

Peptide Array West Nile Virus Protein NS4b

Catalog No. NR-441

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

Product Description: A 33-peptide array spanning the NS4b protein of the NY99-flamingo382-99 strain of West Nile Virus. Peptides are 15- to 18-mers, with 10 amino acid overlaps. Each vial contains 1 mg of lyophilized NR-441.

Lot: 3745096

The following information applies to all 33 peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Electrospray "Exhibits correct MW"
- 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 ^a	Peptide Content ^b
1	7/8/04	17	NEMGWLDKTKSDISSLF	1971.2	91.11%	85%
2	8/11/04	17	KTKSDISSLFGQRIEVK	1936.2	83.31%	76%
3	8/9/04	18	SLFGQRIEVKENFSMGEF	2118.4	65.49%	86%
4	7/1/04	17	VKENFSMGEFLDLRPA	1966.3	90.04%	84%
5	7/2/04	18	GEFLDLRPATAWSLYAV	2022.3	90.01%	90%
6	8/11/04	18	PATAWSLYAVTTAVLTPL	1875.2	25.06%	90%
7	7/1/04	15	AVTTAVLTPLLKHLI	1590.0	97.94%	82%
8	6/28/04	15	VLTPLLKHLITSDYI	1726.1	95.16%	83%
9	6/28/04	17	LKHLITSDYINTSLTSI	1919.2	92.69%	84%
10	8/11/04	18	DYINTSLTSINVQASALF	1957.2	27.45%	89%
11	8/10/04	18	SINVQASALFTLARGFPF	1939.2	74.25%	89%
12	8/11/04	18	LFTLARGFPFVDVGV SAL	1909.3	41.79%	89%
13	8/11/04	17	PFVDVGV SALLLAAGCW	1718.0	24.64%	88%
14	8/9/04	17	SALLLAAGCWQVTLTV	1703.0	18.64%	88%
15	8/16/04	18	GCWGQVTLTVTVAATLL	1834.2	17.99%	89%
16	8/11/04	18	TVTVAATLLFCHYAYMV	2004.4	48.72%	89%
17	7/1/04	18	LLFCHYAYMVPGWQAEAM	2130.5	91.00%	90%
18	7/1/04	18	MVPGWQAEAMRSAQRRTA	2046.4	90.18%	81%
19	7/7/04	18	AMRSAQRRTAAGIMKNAV	1932.3	90.34%	76%
20	8/2/04	16	TAAGIMKNAVVDGIVA	1529.8	95.83%	88%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
21	7/29/04	18	KNAVVDGIVATDVPELER	1925.2	90.49%	85%
22	7/19/04	18	VATDVPELERTTPIMQKK	2056.4	90.99%	81%
23	7/13/04	18	ERTTPIMQKKVGGQIMLIL	2099.6	92.82%	81%
24	8/11/04	18	KKVGGQIMLILVSLAAVVV	1881.4	9.78%	85%
25	7/23/04	18	ILVSLAAVVVNPSVKTVR	1865.3	90.25%	85%
26	8/11/04	18	VVNPSVKTVREAGILITA	1867.2	57.61%	85%
27	8/11/04	16	VREAGILITAAAVTLW	1684.0	42.11%	88%
28	8/11/04	18	LITAAAVTLWENGASSVW	1889.1	25.92%	89%
29	8/11/04	18	LWENGASSVWNATTAIGL	1890.1	20.44%	89%
30	8/10/04	18	VWNATTAIGLCHIMRGGW	1986.4	83.39%	84%
31	8/11/04	18	GLCHIMRGGWLSCLSITW	2033.5	22.99%	88%
32	8/9/04	18	GWLSCLSITWTLIKNMEK	2123.6	79.21%	86%
33	7/8/04	15	TWTLIKNMEKPGLKR	1815.2	93.95%	75%

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

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	Expected			3.00		1.00	1.00		1.00	2.00	2.00	1.00	1.00		3.00	1.00	1.00		
	Actual			2.97		1.00	1.00		1.00	2.02	2.00	1.01	1.00		3.01	1.00	0.00 ^a		
2	Expected		1.00	1.00		2.00	1.00		2.00	1.00	3.00		1.00		3.00	1.00			1.00
	Actual		1.00	1.00		1.98	1.00		2.02	1.00	2.98		1.00		3.02	1.00			1.00
3	Expected		1.00	1.00		4.00	2.00		1.00	1.00	1.00	1.00	3.00		2.00				1.00
	Actual		0.98	1.01		3.97	2.01		1.00	1.00	1.00	1.00	2.99		2.03				1.00
4	Expected	1.00	1.00	2.00		2.00	1.00			3.00	1.00	1.00	2.00	1.00	1.00				1.00
	Actual	1.00	1.00	2.00		1.99	1.00			3.02	1.01	1.00	2.00	1.00	1.00				1.01
5	Expected	3.00	1.00	1.00		1.00	1.00			4.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Actual	2.98	1.00	1.01		1.01	1.00			3.97			1.00	1.00	0.99	0.99	0.00 ^a	1.01	1.00
6	Expected	4.00								3.00				2.00	1.00	4.00	1.00	1.00	2.00
	Actual	4.02								2.99				1.97	1.00	4.01	0.00 ^a	0.98	2.00
7	Expected	2.00						1.00	1.00	4.00	1.00			1.00		3.00			2.00
	Actual	1.99						1.00	1.00	4.03	1.00			1.00		2.98			2.00
8	Expected			1.00				1.00	2.00	4.00	1.00			1.00	1.00	2.00		1.00	1.00
	Actual			1.01				1.00	1.97	4.01	1.00			0.99	0.99	2.02		0.99	1.00
9	Expected			2.00				1.00	3.00	3.00	1.00				3.00	3.00		1.00	
	Actual			2.01				0.99	2.98	2.99	1.02				3.01	3.00		1.00	
10	Expected	2.00		3.00		1.00			2.00	2.00			1.00		3.00	2.00		1.00	1.00
	Actual	2.01		2.99		1.00			2.03	2.01			0.98		2.98	1.98		1.00	1.00
11	Expected	3.00	1.00	1.00		1.00	1.00		1.00	2.00			3.00	1.00	2.00	1.00			1.00
	Actual	2.98	1.00	1.00		0.99	1.01		1.01	1.98			2.99	1.02	2.01	1.00			1.00
12	Expected	2.00	1.00	1.00			2.00			3.00			3.00	1.00	1.00	1.00			3.00
	Actual	1.97	1.00	1.00			1.99			3.02			3.01	1.00	1.00	1.00			3.01
13	Expected	3.00		1.00	1.00		2.00			3.00			1.00	1.00	1.00		1.00		3.00
	Actual	3.00		1.00	0.51 ^b		1.99			3.02			1.00	1.00	1.00		0.00 ^a		3.01
14	Expected	3.00			1.00	1.00	2.00			4.00					1.00	2.00	1.00		2.00
	Actual	3.00			0.58 ^b	1.00	2.00			3.97					1.02	2.03	0.00 ^a		2.03
15	Expected	2.00			1.00	1.00	2.00			3.00						5.00	1.00		3.00
	Actual	2.01			0.53 ^b	1.00	2.01			2.97						5.04	0.00 ^a		3.01
16	Expected	3.00			1.00			1.00		2.00		1.00	1.00			4.00		2.00	3.00
	Actual	2.98			0.51 ^b			1.00		2.01		1.00	1.00			3.97		2.01	3.02
17	Expected	3.00			1.00	2.00	1.00	1.00		2.00		2.00	1.00	1.00			1.00	2.00	1.00
	Actual	2.98			0.53 ^b	2.01	1.00	1.00		1.99		2.03	1.01	1.01			0.00 ^a	2.00	1.00
18	Expected	4.00	3.00			3.00	1.00					2.00		1.00	1.00	1.00	1.00	1.00	1.00
	Actual	3.97	3.02			3.01	1.00					2.00		1.00	1.01	1.00	0.00 ^a		1.01

Table 2 - Amino Acid Analysis (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)
19	Expected	5.00	3.00	1.00		1.00	1.00		1.00		1.00	2.00			1.00	1.00			1.00
	Actual	5.03	2.98	1.00		1.00	1.01		1.00		1.01	1.99			1.00	1.00			1.01
20	Expected	4.00		2.00			2.00		2.00		1.00	1.00				1.00			3.00
	Actual	4.02		1.99			1.98		1.74 ^c		1.00	1.00				1.02			2.31 ^c
21	Expected	2.00	1.00	3.00		2.00	1.00		1.00	1.00				1.00		1.00			4.00
	Actual	2.00	1.00	3.02		2.01	0.99		0.73 ^c	1.00	1.00			1.00		1.00			3.22 ^c
22	Expected	1.00	1.00	1.00		3.00			1.00	1.00	2.00	1.00		2.00		3.00			2.00
	Actual	1.00	1.00	1.00		3.00			0.99	0.99	2.03	1.00		2.01		2.99			2.02
23	Expected		1.00			3.00	1.00		3.00	2.00	2.00	2.00		1.00		2.00			1.00
	Actual		1.00			3.02	0.99		3.03	2.00	1.98	1.99		1.00		1.99			0.98
24	Expected	2.00				1.00	1.00		2.00	3.00	2.00	1.00			1.00				5.00
	Actual	2.01				0.99	1.00		2.00	3.02	1.98	1.00			1.01				4.02 ^c
25	Expected	2.00	1.00	1.00					1.00	2.00	1.00			1.00	2.00	1.00			6.00
	Actual	1.99	1.00	0.99					1.01	2.00	1.00			1.00	2.03	0.99			5.06 ^c
26	Expected	2.00	1.00	1.00		1.00	1.00		2.00	1.00	1.00			1.00	1.00	2.00			4.00
	Actual	2.00	1.00	1.00		1.01	1.00		1.98	1.00	0.98			1.00	1.02	2.01			3.51 ^c
27	Expected	4.00	1.00			1.00	1.00		2.00	2.00						2.00	1.00		2.00
	Actual	4.01	1.00			1.00	0.99		2.01	1.99						2.00	0.00 ^a		2.00
28	Expected	4.00		1.00		1.00	1.00		1.00	2.00					2.00	2.00	2.00		2.00
	Actual	3.98		1.00		1.00	1.00		1.00	2.00					2.01	2.01	0.00 ^a		1.98
29	Expected	3.00		2.00		1.00	2.00		1.00	2.00					2.00	2.00	2.00		1.00
	Actual	3.01		1.99		1.00	2.00		1.00	1.98					2.02	1.99	0.00 ^a		1.00
30	Expected	2.00	1.00	1.00	1.00		3.00	1.00	2.00	1.00		1.00				2.00	2.00		1.00
	Actual	2.01	1.00	1.00	0.53 ^b		2.97	1.00	1.98	1.00		1.00				2.01	0.00 ^a		1.00
31	Expected		1.00		2.00		3.00	1.00	2.00	3.00		1.00			2.00	1.00	2.00		
	Actual		1.01		1.07 ^b		2.97	1.00	2.01	3.00		1.00			1.98	1.00	0.00 ^a		
32	Expected			1.00	1.00	1.00	1.00		2.00	3.00	2.00	1.00			2.00	2.00	2.00		
	Actual			1.00	0.51 ^b	1.00	1.00		1.99	3.02	1.99	1.00			2.00	2.00	0.00 ^a		
33	Expected		1.00	1.00		1.00	1.00		1.00	2.00	3.00	1.00		1.00		2.00	1.00		
	Actual		1.00	1.00		1.00	1.02		0.99	1.98	3.01	1.00		0.99		1.98	0.00 ^a		

^aTrp was completely destroyed during hydrolysis

^bCys was partially destroyed during hydrolysis

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

Date: 24 JUL 2014

Signature:

Dorothy C. Young

Title:

Technical Manager, BEI Authentication

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.

