

Peptide Array, Influenza Virus A/New York/348/2003 (H1N1) Nucleocapsid Protein

Catalog No. NR-50714

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Product Description: The 82-peptide array spans the nucleocapsid protein (NP) of the A/New York/348/2003 (H1N1) strain of influenza virus (GenPept: ABA12733). Peptides are 13- or 17-mers, with 11 or 12 amino acid overlaps.

Lot: P5744-1 to P5744-82

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 tables below.

Table 1							
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
1 of 82	3/14/2017	17	1-MASQGTKRSYEQMETDG-17	1919.08	-0.02	94.4%	84.9%
2 of 82	3/14/2017	17	7-KRSYEQMETDGERQNAT-23	2043.16	-0.15	92.2%	81.8%
3 of 82	3/14/2017	17	13-METDGERQNATEIRASV-29	1907.06	0.06	89.1%	84.8%
4 of 82	3/14/2017	17	19-RQNATEIRASVGRMIGG-35	1816.08	0.21	97.9%	79.9%
5 of 82	3/14/2017	17	25-IRASVGRMIGGIRFYI-41	1866.27	0.57	83.8%	80.4%
6 of 82	3/14/2017	17	31-RMIGGIRFYIQMCTEL-47	1988.43	0.66	85.3%	85.3%
7 of 82	3/14/2017	17	37-GRFYIQMCTELKLNDE-53	2123.43	0.49	82.3%	86.1%
8 of 82	3/14/2017	17	43-MCTELKLNDEYEGRLIQN-59	2040.35	0.46	82.0%	85.6%
9 of 82	3/14/2017	17	49-LNDEYEGRLIQNSLTIER-65	2034.26	0.4	87.3%	85.6%
10 of 82	3/14/2017	17	55-RLIQNSLTIERMVLASF-71	1991.4	0.66	81.8%	85.3%
11 of 82	3/14/2017	17	61-LTIERMVLSAFDERRNK-77	2078.43	0.26	92.2%	78.5%
12 of 82	3/14/2017	17	67-VLSAFDERRNKYLEEHP-83	2103.33	0.2	80.5%	78.7%
13 of 82	3/14/2017	17	73-ERRNKYLEEHPKAGKDP-89	2026.2	-0.09	86.4%	74.8%
14 of 82	3/14/2017	17	79-LEEHPKAGKDPKKTGGP-95	1747.93	-0.03	80.6%	75.4%
15 of 82	3/14/2017	17	85-AGKDPKKTGGPIYKRVD-101	1830.12	-0.03	91.0%	72.8%
16 of 82	3/14/2017	17	91-KTGGPIYKRVDGKVVRE-107	1989.31	0.12	86.8%	74.4%
17 of 82	3/14/2017	17	97-YKRVDGKVVRELVLYDK-113	2167.54	0.24	84.3%	76.0%
18 of 82	3/14/2017	17	103-KVVRELVLYDKEEIRRI-119	2245.66	0.29	87.3%	76.7%
19 of 82	3/14/2017	17	109-VLYDKEEIRRIWRQANN-125	2203.49	0.29	86.7%	79.4%
20 of 82	3/14/2017	17	115-EIRRIWRQANNNGDDATA-131	1986.14	0.17	85.5%	81.3%
21 of 82	3/14/2017	17	121-RQANNNGDDATAGLTHIM-137	1784.94	0.28	84.0%	83.9%
22 of 82	3/14/2017	17	127-DDATAGLTHIMIWHNSL-143	1895.14	0.64	87.8%	84.7%
23 of 82	3/14/2017	17	133-LTHIMIWHNSLNDTTYQ-149	2087.35	0.74	94.8%	85.9%
24 of 82	3/14/2017	17	139-WHNSLNDTTYQRTRALV-155	2075.27	0.42	93.1%	82.0%
25 of 82	3/14/2017	17	145-DTTYQRTRALVRTGMDP-161	1981.22	0.14	95.1%	81.3%
26 of 82	3/14/2017	17	151-TRALVRTGMDPRMCSLM-167	1938.4	0.44	93.0%	81.0%
27 of 82	3/14/2017	17	157-TGMDPRMCSLMQGSTLP-173	1825.19	0.5	94.9%	88.9%
28 of 82	3/14/2017	17	163-MCSLMQGSTLPRRSGAA-179	1766.11	0.39	86.9%	83.8%

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Table 1 (continued)

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
29 of 82	3/14/2017	17	169-GSTLPRRSGAAGAAVKG-185	1555.77	0.12	81.2%	77.3%
30 of 82	3/14/2017	17	175-RSGAAGAAVKGVGTMVL-191	1544.85	0.36	99.2%	81.9%
31 of 82	3/14/2017	17	181-AAVKGVGTMVLELIRMI-197	1801.3	0.67	81.4%	84.0%
32 of 82	3/14/2017	17	187-GTMVLELIRMIKRGIND-203	1959.42	0.52	96.4%	81.1%
33 of 82	3/14/2017	17	193-LIRMIKRGINDRNFWRG-209	2145.58	0.46	95.9%	75.8%
34 of 82	3/14/2017	17	199-RGINDRNFWRGENGRKT-215	2076.27	0.09	92.2%	75.2%
35 of 82	3/14/2017	17	205-NFWRGENGRKTRIAYER-221	2153.39	0.13	86.2%	75.9%
36 of 82	3/14/2017	17	211-NGRKTRIAYERMCNILK-227	2066.48	0.3	93.6%	75.1%
37 of 82	3/14/2017	17	217-IAYERMCNILKGKFTA-233	1986.39	0.5	81.6%	81.3%
38 of 82	3/14/2017	17	223-CNILKGKFTAAQKAMM-239	1883.34	0.45	88.8%	80.5%
39 of 82	3/14/2017	17	229-KFQTAQKAMMDQVRES-245	1969.28	0.09	83.2%	81.2%
40 of 82	3/14/2017	17	234-AQKAMMDQVRESRNPNGN-250	1932.18	0.08	81.0%	80.9%
41 of 82	3/14/2017	17	240-DQVRESRNPNGNAEIDL-256	1942.04	0.07	97.2%	85.0%
42 of 82	3/14/2017	17	246-RNPGNAEIDLTLFARS-262	1903.09	0.33	84.0%	84.8%
43 of 82	3/14/2017	17	252-EIEDLTLFARSALILRG-268	1917.25	0.53	91.9%	84.9%
44 of 82	3/14/2017	17	258-FLARSALILRGVVAHKS-274	1826.19	0.46	88.9%	76.2%
45 of 82	3/14/2017	17	264-LILRGVVAHKSCLPACV-280	1767.2	0.69	82.4%	79.5%
46 of 82	3/14/2017	17	270-VAHKSCLPACVYGPAVA-286	1686.03	0.66	97.1%	83.1%
47 of 82	3/14/2017	17	276-LPACVYGPAVASGYDFE-292	1758.97	0.61	81.1%	88.5%
48 of 82	3/14/2017	17	282-GPAVASGYDFEKEGYSL-298	1789.91	0.29	89.1%	88.7%
49 of 82	3/14/2017	17	288-GYDFEKEGYSLVGVDPF-304	1922.08	0.38	97.8%	89.4%
50 of 82	3/14/2017	17	294-EGYSLVGVDPFKLLQTS-310	1853.11	0.5	85.4%	89.0%
51 of 82	3/14/2017	17	300-GVDPFKLLQTSQVYSLI-316	1908.23	0.63	93.7%	89.3%
52 of 82	3/14/2017	17	306-LLQTSQVYSLIRPNENP-322	1972.23	0.58	90.8%	89.6%
53 of 82	3/14/2017	17	312-VYSLIRPNENPAHKSQ-328	1966.23	0.44	89.4%	81.2%
54 of 82	3/14/2017	17	318-PNENPAHKSQVWVWV-334	1939.21	0.59	82.2%	85.0%
55 of 82	3/14/2017	17	324-HKSQVWVWVWVWV-340	1937.19	0.51	98.2%	85.0%
56 of 82	3/14/2017	17	330-WVWVWVWVWVWV-346	1934.19	0.62	98.2%	89.5%
57 of 82	3/14/2017	17	336-AVWVWVWVWVWV-352	1924.2	0.35	96.2%	80.8%
58 of 82	3/14/2017	17	342-RVWVWVWVWVWV-358	1942.35	0.31	86.5%	74.0%
59 of 82	3/14/2017	17	348-RGTRVWVWVWVWV-364	1881.22	0.11	90.3%	73.3%
60 of 82	3/14/2017	17	354-PRGKLSTRGVQIASNEN-370	1827.04	0.19	94.6%	80.0%
61 of 82	3/14/2017	17	360-TRGVQIASNENMDAIVS-376	1805.01	0.39	99.3%	88.8%
62 of 82	3/14/2017	17	366-ASNENMDAIVSSTLELR-382	1850.05	0.39	96.0%	89.0%
63 of 82	3/14/2017	17	372-DAIVSSTLELRVWVWV-388	1980.25	0.52	89.4%	85.3%
64 of 82	3/14/2017	17	378-TLELRVWVWVWVWV-394	2022.3	0.26	81.3%	78.0%
65 of 82	3/14/2017	17	384-RVWVWVWVWVWV-400	2064.26	0.15	91.5%	78.4%
66 of 82	3/14/2017	17	390-TRSGGNTNQQRASAGQI-406	1745.84	0.08	92.1%	83.6%
67 of 82	3/14/2017	17	396-TNQQRASAGQISTQPTF-412	1834.97	0.26	92.3%	88.9%
68 of 82	3/14/2017	17	402-SAGQISTQPTFSVQRNL-418	1834.03	0.4	90.9%	88.9%
69 of 82	3/14/2017	17	408-TQPTFSVQRNLPFDKTT-424	1980.22	0.37	88.8%	85.3%
70 of 82	3/14/2017	17	414-VQRNLPFDKTTIMAAFT-430	1953.3	0.54	81.7%	85.1%
71 of 82	3/14/2017	17	420-FDKTTIMAAFTGNTTEGR-436	1860.09	0.32	84.7%	84.5%
72 of 82	3/14/2017	17	426-MAAFTGNTTEGRSDMRA-442	1816.01	0.18	94.6%	84.2%
73 of 82	3/14/2017	17	432-NTEGRSDMRAEIKMM-448	1983.33	0.21	97.1%	81.3%
74 of 82	3/14/2017	17	438-SDMRAEIKMMESARPE-454	1994.35	0.17	94.0%	81.4%
75 of 82	3/14/2017	17	444-IKMMESARPEEVSFQG-460	1952.29	0.35	89.8%	85.1%
76 of 82	3/14/2017	17	450-SARPEEVSFQGRGVFEL-466	1908.11	0.27	94.3%	84.8%

Table 1 (continued)

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
77 of 82	3/14/2017	17	456-VSFQGRGVFELSDERAT-472	1898.07	0.23	97.6%	84.7%
78 of 82	3/14/2017	17	462-GVFELSDERATNPIVPS-478	1831.02	0.42	96.8%	88.9%
79 of 82	3/14/2017	17	468-DERATNPIVPSFDMSNE-484	1922.07	0.31	96.7%	89.4%
80 of 82	3/14/2017	17	474-PIVPSFDMSNEGSYFFG-490	1894.09	0.65	88.1%	89.3%
81 of 82	3/14/2017	17	480-DMSNEGSYFFGDNAEEY-496	1974.99	0.28	98.1%	89.7%
82 of 82	3/14/2017	13	486-SYFFGDNAEEYDN-498	1570.54	0.32	94.2%	87.3%

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

Table 2

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	1.00	1.00	1.00		4.00	2.00				1.00	2.00			2.00	2.00		1.00		
	Actual	1.03	0.98	1.00		3.85	1.86				0.98	1.98			2.01	1.98		1.06		
2 of 82	Expected	1.00	2.00	2.00		5.00	1.00				1.00	1.00			1.00	2.00		1.00		
	Actual	1.05	2.06	2.13		4.77	1.08				0.86	0.97			0.98	2.01		1.04		
3 of 82	Expected	2.00	2.00	2.00		4.00	1.00		1.00			1.00			1.00	2.00			1.00	
	Actual	2.04	2.03	2.00		3.78	0.92		0.99			0.92			1.04	1.82			1.13	
4 of 82	Expected	2.00	3.00	1.00		2.00	3.00		2.00			1.00			1.00	1.00			1.00	
	Actual	1.95	2.80	1.10		2.02	3.03		1.75			1.01			1.07	1.00			0.91	
5 of 82	Expected	1.00	3.00				4.00		4.00			1.00	1.00		1.00				1.00	1.00
	Actual	0.97	3.01				3.85		4.03			1.02	0.91		0.98				1.00	0.81
6 of 82	Expected		2.00		1.00	2.00	3.00		3.00	1.00		2.00	1.00			1.00			1.00	1.00
	Actual		1.87		0.44 ^a	2.00	2.94		2.80	1.12		1.80	0.81			1.04			0.91	
7 of 82	Expected		1.00	2.00	1.00	3.00	1.00		1.00	2.00	1.00	1.00	1.00			1.00			2.00	1.00
	Actual		1.03	2.01	0.24 ^a	3.00	1.13		0.99	2.03	0.96	1.02	0.81			0.98			1.92	
8 of 82	Expected		1.00	3.00	1.00	3.00	1.00		1.00	3.00	1.00	1.00				1.00			1.00	1.00
	Actual		1.05	3.15	0.59 ^a	2.94	1.11		0.85	2.80	0.96	0.89				0.90			1.00	
9 of 82	Expected		2.00	3.00		3.00	1.00		2.00	3.00					1.00	1.00			1.00	1.00
	Actual		2.08	2.97		2.97	1.02		1.79	2.88					1.00	0.84			1.00	
10 of 82	Expected	1.00	2.00	1.00		2.00			2.00	3.00		1.00	1.00		2.00	1.00				1.00
	Actual	1.08	1.83	1.09		1.79			1.95	2.79		1.00	0.88		2.01	0.77				1.07
11 of 82	Expected	1.00	3.00	2.00		2.00			1.00	2.00	1.00	1.00	1.00		1.00	1.00				1.00
	Actual	1.06	3.00	1.98		1.98			0.95	1.89	1.10	0.98	0.85		1.02	0.90				0.76
12 of 82	Expected	1.00	2.00	2.00		3.00		1.00		2.00	1.00		1.00	1.00	1.00				1.00	1.00
	Actual	0.92	1.92	1.96		3.00		1.09		1.90	1.00		0.76	1.06	0.93				1.00	0.97
13 of 82	Expected	1.00	2.00	2.00		3.00	1.00	1.00		1.00	2.00			2.00	1.00				1.00	
	Actual	1.03	1.90	1.98		2.85	1.16	1.06		0.97	1.76			2.00	1.05				0.93	
14 of 82	Expected	1.00		1.00		2.00	3.00	1.00		1.00	3.00			3.00	1.00	1.00				
	Actual	0.96		1.05		1.97	3.02	1.13		1.00	2.98			2.87	0.89	1.03				
15 of 82	Expected	1.00	1.00	2.00			3.00		1.00		4.00			2.00		1.00			1.00	1.00
	Actual	0.88	1.03	2.11			3.13		1.01		3.87			1.90		1.00			0.78	0.99

Table 2 (continued)

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 82	Expected		2.00	1.00		1.00	3.00		1.00		3.00			1.00		1.00	1.00	1.00	2.00
	Actual		1.86	0.94		1.09	2.91		0.77		2.98			1.06		1.00	0.00 ^b	0.95	2.00
17 of 82	Expected		2.00	2.00		1.00	1.00			2.00	3.00						1.00	2.00	3.00
	Actual		1.83	1.94		0.99	1.01			1.96	3.05						0.00 ^b	2.00	2.96
18 of 82	Expected		3.00	1.00		3.00			2.00	2.00	2.00						1.00	1.00	2.00
	Actual		2.95	1.07		2.93			1.91	1.83	1.89						0.00 ^b	1.00	2.08
19 of 82	Expected	1.00	3.00	3.00		3.00			2.00	1.00	1.00						1.00	1.00	1.00
	Actual	1.06	2.93	3.00		2.83			1.94	1.08	0.88						0.00 ^b	0.90	1.03
20 of 82	Expected	3.00	3.00	4.00		2.00	1.00		2.00							1.00	1.00		
	Actual	2.82	3.05	3.83		1.92	1.15		2.02							1.00	0.00 ^b		
21 of 82	Expected	3.00	1.00	4.00		1.00	2.00	1.00	1.00	1.00		1.00				2.00			
	Actual	2.98	0.95	3.82		0.91	2.11	1.00	0.92	1.11		0.92				1.99			
22 of 82	Expected	2.00		3.00			1.00	2.00	2.00	2.00		1.00			1.00	2.00	1.00		
	Actual	1.99		2.87			1.01	1.90	2.01	1.88		0.86			1.00	1.83	0.00 ^b		
23 of 82	Expected			3.00		1.00		2.00	2.00	2.00		1.00			1.00	3.00	1.00	1.00	
	Actual			3.00		1.14		1.97	1.87	2.04		0.88			1.04	2.93	0.00 ^b	1.11	
24 of 82	Expected	1.00	2.00	3.00		1.00		1.00		2.00					1.00	3.00	1.00	1.00	1.00
	Actual	0.99	1.91	2.89		1.13		0.92		2.00					0.96	3.01	0.00 ^b	1.08	1.10
25 of 82	Expected	1.00	3.00	2.00		1.00	1.00			1.00		1.00		1.00		4.00		1.00	1.00
	Actual	1.07	2.85	1.93		1.00	1.09			1.00		1.02		1.10		4.09		0.92	0.89
26 of 82	Expected	1.00	3.00	1.00	1.00		1.00			2.00		3.00		1.00	1.00	2.00			1.00
	Actual	1.00	2.78	1.01	0.26 ^a		1.00			1.80		2.84		1.01	0.95	1.90			0.78
27 of 82	Expected		1.00	1.00	1.00	1.00	2.00			2.00		3.00		2.00	2.00	2.00			
	Actual		1.13	1.00	0.36 ^a	1.08	2.07			2.06		2.94		2.11	1.98	2.04			
28 of 82	Expected	2.00	2.00		1.00	1.00	2.00			2.00		2.00		1.00	3.00	1.00			
	Actual	1.95	2.11		0.25 ^a	1.10	1.90			1.94		1.78		1.00	2.95	1.04			
29 of 82	Expected	4.00	2.00				4.00			1.00	1.00			1.00	2.00	1.00			1.00
	Actual	3.99	2.06				3.87			0.97	1.00			1.06	2.09	1.00			0.95
30 of 82	Expected	4.00	1.00				4.00			1.00	1.00	1.00			1.00	1.00			3.00
	Actual	3.77	1.02				4.00			0.96	0.85	1.14			1.01	1.14			2.91
31 of 82	Expected	2.00	1.00			1.00	2.00		2.00	2.00	1.00	2.00				1.00			3.00
	Actual	1.81	0.85			1.00	1.80		1.99	2.01	0.99	1.99				0.89			2.96
32 of 82	Expected		2.00	2.00		1.00	2.00		3.00	2.00	1.00	2.00				1.00			1.00
	Actual		2.14	1.81		1.12	2.03		2.99	2.00	0.78	1.96				0.82			0.84
33 of 82	Expected		4.00	3.00			2.00		3.00	1.00	1.00	1.00	1.00				1.00		
	Actual		3.91	3.00			2.05		2.88	1.03	1.05	1.03	1.11				0.00 ^b		
34 of 82	Expected		4.00	4.00		1.00	3.00		1.00		1.00		1.00			1.00	1.00		
	Actual		3.83	3.88		1.11	3.01		0.98		0.96		1.00			0.95	0.00 ^b		
35 of 82	Expected	1.00	4.00	2.00		2.00	2.00		1.00		1.00		1.00			1.00	1.00	1.00	
	Actual	1.00	3.93	2.04		1.91	1.78		1.07		0.79		0.85			0.95	0.00 ^b	1.07	

Table 2 (continued)

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)
36 of 82	Expected	1.00	3.00	2.00	1.00	1.00	1.00		2.00	1.00	2.00	1.00				1.00		1.00	
	Actual	1.05	2.86	1.92	0.62 ^a	1.04	0.97		1.85	0.98	1.94	1.00				0.95		1.06	
37 of 82	Expected	2.00	1.00	1.00	1.00	2.00	1.00		2.00	1.00	2.00	1.00	1.00			1.00		1.00	
	Actual	1.90	1.03	0.97	0.56 ^a	2.00	1.06		1.88	0.94	1.78	0.98	1.09			1.03		1.04	
38 of 82	Expected	3.00		1.00	1.00	2.00	1.00		1.00	1.00	3.00	2.00	1.00			1.00			
	Actual	3.03		0.90	0.31 ^a	2.02	1.05		0.83	0.88	2.98	2.01	1.07			1.07			
39 of 82	Expected	3.00	1.00	1.00		4.00					2.00	2.00	1.00		1.00	1.00			1.00
	Actual	2.99	0.91	1.00		3.95					1.82	2.01	1.10		0.98	1.04			0.88
40 of 82	Expected	2.00	2.00	3.00		3.00	1.00				1.00	2.00		1.00	1.00				1.00
	Actual	1.90	2.07	3.01		2.80	0.88				0.84	1.85		0.98	0.98				0.92
41 of 82	Expected	1.00	2.00	4.00		4.00	1.00		1.00	1.00				1.00	1.00				1.00
	Actual	1.02	1.88	3.79		3.81	1.01		0.95	1.04				1.00	0.85				0.91
42 of 82	Expected	2.00	2.00	3.00		2.00	1.00		1.00	2.00			1.00	1.00	1.00	1.00			
	Actual	1.90	1.83	2.90		1.89	0.98		1.00	1.81			1.01	1.04	1.01	0.87			
43 of 82	Expected	2.00	2.00	1.00		2.00	1.00		2.00	4.00			1.00		1.00	1.00			
	Actual	1.90	2.00	1.00		1.83	0.97		1.76	3.95			1.00		0.93	0.94			
44 of 82	Expected	3.00	2.00				1.00	1.00	1.00	3.00	1.00		1.00		3.00				1.00
	Actual	3.00	2.06				1.04	1.13	0.89	2.80	0.96		1.00		2.90				1.11
45 of 82	Expected	2.00	1.00		2.00		1.00	1.00	1.00	3.00	1.00			1.00	2.00				2.00
	Actual	2.03	1.01		0.48 ^a		1.00	1.03	0.83	3.12	0.88			1.07	1.85				1.89
46 of 82	Expected	4.00			2.00		1.00	1.00		1.00	1.00			2.00	1.00			1.00	3.00
	Actual	3.91			0.60 ^a		1.09	0.99		1.00	0.98			1.92	1.00			0.96	2.90
47 of 82	Expected	3.00		1.00	1.00	1.00	2.00			1.00			1.00	2.00	1.00			2.00	2.00
	Actual	2.82		1.00	0.74 ^a	1.06	2.03			0.86			1.01	1.86	0.96			1.80	1.79
48 of 82	Expected	2.00		1.00		2.00	3.00			1.00	1.00		1.00	1.00	2.00			2.00	1.00
	Actual	1.87		1.00		1.96	3.04			1.03	0.97		0.97	0.95	1.99			1.86	0.93
49 of 82	Expected			2.00		2.00	3.00			1.00	1.00		2.00	1.00	1.00			2.00	2.00
	Actual			1.97		2.00	3.00			1.00	0.91		1.81	1.14	1.01			1.86	2.00
50 of 82	Expected			1.00		2.00	2.00			3.00	1.00		1.00	1.00	2.00	1.00		1.00	2.00
	Actual			1.00		1.92	1.86			2.88	0.96		0.99	0.99	1.76	1.01		0.98	1.88
51 of 82	Expected			1.00		2.00	1.00		1.00	3.00	1.00		1.00	1.00	2.00	1.00		1.00	2.00
	Actual			0.86		2.10	0.97		0.91	3.00	0.89		0.95	0.96	1.91	1.08		0.97	1.76
52 of 82	Expected		1.00	2.00		3.00			1.00	3.00				2.00	2.00	1.00		1.00	1.00
	Actual		0.97	1.84		2.91			1.05	2.91				2.10	1.92	1.00		0.86	0.84
53 of 82	Expected	1.00	1.00	2.00		2.00		1.00	1.00	2.00	1.00			2.00	2.00			1.00	1.00
	Actual	1.03	0.99	2.00		2.10		1.04	0.95	1.88	0.98			1.93	1.81			0.96	0.95
54 of 82	Expected	2.00		3.00	1.00	2.00		1.00		1.00	1.00	1.00		2.00	1.00		1.00		1.00
	Actual	1.97		2.87	0.31 ^a	1.95		1.01		1.02	0.90	1.04		1.90	1.00		0.00 ^b		0.89
55 of 82	Expected	3.00		2.00	1.00	2.00		1.00		1.00	1.00	1.00	1.00		2.00		1.00		1.00
	Actual	3.03		2.02	0.51 ^a	1.93		0.83		0.83	0.94	0.97	1.00		2.02		0.00 ^b		0.92

Table 2 (continued)

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)
56 of 82	Expected	3.00	1.00	2.00	1.00	1.00				1.00		1.00	2.00		3.00		1.00		3.00
	Actual	2.85	1.04	2.00	0.39 ^a	1.12				1.07		0.98	1.96		2.81		0.00 ^b		2.85
57 of 82	Expected	2.00	3.00	1.00		1.00	1.00		1.00	1.00			2.00		2.00	1.00			2.00
	Actual	1.96	3.05	1.00		1.01	0.97		0.87	0.96			1.84		1.90	0.95			1.96
58 of 82	Expected		4.00				2.00		1.00	2.00	1.00		1.00	1.00	2.00	1.00			
	Actual		3.96				2.13		0.90	1.86	1.00		0.86	1.12	1.77	1.00			
59 of 82	Expected		4.00			1.00	3.00			2.00	1.00			1.00	1.00	2.00			
	Actual		4.02			0.98	2.90			1.94	0.90			1.02	1.00	1.83			
60 of 82	Expected	1.00	2.00	2.00		2.00	2.00		1.00	1.00	1.00			1.00	2.00	1.00			1.00
	Actual	1.00	1.86	1.89		1.86	1.80		1.13	1.02	0.89			0.83	1.88	0.92			1.00
61 of 82	Expected	2.00	1.00	3.00		2.00	1.00		2.00			1.00			2.00	1.00			2.00
	Actual	1.95	1.02	3.00		2.02	0.99		1.39 ^c			1.05			1.81	0.91			1.95
62 of 82	Expected	2.00	1.00	3.00		2.00			1.00	2.00		1.00			3.00	1.00			2.00
	Actual	1.95	0.98	2.91		2.03			0.44 ^c	1.91		1.00			2.89	1.03			1.95
63 of 82	Expected	2.00	2.00	1.00		1.00			2.00	2.00					3.00	1.00	1.00	1.00	2.00
	Actual	2.01	2.12	1.05		1.02			1.53 ^c	2.03					2.96	0.95	0.00 ^b	1.12 ^c	2.01
64 of 82	Expected	1.00	4.00			1.00	2.00		1.00	2.00					2.00	2.00	1.00	1.00	1.00
	Actual	0.97	3.89			1.00	2.04		0.95	1.90					1.88	1.79	0.00 ^b	1.04	0.97
65 of 82	Expected	1.00	4.00	2.00		2.00	2.00		1.00						1.00	2.00	1.00	1.00	1.00
	Actual	0.93	4.06	2.00		2.12	2.00		1.04						0.93	1.89	0.00 ^b	0.91	0.93
66 of 82	Expected	2.00	2.00	2.00		3.00	3.00		1.00						2.00	2.00			2.00
	Actual	2.13	2.06	2.00		2.99	2.90		1.12						2.01	1.76			2.13
67 of 82	Expected	2.00	1.00	1.00		4.00	1.00		1.00				1.00	1.00	2.00	3.00			2.00
	Actual	1.97	1.00	0.93		4.02	1.13		1.07				1.06	1.07	1.92	2.81			1.97
68 of 82	Expected	1.00	1.00	1.00		3.00	1.00		1.00	1.00			1.00	1.00	3.00	2.00			1.00
	Actual	0.87	1.06	1.00		2.91	0.89		0.93	1.08			0.96	0.97	2.79	2.03			0.87
69 of 82	Expected		1.00	2.00		2.00				1.00	1.00		2.00	2.00	1.00	4.00			
	Actual		1.09	2.07		1.85				1.07	1.00		1.88	1.99	0.94	3.84			
70 of 82	Expected	2.00	1.00	2.00		1.00			1.00	1.00	1.00	1.00	2.00	1.00		3.00			2.00
	Actual	1.96	1.02	2.03		0.86			0.94	1.00	1.00	1.10	2.00	1.14		3.06			1.96
71 of 82	Expected	2.00	1.00	2.00		1.00	2.00		1.00		1.00	1.00	2.00			4.00			2.00
	Actual	1.99	0.94	1.97		1.14	2.00		1.06		0.84	1.00	1.78			3.82			1.99
72 of 82	Expected	3.00	2.00	2.00		1.00	2.00					2.00	1.00		1.00	3.00			3.00
	Actual	2.95	1.93	2.07		0.97	2.00					1.98	1.01		0.99	2.79			2.95
73 of 82	Expected	1.00	2.00	2.00		2.00	1.00		2.00		1.00	3.00			1.00	2.00			1.00
	Actual	1.08	1.93	1.92		2.00	0.94		1.21 ^c		0.98	2.75			0.89	1.82			1.08
74 of 82	Expected	2.00	2.00	1.00		3.00			2.00		1.00	3.00		1.00	2.00				2.00
	Actual	2.00	1.99	1.04		2.98			1.09 ^c		0.97	3.00		1.07	1.85				2.00
75 of 82	Expected	1.00	1.00			4.00	1.00		2.00		1.00	2.00	1.00	1.00	2.00				1.00
	Actual	0.98	1.00			3.91	1.04		0.76 ^c		0.84	1.76	0.98	1.05	1.87				0.98

Table 2 (continued)

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)	
76 of 82	Expected	1.00	2.00			4.00	2.00			1.00			2.00	1.00	2.00				2.00	
	Actual	1.00	1.93			3.98	2.00			1.12			1.90	1.05	1.84				1.94	
77 of 82	Expected	1.00	2.00	1.00		3.00	2.00			1.00			2.00		2.00	1.00			2.00	
	Actual	1.06	1.85	1.00		2.90	1.95			0.97			1.85		2.05	0.99			1.81	
78 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	1.07	1.07	2.00		2.03	0.96		0.60 ^c	0.99			0.87	1.89	1.94	0.96			1.29 ^c	
79 of 82	Expected	1.00	1.00	4.00		2.00			1.00			1.00	1.00	2.00	2.00	1.00			1.00	
	Actual	1.04	1.07	3.97		2.08			0.65 ^c			1.00	0.96	1.98	1.78	0.97			0.63 ^c	
80 of 82	Expected			2.00		1.00	2.00		1.00			1.00	3.00	2.00	3.00				1.00	1.00
	Actual			2.00		1.03	2.07		0.60 ^c			0.95	3.01	1.81	2.83				0.96	0.45 ^c
81 of 82	Expected	1.00		4.00		3.00	2.00					1.00	2.00		2.00				2.00	
	Actual	1.08		3.89		3.00	1.94					0.85	1.98		1.90				2.02	
82 of 82	Expected	1.00		4.00		2.00	1.00						2.00		1.00				2.00	
	Actual	1.13		3.91		2.04	0.96						1.84		1.00				1.95	

^aCys was partially destroyed during hydrolysis.

^bTrp was completely destroyed during hydrolysis.

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

Table 3

Peptide	Sequence	Solubility	Solvent
1 of 82	1-MASQGTKRSYEQMETDG-17	1 mg/mL	100% DMSO
2 of 82	7-KRSYEQMETDGERQNAT-23	1 mg/mL	Water
3 of 82	13-METDGERQNATEIRASV-29	1 mg/mL	100% DMSO
4 of 82	19-RQNATEIRASVGRMIGG-35	1 mg/mL	100% DMSO
5 of 82	25-IRASVGRMIGGIGRFYI-41	1 mg/mL	70% acetonitrile in water
6 of 82	31-RMIGGIGRFYIQMCTEL-47	1 mg/mL	100% DMSO
7 of 82	37-GRFYIQMCTELKLNDE-53	1 mg/mL	70% acetonitrile in water
8 of 82	43-MCTELKLNDEGRLIQN-59	1 mg/mL	70% acetonitrile in water
9 of 82	49-LNDYEGRLIQNSLTIER-65	1 mg/mL	70% acetonitrile in water
10 of 82	55-RLIQNSLTIERMVLSAF-71	1 mg/mL	100% DMSO
11 of 82	61-LTIERMVLSAFDERRNK-77	1 mg/mL	100% DMSO
12 of 82	67-VLSAFDERRNKYLEEHP-83	1 mg/mL	70% acetonitrile in water
13 of 82	73-ERRNKYLEEHPKDP-89	1 mg/mL	70% acetonitrile in water
14 of 82	79-LEEHPKDPKKTGGP-95	1 mg/mL	70% acetonitrile in water
15 of 82	85-AGKDPKKTGGPIYKRVD-101	1 mg/mL	70% acetonitrile in water
16 of 82	91-KTGGPIYKRVDGKVVRE-107	1 mg/mL	Water
17 of 82	97-YKRVDGKVVRELVLVDK-113	1 mg/mL	Water
18 of 82	103-KVVRELVLVDKKEIRRI-119	1 mg/mL	50% acetic acid in water
19 of 82	109-VLYDKEIRRIWRQANN-125	1 mg/mL	70% acetonitrile in water
20 of 82	115-EIRRIWRQANNNGDDATA-131	1 mg/mL	70% acetonitrile in water
21 of 82	121-RQANNNGDDATAGLTHIM-137	1 mg/mL	70% acetonitrile in water
22 of 82	127-DDATAGLTHIMIWHNSNL-143	1 mg/mL	100% DMSO
23 of 82	133-LTHIMIWHNSLNDDTTYQ-149	1 mg/mL	100% DMSO

Table 3 (continued)

Peptide	Sequence	Solubility	Solvent
24 of 82	139-WHSNLNDTTYQRTRALV-155	1 mg/mL	100% DMSO
25 of 82	145-DTTYQRTRALVRTGMDP-161	1 mg/mL	100% DMSO
26 of 82	151-TRALVRTGMDPRMCSLM-167	1 mg/mL	100% DMSO
27 of 82	157-TGMDPRMCSLMQGSTLP-173	1 mg/mL	70% acetonitrile in water
28 of 82	163-MCSLMQGSTLPRRSGAA-179	1 mg/mL	Water
29 of 82	169-GSTLPRRSGAAGAAVKG-185	1 mg/mL	Water
30 of 82	175-RSGAAGAAVKGVGTMLV-191	1 mg/mL	Water
31 of 82	181-AAVKGVGTMLVLELIRMI-197	1 mg/mL	Water
32 of 82	187-GTMVLELIRMIKRGIND-203	1 mg/mL	100% DMSO
33 of 82	193-LIRMIKRGINDRNFWRG-209	1 mg/mL	Water
34 of 82	199-RGINDRNFWRGENGRKT-215	1 mg/mL	70% acetonitrile in water
35 of 82	205-NFWRGENGRKTRIAYER-221	1 mg/mL	70% acetonitrile in water
36 of 82	211-NGRKTRIAYERMCNILK-227	1 mg/mL	Water
37 of 82	217-IAYERMCNILKGFQTA-233	1 mg/mL	70% acetonitrile in water
38 of 82	223-CNILKGFQTAAQKAMM-239	1 mg/mL	Water
39 of 82	229-KFQTAAQKAMMDQVRES-245	1 mg/mL	70% acetonitrile in water
40 of 82	234-AQKAMMDQVRESRNPNG-250	1 mg/mL	70% acetonitrile in water
41 of 82	240-DQVRESRNPNGAEIEDL-256	1 mg/mL	70% acetonitrile in water
42 of 82	246-RNPGNAEIEDLTFLARS-262	1 mg/mL	50% acetic acid in water
43 of 82	252-EIEDLTFLARSALILRG-268	1 mg/mL	100% DMSO
44 of 82	258-FLARSALILRGSVAHKS-274	1 mg/mL	30% formic acid in water
45 of 82	264-LILRGSVAHKSCLPACV-280	1 mg/mL	50% acetic acid in water
46 of 82	270-VAHKSCLPACVYGPAAV-286	1 mg/mL	Water
47 of 82	276-LPACVYGPAAVASGYDFE-292	1 mg/mL	70% acetonitrile in water
48 of 82	282-GPAVASGYDFEKEGYSL-298	1 mg/mL	70% acetonitrile in water
49 of 82	288-GYDFEKEGYSLVGVDPF-304	1 mg/mL	50% acetic acid in water
50 of 82	294-EGYSLVGVDPFKLLQTS-310	1 mg/mL	70% acetonitrile in water
51 of 82	300-GVDPFKLLQTSQVYSLI-316	1 mg/mL	Water
52 of 82	306-LLQTSQVYSLIRPNENP-322	1 mg/mL	70% acetonitrile in water
53 of 82	312-VYSLIRPNENPAHKSQ-328	1 mg/mL	70% acetonitrile in water
54 of 82	318-PNENPAHKSQVWVWV-334	1 mg/mL	70% acetonitrile in water
55 of 82	324-HKSQVWVWVWVWVWV-340	1 mg/mL	70% acetonitrile in water
56 of 82	330-WVWVWVWVWVWVWV-346	1 mg/mL	70% acetonitrile in water
57 of 82	336-AAFEDLRVSSFIRGTRV-352	1 mg/mL	100% DMSO
58 of 82	342-RVSSFIRGTRVLP-358	1 mg/mL	70% acetonitrile in water
59 of 82	348-RGTRVLP-364	1 mg/mL	70% acetonitrile in water
60 of 82	354-PRGKLSTRGVQIASNEN-370	1 mg/mL	100% DMSO
61 of 82	360-TRGVQIASNENMDAIVS-376	1 mg/mL	Water
62 of 82	366-ASNENMDAIVSSTLELR-382	1 mg/mL	100% DMSO
63 of 82	372-DAIVSSTLELRSRYWAI-388	1 mg/mL	30% formic acid in water
64 of 82	378-TLELRSRYWAIRTRSGG-394	1 mg/mL	70% acetonitrile in water
65 of 82	384-RYWAIRTRSGGNTNQQ-400	1 mg/mL	70% acetonitrile in water
66 of 82	390-TRSGGNTNQQRASAGQI-406	1 mg/mL	70% acetonitrile in water
67 of 82	396-TNQQRASAGQISTQPTF-412	1 mg/mL	70% acetonitrile in water
68 of 82	402-SAGQISTQPTFSVQRNL-418	1 mg/mL	70% acetonitrile in water
69 of 82	408-TQPTFSVQRNLPFDKTT-424	1 mg/mL	70% acetonitrile in water

Table 3 (continued)			
Peptide	Sequence	Solubility	Solvent
70 of 82	414-VQRNLPFDKTTIMAAFT-430	1 mg/mL	50% acetic acid in water
71 of 82	420-FDKTTIMAAFTGNTEGR-436	1 mg/mL	70% acetonitrile in water
72 of 82	426-MAAFTGNTEGRTSDMRA-442	1 mg/mL	70% acetonitrile in water
73 of 82	432-NTEGRTSDMRAEIIKMM-448	1 mg/mL	70% acetonitrile in water
74 of 82	438-SDMRAEIIKMMESARPE-454	1 mg/mL	70% acetonitrile in water
75 of 82	444-IIKMMESARPEEVSFQG-460	1 mg/mL	70% acetonitrile in water
76 of 82	450-SARPEEVSFQGRGVFEL-466	1 mg/mL	50% acetic acid in water
77 of 82	456-VSFQGRGVFELSDERAT-472	1 mg/mL	50% acetic acid in water
78 of 82	462-GVFELSDERATNPIVPS-478	1 mg/mL	70% acetonitrile in water
79 of 82	468-DERATNPIVPSFDMSNE-484	1 mg/mL	70% acetonitrile in water
80 of 82	474-PIVPSFDMSNEGSYFFG-490	1 mg/mL	70% acetonitrile in water
81 of 82	480-DMSNEGSYFFGDNAEEY-496	1 mg/mL	70% acetonitrile in water
82 of 82	486-SYFFGDNAEEYDN-498	1 mg/mL	70% acetonitrile in water

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