

**Peptide Array, Influenza Virus A/Solomon Islands/3/2006 (H1N1) Hemagglutinin Protein Diverse Peptides**

**Catalog No. NR-18971**

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

**Product Description:** NR-18971 contains 21 peptides that represent regions of amino acid sequence diversity in the hemagglutinin (HA) protein of influenza virus A/Solomon Islands/3/2006 (H1N1) (GenPept: ABU50586) compared to the HA of influenza virus A/Brisbane/59/2007 (H1N1) (GenPept: ACA28844). Peptides are 17-mers with 11 amino acid overlaps.

**Lot: PF0804-1**

**Note:** The lot numbers of the individual peptides are shown on the vial labels and in Table 1 below.

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by Electrospray Ionization
- Counter Ion Trifluoroacetate

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

Table 1							
Peptide	Lot #	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
7 of 93	A0644	07/14/2010	17	37-LEKNVTVTHSVNLEDS-53	1897.93	88.3%	84.2%
8 of 93	A1123	05/31/2010	17	43-VTHSVNLEDSHNGKLC-59	1865.70	98.0%	79.7%
9 of 93	A0084	05/07/2010	17	49-LLEDSHNGKLCCLKGIA-65	1824.53	99.6%	68.8%
14 of 93	A0059	05/01/2010	17	79-LGNPECELLISRESWSY-95	1995.73	99.0%	78.7%
15 of 93	A0267	06/02/2010	17	85-ELLISRESWSYIVEKPN-101	2066.94	93.2%	79.6%
23 of 93	A0060	05/03/2010	17	133-IFPKESSWPNHHTTGV-149	1888.00	99.3%	80.0%
24 of 93	A0437	06/18/2010	17	139-SWPNHHTTGVASCSHN-155	1785.86	95.9%	79.3%
25 of 93	A0090	05/07/2010	17	145-TTGVSASCSHNGESSFY-161	1734.20	95.2%	72.2%
26 of 93	A0145	05/14/2010	17	151-SCSHNGESSFYKNLLWL-167	1983.60	96.8%	77.0%
27 of 93	A0114	05/12/2010	17	157-ESSFYKNLLWLTGKNGL-173	1970.20	99.7%	86.5%
33 of 93	A0097	05/11/2010	17	193-WGVHHPNIGDQRALYH-209	1996.67	96.7%	84.2%
34 of 93	A0098	05/11/2010	17	199-PNIGDQRALYHTENAYV-215	1960.40	95.2%	73.9%
35 of 93	A0128	05/13/2010	17	205-RALYHTENAYVSVVSSH-221	1932.47	99.7%	78.5%
38 of 93	A0115	05/11/2010	17	223-SRKFTPEIAKRPKVRDR-239	2084.96	98.6%	83.4%
39 of 93	A0129	05/13/2010	17	229-EIAKRPKVRDREGRINY-245	2100.66	96.0%	80.6%
40 of 93	A0130	05/12/2010	17	235-KVRDREGRINYWTLE-251	2211.60	95.3%	78.7%
47 of 93	A0099	05/10/2010	17	277-FGSGIINSNAPMDECCA-293	1739.87	95.1%	74.2%
48 of 93	A0070	05/04/2010	17	283-NSNAPMDECDKACQTPQ-299	1851.40	96.3%	77.9%
49 of 93	A0078	05/06/2010	17	289-DECDKACQTPQGAINSS-305	1764.53	97.4%	75.6%
89 of 93	A0314	06/03/2010	17	529-ILAIYSTVASSRVLVLS-545	1791.73	pass by MS	76.6%
90 of 93	A0302	06/04/2010	17	535-TVASSRVLVSLGAIISF-551	1720.13	90.0%	70.7%

<sup>a</sup>% full-length  
<sup>b</sup>Remainder 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)
7 of 93	Expected			3.00		2.00		1.00		3.00	1.00				2.00	2.00			3.00
	Actual			3.23		2.35		0.94		2.57	1.00				1.83	1.90			3.18
8 of 93	Expected			3.00	1.00	1.00	1.00	2.00		3.00	1.00				2.00	1.00			2.00
	Actual			3.41	0.00 <sup>c</sup>	1.08	0.82	1.74		2.79	1.05				1.73	1.13			2.25
9 of 93	Expected	1.00		2.00	1.00	1.00	2.00	1.00	1.00	5.00	2.00				1.00				
	Actual	1.00		2.13	0.00 <sup>c</sup>	1.14	1.79	0.87	0.97	5.17	1.90				1.04				
14 of 93	Expected		1.00	1.00	1.00	3.00	1.00		1.00	3.00				1.00	3.00		1.00	1.00	
	Actual		0.89	1.02	0.00 <sup>c</sup>	3.18	0.94		1.03	3.30				0.96	2.70		0.00 <sup>a</sup>	0.96	
15 of 93	Expected		1.00	1.00		3.00			2.00	2.00	1.00			1.00	3.00		1.00	1.00	1.00
	Actual		0.92	1.12		3.34			1.73 <sup>b</sup>	2.01	1.01			1.05	2.99		0.00 <sup>a</sup>	1.01	0.83 <sup>b</sup>
23 of 93	Expected			1.00		1.00	1.00	1.00	1.00		1.00		1.00	2.00	3.00	3.00	1.00		1.00
	Actual			1.16		1.17	0.94	0.91	1.02		0.99		0.98	2.00	2.80	2.93	0.00 <sup>a</sup>		1.09
24 of 93	Expected	1.00		2.00	1.00		1.00	2.00						1.00	4.00	3.00	1.00		1.00
	Actual	1.03		2.32	0.00 <sup>c</sup>		0.89	1.94						0.98	3.60	3.08	0.00 <sup>a</sup>		1.16
25 of 93	Expected	1.00		1.00	1.00	1.00	2.00	1.00					1.00		5.00	2.00			1.00
	Actual	1.11		1.16	0.00 <sup>c</sup>	1.14	1.91	0.95					1.03		4.78	1.82			0.95
26 of 93	Expected			2.00	1.00	1.00	1.00	1.00		3.00	1.00		1.00		4.00		1.00		1.00
	Actual			2.38	0.00 <sup>c</sup>	1.17	1.01	0.85		3.17	0.93		0.97		3.65		0.00 <sup>a</sup>		0.85
27 of 93	Expected			2.00		1.00	2.00			4.00	2.00		1.00		2.00	1.00	1.00	1.00	1.00
	Actual			2.37		1.11	1.82			4.15	1.89		0.95		1.90	1.00	0.00 <sup>a</sup>		0.81
33 of 93	Expected	1.00	1.00	2.00		1.00	2.00	3.00	1.00	1.00				2.00			1.00	1.00	1.00
	Actual	1.05	0.91	2.40		1.19	1.87	2.71	1.00	1.09				2.04			0.00 <sup>a</sup>	0.86	0.87
34 of 93	Expected	2.00	1.00	3.00		2.00	1.00	1.00	1.00	1.00				1.00		1.00			2.00
	Actual	1.95	0.84	3.49		2.36	0.86	0.83	0.94	1.11				0.93		1.03			1.63
35 of 93	Expected	2.00	1.00	1.00		1.00		2.00		1.00					3.00	1.00			2.00
	Actual	2.13	0.91	1.17		1.12		1.98		1.11					2.98	0.91			1.82
38 of 93	Expected	1.00	4.00	1.00		1.00			1.00		3.00		1.00	2.00	1.00	1.00			1.00
	Actual	1.06	3.57	1.11		1.17			1.02		2.95		0.98	2.02	1.07	1.01			1.03
39 of 93	Expected	1.00	4.00	2.00		2.00	1.00		2.00		2.00			1.00					1.00
	Actual	1.01	3.61	2.36		2.27	0.95		2.02		1.91			1.00					0.86
40 of 93	Expected		3.00	2.00		2.00	1.00		1.00	2.00	1.00					1.00	1.00	2.00	1.00
	Actual		2.60	2.27		2.40	0.92		0.97	2.11	0.96					0.98	0.00 <sup>a</sup>	1.77	1.01
47 of 93	Expected	2.00		4.00	1.00	1.00	2.00		2.00			1.00	1.00	1.00	2.00				
	Actual	2.00		4.36	0.00 <sup>c</sup>	1.17	1.79		1.82 <sup>b</sup>			1.16	0.94	0.96	1.79				
48 of 93	Expected	2.00		4.00	2.00	3.00					1.00	1.00		2.00	1.00	1.00			
	Actual	1.87		4.01	0.00 <sup>c</sup>	3.47					0.91	0.81		1.85	0.94	1.15			
49 of 93	Expected	2.00		3.00	2.00	3.00	1.00		1.00		1.00			1.00	2.00	1.00			
	Actual	1.99		3.27	0.00 <sup>c</sup>	3.17	0.91		0.97		0.96			0.95	1.86	0.93			
89 of 93	Expected	2.00	1.00						2.00	3.00					4.00	1.00			1.00
	Actual	2.05	0.87						1.97	3.33					3.75	0.93			0.88
90 of 93	Expected	2.00	1.00				1.00		1.00	3.00			1.00		4.00	1.00			3.00
	Actual	2.00	0.84				0.99		0.99	3.31			1.06		3.57	1.18			3.06

<sup>a</sup>Trp was completely destroyed during hydrolysis

<sup>b</sup>Val-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis

<sup>c</sup>Cys was completely destroyed during hydrolysis

**Date:** 08 NOV 2010

**Signature:**



**Title:**

Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the vendor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

