.09	1.10	1.06	0.98	0.92		1.01	1.00	0.00 <sup>b</sup>		0.96

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)
65 of 82	Expected		2.00			2.00	2.00		1.00	1.00	1.00	1.00			2.00	2.00	1.00	1.00	1.00
	Actual		2.04			1.98	2.05		1.03	1.06	1.05	0.96			1.96	1.89	0.00 <sup>b</sup>	1.05	1.02
66 of 82	Expected		1.00			3.00	2.00		2.00	1.00	2.00		1.00		2.00	1.00		1.00	1.00
	Actual		1.03			2.99	2.03		1.79	1.03	2.15		1.07		1.96	1.04		1.05	0.95
67 of 82	Expected			2.00		2.00	2.00		1.00		1.00		1.00	1.00	2.00	1.00	1.00	1.00	1.00
	Actual			2.11		1.93	2.13		0.97		0.99		1.05	0.94	1.91	0.82	0.00 <sup>b</sup>	1.00	0.96
68 of 82	Expected			3.00		2.00	1.00		2.00	1.00	2.00		1.00	1.00	2.00		1.00		1.00
	Actual			3.20		2.05	1.04		1.89	1.01	1.89		1.03	0.98	1.87		0.00 <sup>b</sup>		0.96
69 of 82	Expected		1.00	4.00		2.00			2.00	1.00	1.00			1.00	2.00		1.00		2.00
	Actual		1.05	4.12		2.19			1.84	1.10	0.99			0.93	2.03		0.00 <sup>b</sup>		1.94
70 of 82	Expected		3.00	3.00		2.00	2.00		2.00	1.00	1.00				1.00				2.00
	Actual		3.11	3.07		2.15	2.19		1.79	1.05	0.97				0.99				1.92
71 of 82	Expected		3.00	2.00		1.00	3.00		2.00				1.00		2.00			1.00	2.00
	Actual		2.88	2.06		0.99	3.18		1.84				1.05		1.91			1.07	1.82
72 of 82	Expected		2.00	1.00		1.00	4.00		1.00		1.00		1.00		3.00			1.00	1.00
	Actual		2.01	0.98		0.99	3.83		1.00		1.04		1.02		2.77			0.96	1.04
73 of 82	Expected		1.00	1.00	1.00	1.00	3.00		2.00		1.00		1.00		3.00			1.00	1.00
	Actual		1.01	0.96	0.00 <sup>a</sup>	1.01	3.13		1.96		1.00		1.06		2.55			1.05	0.89
74 of 82	Expected		1.00	1.00	2.00	2.00	1.00		1.00	1.00	1.00		2.00		2.00			1.00	2.00
	Actual		1.02	1.00	0.00 <sup>a</sup>	2.02	1.00		1.02	1.06	0.91		1.92		1.86			1.03	1.99
75 of 82	Expected		3.00	1.00	2.00	2.00	1.00		2.00	1.00	1.00		1.00		1.00			1.00	1.00
	Actual		3.01	0.98	0.00 <sup>a</sup>	1.96	1.01		1.89	1.02	0.98		1.01		0.67 <sup>d</sup>			1.03	1.02
76 of 82	Expected		2.00			4.00	1.00		1.00	2.00	1.00		1.00			1.00	1.00	1.00	2.00
	Actual		2.02			3.93	1.06		0.97	1.88	0.97		1.06			0.99	0.00 <sup>b</sup>	1.01	2.00
77 of 82	Expected		2.00	1.00		3.00	1.00		1.00	1.00	1.00				2.00	2.00	1.00		2.00
	Actual		1.91	1.03		2.81	1.07		1.04	0.99	1.00				1.97	2.08	0.00 <sup>b</sup>		1.98
78 of 82	Expected			1.00	1.00	1.00	1.00		1.00	1.00			1.00		2.00	3.00	1.00		3.00
	Actual			1.04	0.00 <sup>a</sup>	0.92	1.08		1.02	0.97			1.04		1.96	2.81	0.00 <sup>b</sup>		3.12
79 of 82	Expected			1.00	1.00		3.00		1.00				1.00		3.00	4.00		1.00	2.00
	Actual			1.06	0.00 <sup>a</sup>		3.20		0.90				1.03		2.88	4.01		0.98	1.92
80 of 82	Expected			1.00	1.00		5.00						1.00	1.00	2.00	3.00	1.00	1.00	1.00
	Actual			1.01	0.00 <sup>a</sup>		5.14						1.02	1.06	2.13	3.05	0.00 <sup>b</sup>	1.04	0.98
81 of 82	Expected	1.00		3.00			4.00		1.00	1.00		1.00		1.00	1.00	2.00	1.00	1.00	
	Actual	1.05		3.17			4.09		1.04	1.06		0.85		1.01	0.99	1.89	0.00 <sup>b</sup>	1.01	
82 of 82	Expected	1.00		3.00			1.00		2.00	1.00		1.00		2.00	1.00		1.00		
	Actual	1.06		3.12			1.04		2.01	1.05		0.87		2.03	1.01		0.00 <sup>b</sup>		

<sup>a</sup>Cys was totally destroyed during hydrolysis

<sup>b</sup>Trp was totally destroyed during hydrolysis

<sup>c</sup>Ile-Val bonds were only partially destroyed during hydrolysis

<sup>d</sup>Ser and Thr were only partially destroyed during hydrolysis

Date: 29 JUL 2014

Signature:



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