

Peptide Arrays, Influenza Virus A/New York/348/2003 (H1N1) and A/New York/504/1998 (H3N2) PB1-F2 Proteins

Catalog No. NR-2865

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Product Description: NR-2865 contains two peptide arrays. The first peptide array (NRC-338; 8 peptides) spans the PB1-F2 protein of the A/New York/348/2003 (H1N1) strain of influenza virus (GenPept: ABA12738). The second peptide array (NRC-339; 16 peptides) spans the PB1-F2 protein of the A/New York/504/1998 (H3N2) strain of influenza virus (GenPept: ABD15623). Peptides are 13- to 17-mers, with 11 or 12 amino acid overlaps.

Lot: N417-1 to 24

The following information applies to all peptides:

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

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

Table 1							
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
NRC-338: Influenza Virus A/New York/348/2003(H1N1)							
1 of 8	5/23/2006	17	1 MGQEQGTPWIQSTGHIS 17	1857.05	-0.76	98.8%	89.1%
2 of 8	5/23/2006	17	7 TPWIQSTGHISTQKEED 23	1957.10	-1.31	97.1%	85.1%
3 of 8	5/23/2006	17	13 TGHISTQKEEDGQKIPK 29	1896.10	-1.65	89.0%	76.9%
4 of 8	5/23/2006	16	18 TQKEEDGQKIPKLEHR 33	1936.17	-2.17	83.3%	73.9%
5 of 8	5/23/2006	17	23 DGQKIPKLEHRNSTQLM 39	1995.31	-1.32	97.6%	77.8%
6 of 8	5/23/2006	17	29 KLEHRNSTQLMGHYQKT 45	2071.36	-1.59	95.8%	75.2%
7 of 8	5/23/2006	17	35 STQLMGHYQKTMNQVAM 51	1968.32	-0.56	91.7%	85.2%
8 of 8	5/23/2006	17	41 HYQKTMNQVAMPKQIVY 57	2079.49	-0.67	96.6%	82.0%
NRC-339: Influenza Virus A/New York/504/1998(H3N2)							
1 of 16	5/23/2006	17	1 MEQEQGTPWTQSTEHTN 17	2004.09	-1.9	96.1%	89.8%
2 of 16	5/23/2006	17	7 TPWTQSTEHTNIQRGS 23	1999.15	-1.71	97.5%	81.4%
3 of 16	5/23/2006	17	13 TEHTNIQRGSGRQIQK 29	2009.23	-1.89	89.2%	74.6%
4 of 16	5/23/2006	17	18 IQRRGSGRQIQKLGHPN 34	1945.23	-1.49	89.7%	74.0%
5 of 16	5/23/2006	17	24 GRQIQKLGHPNSTQLMD 40	1923.20	-1.12	95.3%	80.8%
6 of 16	5/23/2006	17	30 LGHPNSTQLMDHYLRIM 46	2026.38	-0.38	98.8%	81.6%
7 of 16	5/23/2006	17	36 TQLMDHYLRIMSQVDMH 52	2118.50	-0.34	96.9%	82.3%
8 of 16	5/23/2006	17	42 YLRIMSQVDMHKQTVSW 58	2122.51	-0.36	88.8%	82.3%
9 of 16	5/23/2006	17	47 SQVDMHKQTVSWRLWPS 63	2085.39	-0.85	92.3%	82.1%
10 of 16	5/23/2006	17	53 KQTVSWRLWPSLKNPTQ 69	2069.41	-1.12	98.3%	82.0%
11 of 16	5/23/2006	17	59 RLWPSLKNPTQGSLRTH 75	1991.30	-1.13	97.3%	77.8%
12 of 16	5/23/2006	17	65 KNPTQGSLRTHALKQWK 81	1993.32	-1.51	98.6%	74.5%
13 of 16	5/23/2006	17	71 SLRTHALKQWKSFNKQG 87	2029.35	-1.25	99.4%	74.8%
14 of 16	5/23/2006	17	77 LKQWKSFNKQGWNTLLK 93	2119.52	-1.12	99.5%	78.8%
15 of 16	5/23/2006	17	83 FNKQGWNTLLKVARLMI 99	2032.50	0.11	97.4%	81.7%
16 of 16	5/23/2006	13	89 TNLLKVARLMIGH 101	1465.84	0.58	96.3%	76.3%

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

Table 2 - Amino Acid Analysis

Peptide		Ala (A)	Arg (R)	Asx (N,D)	Cys (C)	Glx (Q,E)	Gly (G)	His (H)	Ile (I)	Leu (L)	Lys (K)	Met (M)	Phe (F)	Pro (P)	Ser (S)	Thr (T)	Trp (W)	Tyr (Y)	Val (V)
NRC-338: Influenza Virus A/New York/348/2003(H1N1)																			
1 of 8	Expected					4.00	3.00	1.00	2.00			1.00		1.00	2.00	2.00	1.00		
	Actual					3.75	2.99	1.16	2.00			1.16		1.18	1.99	1.82	0.00 ^a		
2 of 8	Expected			1.00		4.00	1.00	1.00	2.00		1.00			1.00	2.00	3.00	1.00		
	Actual			0.93		3.76	1.18	1.16	2.00		0.94			1.14	1.97	2.74	0.00 ^a		
3 of 8	Expected			1.00		4.00	2.00	1.00	2.00		3.00			1.00	1.00	2.00			
	Actual			0.98		3.91	2.13	0.93	1.98		2.93			1.00	1.00	2.01			
4 of 8	Expected		1.00	1.00		5.00	1.00	1.00	1.00	1.00	3.00			1.00		1.00			
	Actual		1.02	0.83		4.79	1.02	1.06	0.92	0.99	2.92			1.00		0.89			
5 of 8	Expected		1.00	2.00		3.00	1.00	1.00	1.00	2.00	2.00	1.00		1.00	1.00	1.00			
	Actual		1.06	1.97		2.95	1.12	1.19	0.88	2.00	2.13	1.00		1.15	0.94	0.84			
6 of 8	Expected		1.00	1.00		3.00	1.00	2.00		2.00	2.00	1.00			1.00	2.00		1.00	
	Actual		1.03	0.81		2.64	1.10	1.92		1.74	1.79	0.95			0.84	1.72		1.00	
7 of 8	Expected	1.00		1.00		3.00	1.00	1.00		1.00	1.00	3.00			1.00	2.00		1.00	1.00
	Actual	0.99		0.85		2.84	1.05	0.89		1.00	0.82	2.47			0.99	1.76		1.00	0.94
8 of 8	Expected	1.00		1.00		3.00		1.00	1.00		2.00	2.00		1.00		1.00		2.00	2.00
	Actual	0.88		0.87		2.89		1.05	0.43 ^b		1.80	1.91		1.01		0.89		2.00	1.30 ^b
NRC-339: Influenza Virus A/New York/504/1998(H3N2)																			
1 of 16	Expected			1.00		6.00	1.00	1.00				1.00		1.00	1.00	4.00	1.00		
	Actual			1.00		5.70	0.97	1.00				0.99		1.07	0.89	3.71	0.00 ^a		
2 of 16	Expected		2.00	1.00		3.00	1.00	1.00	1.00					1.00	2.00	4.00	1.00		
	Actual		1.87	0.94		2.76	1.01	1.14	1.00					1.08	2.06	3.71	0.00 ^a		
3 of 16	Expected		3.00	1.00		4.00	2.00	1.00	2.00		1.00				1.00	2.00			
	Actual		3.20	0.92		3.71	2.09	1.17	2.00		0.96				1.10	2.10			
4 of 16	Expected		3.00	1.00		3.00	3.00	1.00	2.00	1.00	1.00			1.00	1.00				
	Actual		2.86	1.02		2.74	2.84	1.02	1.79	1.00	1.00			0.99	0.95				
5 of 16	Expected		1.00	2.00		3.00	2.00	1.00	1.00	2.00	1.00	1.00		1.00	1.00	1.00			
	Actual		1.10	1.94		2.82	2.06	1.04	0.89	2.00	1.00	1.09		0.97	0.97	1.00			
6 of 16	Expected		1.00	2.00		1.00	1.00	2.00	1.00	3.00		2.00		1.00	1.00	1.00		1.00	
	Actual		1.17	2.02		1.06	1.19	2.14	1.09	3.00		2.12		1.11	1.09	1.07		1.14	
7 of 16	Expected		1.00	2.00		2.00		2.00	1.00	2.00		3.00			1.00	1.00		1.00	1.00
	Actual		1.14	2.10		1.99		2.12	0.87	1.87		2.70			1.00	1.01		1.08	1.00
8 of 16	Expected		1.00	1.00		2.00		1.00	1.00	1.00	1.00	2.00			2.00	1.00	1.00	1.00	2.00
	Actual		1.17	0.91		1.75		1.20	0.97	1.00	0.88	1.82			1.70	0.95	0.00 ^a	1.03	1.77
9 of 16	Expected		1.00	1.00		2.00		1.00		1.00	1.00	1.00		1.00	3.00	1.00	2.00		2.00
	Actual		1.15	0.89		1.80		1.19		1.00	0.80	1.13		1.11	2.94	0.94	0.00 ^a		1.72
10 of 16	Expected		1.00	1.00		2.00				2.00	2.00			2.00	2.00	2.00	2.00		1.00
	Actual		1.18	1.07		2.00				2.00	1.74			2.10	2.08	1.76	0.00 ^a		1.13
11 of 16	Expected		2.00	1.00		1.00	1.00	1.00		3.00	1.00			2.00	2.00	2.00	1.00		
	Actual		1.85	1.00		1.18	1.15	1.27		2.81	1.11			2.00	1.89	1.95	0.00 ^a		
12 of 16	Expected	1.00	1.00	1.00		2.00	1.00	1.00		2.00	3.00			1.00	1.00	2.00	1.00		
	Actual	0.88	1.01	0.82		1.78	1.03	1.10		1.77	2.83			1.00	0.90	1.79	0.00 ^a		
13 of 16	Expected	1.00	1.00	1.00		2.00	1.00	1.00		2.00	3.00		1.00		2.00	1.00	1.00		
	Actual	0.99	1.19	0.86		1.81	1.14	1.11		1.97	2.83		1.00		1.90	1.01	0.00 ^a		
14 of 16	Expected			2.00		2.00	1.00			3.00	4.00		1.00		1.00	1.00	2.00		
	Actual			2.00		1.86	1.20			2.82	3.73		1.00		1.17	1.13	0.00 ^a		
15 of 16	Expected	1.00	1.00	2.00		1.00	1.00		1.00	3.00	2.00	1.00	1.00			1.00	1.00		1.00
	Actual	1.00	1.05	1.79		1.12	0.99		0.92	2.82	1.96	0.80	0.81			0.98	0.00 ^a		0.79
16 of 16	Expected	1.00	1.00	1.00			1.00	1.00	1.00	3.00	1.00	1.00				1.00			1.00
	Actual	0.99	1.15	0.99			1.14	1.18	0.97	2.77	1.10	1.02				1.07			1.00

^aTrp was completely destroyed during hydrolysis

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

Date: 20 JUN 2014

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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