

Peptide Array, Influenza Virus B/Florida/4/2006 Matrix Protein 1

Catalog No. NR-36046

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Product Description: The 47-peptide array spans the matrix protein 1 (M1) of the B/Florida/4/2006 strain of influenza virus (GenPept: ACF54247). Peptides are 16- to 17-mers, with 10 to 12 amino acid overlaps.

Lot: P595784-B

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by Electrospray or MALDI
- 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	Peptide Content
01 of 47	6/4/2012	17	1-MSLFGDTIAYLLSLTED-17	1890	97.8%	87.0%
02 of 47	6/4/2012	17	6-DTIAYLLSLTEDGEGKA-22	1798	99.1%	79.7%
03 of 47	6/4/2012	17	11-LLSLTEDGEGKAELAEK-27	1804	99.0%	80.7%
04 of 47	6/4/2012	17	16-EDGEGKAELAEKLHCWF-32	1963	93.5%	77.3%
05 of 47	6/7/2012	17	21-KAELAEKLHCWFGGKEF-37	1993	96.7%	81.8%
06 of 47	6/4/2012	17	26-EKLHCWFGGKEFDLDSA-42	1984	96.7%	74.2%
07 of 47	6/4/2012	17	31-WFGGKEFDLDSALEWIK-47	2043	98.3%	81.3%
08 of 47	6/21/2012	17	36-EFDLDSALEWIKNRCL-52	2082	80.4%	81.0%
09 of 47	6/4/2012	17	41-SALEWIKNRCLDIQK-57	2048	97.3%	73.3%
10 of 47	6/4/2012	17	46-IKNRCLDIQKALIGA-62	1887	96.7%	77.5%
11 of 47	6/21/2012	17	51-CLDIQKALIGASICFL-67	1809	84.0%	80.5%
12 of 47	6/4/2012	16	57-KALIGASICFLPKDQ-72	1734	88.0%	70.9%
13 of 47	6/8/2012	17	61-GASICFLPKDQERKRR-77	2034	98.8%	60.0%
14 of 47	6/7/2012	17	66-FLPKDQERKRRFITEP-82	2190	99.6%	81.8%
15 of 47	6/8/2012	17	71-DQERKRRFITEPLSGMG-87	2022	99.9%	64.0%
16 of 47	6/7/2012	17	76-RRFITEPLSGMGTTATK-92	1868	92.3%	69.2%
17 of 47	6/7/2012	17	81-EPLSGMGTTATKKKGLI-97	1734	96.1%	74.7%
18 of 47	6/7/2012	17	86-MGTTATKKKGLILAERK-102	1848	99.0%	64.7%
19 of 47	6/7/2012	17	91-TKKKGLILAERKMRRCV-107	2032	99.4%	63.3%
20 of 47	6/7/2012	17	96-LILAERKMRRCVSFHEA-112	2061	95.8%	84.2%
21 of 47	6/7/2012	17	101-RKMRRCVSFHEAFEIAE-117	2110	95.6%	73.6%
22 of 47	6/7/2012	17	106-CVSFHEAFEIAEGHESS-122	1880	92.1%	74.4%
23 of 47	6/21/2012	17	111-EAFEIAEGHESSALLYC-127	1869	71.8%	81.8%
24 of 47	6/7/2012	17	116-AEGHESSALLYCLMVMY-132	1918	99.2%	74.2%
25 of 47	6/21/2012	17	121-SSALLYCLMVMYLNPGN-137	1891	Crude	73.3%

Table 1						
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC	Peptide Content
26 of 47	6/7/2012	17	126-YCLMVMYLNPGNYSMQV-142	2027	82.7%	81.5%
27 of 47	6/7/2012	17	131-MYLNPGNYSMQVKLGTL-147	1930	94.1%	83.1%
28 of 47	6/7/2012	17	136-GNYSMQVKLGTLCALCE-152	1831	92.7%	73.8%
29 of 47	6/7/2012	16	142-VKLGTLCALCEKQASH-157	1703	90.2%	73.8%
30 of 47	6/7/2012	17	146-TLCALCEKQASHSHRAH-162	1893	97.9%	64.3%
31 of 47	6/7/2012	17	151-CEKQASHSHRAHSRAAR-167	1933	93.8%	60.1%
32 of 47	6/7/2012	17	156-SHSHRAHSRAARSSVPG-172	1802	98.9%	64.3%
33 of 47	6/7/2012	17	161-AHSRAARSSVPGVRREM-177	1869	98.5%	70.9%
34 of 47	6/7/2012	17	166-ARSSVPGVRREMQMVSA-182	1863	99.3%	74.3%
35 of 47	6/7/2012	17	171-PGVRREMQMVSAMNTAK-187	1908	99.5%	79.4%
36 of 47	6/20/2012	17	176-EMQMVSAMNTAKTMNGM-192	1877	96.3%	81.4%
37 of 47	6/7/2012	17	181-SAMNTAKTMNGMGKGED-197	1745	99.3%	82.8%
38 of 47	6/7/2012	17	186-AKTMNGMGKGEDVQKLA-202	1780	99.6%	82.1%
39 of 47	6/20/2012	17	191-GMGKGEDVQKLAEEELS-207	1820	95.5%	80.1%
40 of 47	6/7/2012	17	196-EDVQKLAEEELSNIQV-212	1886	98.9%	83.9%
41 of 47	6/20/2012	17	201-LAEELSNIQVLRSLGA-217	1772	90.9%	59.9%
42 of 47	6/8/2012	16	207-SNIQVLRSLGASQKNG-222	1603	99.1%	60.2%
43 of 47	6/8/2012	17	211-VLRSLGASQKNGEGIAK-227	1730	94.3%	70.0%
44 of 47	6/11/2012	17	216-GASQKNGEGIAKDVMEV-232	1734	98.6%	68.2%
45 of 47	6/8/2012	17	221-NGEGIAKDVMEVLKQSS-237	1807	98.7%	75.4%
46 of 47	6/8/2012	17	226-AKDVMEVLKQSSMGNSA-242	1796	99.0%	78.3%
47 of 47	6/8/2012	16	233-LKQSSMGNSALVKKYL-248	1769	99.8%	73.8%

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)
01 of 47	Expected	1.00		2.00		1.00	1.00		1.00	4.00		1.00	1.00		2.00	2.00		1.00	
	Actual	1.02		2.04		0.98	1.02		1.02	4.19		1.01	1.04		1.97	1.98		1.01	
02 of 47	Expected	2.00		2.00		2.00	2.00		1.00	3.00	1.00				1.00	2.00		1.00	
	Actual	2.05		2.04		1.99	2.04		0.99	3.11	1.04				0.98	1.99		1.03	
03 of 47	Expected	2.00		1.00		4.00	2.00			4.00	2.00				1.00	1.00			
	Actual	2.05		1.03		3.96	2.05			4.21	2.07				0.97	1.01			
04 of 47	Expected	2.00		1.00	1.00	4.00	2.00	1.00		2.00	2.00		1.00				1.00		
	Actual	2.04		0.95	0.00 ^a	3.82	1.98	1.02		2.03	2.05		1.03				0.00 ^b		
05 of 47	Expected	2.00			1.00	3.00	2.00	1.00		2.00	3.00		2.00				1.00		
	Actual	2.00			0.00 ^a	2.85	1.99	1.04		2.02	2.99		2.01				0.00 ^b		
06 of 47	Expected	1.00		2.00	1.00	2.00	2.00	1.00		2.00	2.00		2.00		1.00		1.00		
	Actual	0.96		2.03	0.00 ^a	1.93	2.03	0.97		2.04	2.03		2.07		0.88		0.00 ^b		
07 of 47	Expected	1.00		2.00		2.00	2.00		1.00	2.00	2.00		2.00		1.00		2.00		
	Actual	1.00		2.01		1.92	1.99		0.98	2.07	2.04		2.03		0.92		0.00 ^b		
08 of 47	Expected	1.00	1.00	3.00	1.00	2.00			1.00	3.00	2.00		1.00		1.00		1.00		
	Actual	1.00	1.05	3.06	0.00 ^a	1.93			0.99	3.13	2.08		1.03		0.95		0.00 ^b		
09 of 47	Expected	1.00	1.00	2.00	1.00	2.00			2.00	2.00	3.00				1.00	1.00	1.00		
	Actual	1.02	1.04	2.06	0.00 ^a	1.95			1.96	2.09	3.07				0.99	1.03	0.00 ^b		
10 of 47	Expected	2.00	1.00	2.00	1.00	1.00	1.00		3.00	2.00	3.00					1.00			
	Actual	2.07	1.02	2.01	0.00 ^a	0.94	1.02		2.95	2.08	3.10					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)
11 of 47	Expected	2.00		1.00	2.00	1.00	1.00		3.00	3.00	1.00		1.00		1.00	1.00			
	Actual	2.08		1.02	0.00 ^a	1.00	1.04		2.77	3.14	1.04		1.04		1.01	0.97			
12 of 47	Expected	2.00		1.00	1.00	1.00	1.00		2.00	2.00	3.00		1.00	1.00	1.00				
	Actual	2.06		1.01	0.00 ^a	1.01	1.03		1.97	2.06	3.11		1.08	0.93	0.95				
13 of 47	Expected	1.00	3.00	1.00	1.00	2.00	1.00		1.00	1.00	3.00		1.00	1.00	1.00				
	Actual	1.00	3.05	1.01	0.00 ^a	1.98	1.01		0.92	1.03	3.08		1.08	0.91	0.90				
14 of 47	Expected		3.00	1.00		3.00			1.00	1.00	3.00		2.00	2.00		1.00			
	Actual		3.07	0.99		3.01			0.98	1.04	3.08		2.07	1.97		0.96			
15 of 47	Expected		3.00	1.00		3.00	2.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	Actual		3.04	1.02		3.00	2.03		0.98	1.03	1.03	0.94	1.05	0.95	0.90	1.02			
16 of 47	Expected	1.00	2.00			1.00	2.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00			
	Actual	1.03	2.01			0.99	2.03		0.99	1.05	1.04	1.01	1.08	0.97	0.97	3.93			
17 of 47	Expected	1.00				1.00	3.00		1.00	2.00	3.00	1.00		1.00	1.00	3.00			
	Actual	1.05				1.03	3.04		1.00	2.05	3.06	0.99		0.98	1.07	2.90			
18 of 47	Expected	2.00	1.00			1.00	2.00		1.00	2.00	4.00	1.00				3.00			
	Actual	2.04	1.02			0.99	2.01		0.98	2.05	4.09	1.00				2.92			
19 of 47	Expected	1.00	3.00		1.00	1.00	1.00		1.00	2.00	4.00	1.00				1.00			1.00
	Actual	1.02	3.02		0.00 ^a	0.95	1.03		0.98	2.03	4.07	1.02				0.98			1.03
20 of 47	Expected	2.00	3.00		1.00	2.00		1.00	1.00	2.00	1.00	1.00	1.00		1.00				1.00
	Actual	1.92	2.93		0.00 ^a	2.01		1.08	0.93	1.94	0.99	0.98	1.08		0.91				1.03
21 of 47	Expected	2.00	3.00		1.00	3.00		1.00	1.00		1.00	1.00	2.00		1.00				1.00
	Actual	2.02	3.02		0.00 ^a	2.91		1.05	0.98		1.03	1.00	2.04		0.98				1.04
22 of 47	Expected	2.00			1.00	4.00	1.00	2.00	1.00				2.00		3.00				1.00
	Actual	1.97			0.00 ^a	3.78	1.00	2.04	0.99				2.08		2.73				1.02
23 of 47	Expected	3.00			1.00	4.00	1.00	1.00	1.00	2.00			1.00		2.00			1.00	
	Actual	3.10			0.00 ^a	3.89	1.00	1.06	0.95	2.10			0.99		1.93			1.07	
24 of 47	Expected	2.00			1.00	2.00	1.00	1.00		3.00		2.00			2.00			2.00	1.00
	Actual	2.04			0.00 ^a	2.10	1.03	1.01		2.96		2.03			2.08			1.83	1.03
25 of 47	Expected	1.00		2.00	1.00		1.00			4.00		2.00		1.00	2.00			2.00	1.00
	Actual	0.95		2.14	0.00 ^a		0.99			4.14		2.02		0.98	1.90			2.17	1.01
26 of 47	Expected			2.00	1.00	1.00	1.00			2.00		3.00		1.00	1.00			3.00	2.00
	Actual			1.98	0.00 ^a	1.00	1.07			2.01		2.97		0.98	1.06			2.98	2.02
27 of 47	Expected			2.00		1.00	2.00			3.00	1.00	2.00		1.00	1.00	1.00		2.00	1.00
	Actual			1.95		1.05	2.02			3.05	1.04	1.96		0.97	1.02	1.05		1.98	1.05
28 of 47	Expected	1.00		1.00	2.00	2.00	2.00			3.00	1.00	1.00			1.00	1.00		1.00	1.00
	Actual	1.05		0.91	0.00 ^a	2.05	2.04			3.19	1.04	0.96			1.01	1.05		0.97	1.05
29 of 47	Expected	2.00			2.00	2.00	1.00	1.00		3.00	2.00				1.00	1.00			1.00
	Actual	2.09			0.00 ^a	2.00	1.03	1.09		3.12	2.01				1.00	0.95			0.98
30 of 47	Expected	3.00	1.00		2.00	2.00		3.00		2.00	1.00				2.00	1.00			
	Actual	3.07	1.03		0.00 ^a	1.98		3.12		2.06	1.04				1.99	1.00			
31 of 47	Expected	4.00	3.00		1.00	2.00		3.00			1.00				3.00				
	Actual	4.14	3.12		0.00 ^a	1.93		3.14			1.01				2.97				
32 of 47	Expected	3.00	3.00				1.00	3.00						1.00	5.00				1.00
	Actual	3.09	2.97				1.06	3.13						0.94	4.77				1.07
33 of 47	Expected	3.00	4.00			1.00	1.00	1.00				1.00		1.00	3.00				2.00
	Actual	3.04	4.04			1.01	1.03	1.05				1.02		0.97	2.89				2.05
34 of 47	Expected	2.00	3.00			2.00	1.00					2.00		1.00	3.00				3.00
	Actual	2.03	3.06			2.03	1.02					2.10		0.97	2.88				3.10

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)
35 of 47	Expected	2.00	2.00	1.00		2.00	1.00				1.00	3.00		1.00	1.00	1.00			2.00
	Actual	2.06	1.93	1.04		2.01	1.01				1.04	3.06		0.99	1.00	1.03			2.04
36 of 47	Expected	2.00		2.00		2.00	1.00				1.00	5.00			1.00	2.00			1.00
	Actual	2.02		2.05		1.99	1.01				1.03	5.10			0.95	2.04			1.07
37 of 47	Expected	2.00		3.00		1.00	3.00				2.00	3.00			1.00	2.00			
	Actual	2.09		3.05		1.00	3.06				2.07	3.09			1.01	2.04			
38 of 47	Expected	2.00		2.00		2.00	3.00			1.00	3.00	2.00				1.00			1.00
	Actual	2.05		2.00		1.93	3.01			1.04	3.06	1.99				0.96			1.03
39 of 47	Expected	1.00		1.00		5.00	3.00			2.00	2.00	1.00			1.00				1.00
	Actual	1.01		1.01		4.89	2.98			2.08	2.06	1.00			0.98				1.04
40 of 47	Expected	1.00		2.00		5.00	1.00		1.00	3.00	1.00				1.00				2.00
	Actual	0.99		2.00		4.90	1.03		1.02	3.17	1.04				0.94				2.07
41 of 47	Expected	2.00	1.00	1.00		3.00	2.00		1.00	4.00					2.00				1.00
	Actual	1.88	1.01	1.09		2.92	1.88		1.03	4.10					1.98				1.09
42 of 47	Expected	1.00	1.00	2.00		1.00	3.00		1.00	2.00	1.00				3.00				1.00
	Actual	1.00	1.01	1.97		0.97	2.98		0.98	2.03	1.02				2.81				1.02
43 of 47	Expected	2.00	1.00	1.00		2.00	3.00		1.00	2.00	2.00				2.00				1.00
	Actual	1.99	1.01	1.00		1.92	2.99		0.99	2.03	2.03				1.91				1.02
44 of 47	Expected	2.00		2.00		3.00	3.00		1.00		2.00	1.00			1.00				2.00
	Actual	2.06		2.06		2.97	3.10		1.02		2.07	0.93			0.95				2.12
45 of 47	Expected	1.00		2.00		3.00	2.00		1.00	1.00	2.00	1.00			2.00				2.00
	Actual	0.97		2.02		2.89	2.01		1.01	1.04	2.03	0.95			1.75				2.06
46 of 47	Expected	2.00		2.00		2.00	1.00			1.00	2.00	2.00			3.00				2.00
	Actual	1.96		1.99		1.93	1.00			1.03	2.02	2.00			2.84				2.04
47 of 47	Expected	1.00		1.00		1.00	1.00			3.00	3.00	1.00			3.00			1.00	1.00
	Actual	1.01		1.02		0.97	1.00			3.02	3.01	1.00			2.88			0.97	1.02

^aCys was completely destroyed during hydrolysis

^bTrp was completely destroyed during hydrolysis

Date: 07 AUG 2012

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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