

Peptide Array, West Nile Virus NS2a Protein

Catalog No. NR-437

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Product Description: A 30-peptide array spans the NS2a protein of the NY99-flamingo382-99 strain of West Nile Virus. Peptides are 12- to 19-mers, with 10 amino acid overlaps. Each vial contains 1 mg of lyophilized NR-437. **Note: Three additional amino acids (VNA) have been added to the N-terminus of Peptide 1.**

Lot: 3745092

The following information applies to all 30 peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Electrospray "Exhibits correct MW"
- Counter Ion Ammonium acetate (Peptide 9)
Trifluoroacetate (all other Peptides)

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

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
1	6/24/2004	18	VNAYNADMIDPFQLGLLV	1993.3	98.18%	90%
2	8/10/2004	18	IDPFQLGLLVFLATQEV	2002.4	93.34%	89%
3	6/30/2004	18	LVVFLATQEVLRKRWTAK	2158.6	90.06%	89%
4	7/19/2004	18	EVLKRKWTAKISMPAILI	2125.6	93.20%	77%
5	8/11/2004	17	AKISMPAILIALLVLF	1812.2	44.84%	88%
6	8/9/2004	18	ILIALLVLVFGGITYTDV	1920.4	22.31%	89%
7	8/10/2004	17	VFGGITYTDVLRVILV	1928.3	49.30%	89%
8	8/10/2004	15	TDVLRVILVGAFA	1607.9	47.78%	88%
9	8/10/2004	18	YVILVGAFAESNSGGDV	1768.9	51.64%	88%
10	6/24/2004	17	FAESNSGGDVVHLALMA	1717.9	97.18%	89%
11	7/29/2004	18	GDVVHLALMATFKIQPVF	1986.4	90.02%	85%
12	7/29/2004	18	MATFKIQPVFMVASFLKA	2029.5	91.07%	86%
13	8/10/2004	18	VFMVASFLKARWTNQENI	2154.5	81.98%	86%
14	7/23/2004	18	KARWTNQENILLMLAAVF	2118.5	90.02%	86%
15	8/9/2004	18	NILLMLAAVFFQMAYHDA	2068.5	65.59%	90%
16	8/9/2004	18	VFFQMAYHDARQILLWEI	2280.7	75.46%	86%
17	6/26/2004	18	DARQILLWEIPDVLNSLA	2066.4	91.68%	90%
18	8/12/2004	18	EIPDVLNSLAVAWMILRA	2011.4	90.32%	89%
19	8/9/2004	19	LAVAWMILRAITFTTTSNV	2108.5	43.73%	89%
20	8/11/2004	18	AITFTTTSNVVPLLALL	1873.3	49.54%	88%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
21	6/28/2004	17	NVVVPLLALLTPGLRCL	1791.3	90.29%	89%
22	8/9/2004	18	ALLTPGLRCLNLDVYRIL	2043.5	17.59%	86%
23	8/9/2004	16	CLNLDVYRILLMLVGI	1848.3	67.80%	89%
24	7/23/2004	18	YRILLMLVIGISLIREKR	2130.7	91.45%	77%
25	6/24/2004	17	GIGSLIREKRSAAAKKK	1813.2	90.14%	68%
26	7/30/2004	18	EKRSAAAKKKGASLLCLA	1845.2	97.25%	71%
27	8/9/2004	17	KKGASLLCLALASTGLF	1693.1	33.07%	84%
28	8/10/2004	17	CLALASTGLFNPMILAA	1706.1	82.85%	88%
29	8/9/2004	19	GLFNPMILAAAGLIACDPNR	1986.4	34.47%	89%
30	6/24/2004	12	AGLIACDPNRKR	1313.5	98.72%	74%

^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	2.00		4.00		1.00	1.00		1.00	3.00		1.00	1.00	1.00				1.00	2.00
	Actual	2.01		3.97		1.01	1.00		1.00	2.98		1.01	1.00	1.00				1.00	2.01
2	Expected	1.00		1.00		3.00	1.00		1.00	4.00			2.00	1.00		1.00			3.00
	Actual	1.00		1.00		2.97	1.00		1.00	4.03			2.01	1.00		1.00			2.48 ^b
3	Expected	2.00	2.00			2.00				3.00	2.00		1.00			2.00	1.00		3.00
	Actual	2.01	1.99			2.00				3.02	2.00		1.01			1.98	0.00 ^a		2.48 ^b
4	Expected	2.00	2.00			1.00			3.00	2.00	2.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
	Actual	1.98	1.97			1.02			3.01	2.01	1.99	1.00		1.00	1.01	1.00	0.00 ^a		1.00
5	Expected	3.00							3.00	4.00	1.00	1.00	1.00	1.00	1.00				2.00
	Actual	2.98							2.97	4.03	1.00	1.00	1.00	1.00	1.00				2.01
6	Expected	1.00		1.00			2.00		3.00	4.00			1.00			2.00		1.00	3.00
	Actual	1.01		1.00			2.01		2.98	4.02			1.00			2.00		1.00	2.98
7	Expected		1.00	1.00			2.00		2.00	2.00			1.00			2.00		2.00	4.00
	Actual		1.00	1.00			2.01		1.79 ^b	2.01			1.00			1.98		2.01	3.76 ^b
8	Expected	3.00	1.00	1.00			1.00		1.00	2.00			1.00			1.00		1.00	3.00
	Actual	3.01	1.00	1.00			1.00		0.77 ^b	2.01			1.00			0.99		0.98	2.76 ^b
9	Expected	3.00		2.00		1.00	3.00		1.00	1.00			1.00		2.00			1.00	3.00
	Actual	3.02		1.98		1.00	3.00		0.77 ^b	1.00			1.01		2.01			1.00	2.74 ^b
10	Expected	3.00		2.00		1.00	2.00	1.00		2.00		1.00	1.00		2.00				2.00
	Actual	3.02		1.99		1.00	1.97	1.01		2.01		1.01	1.00		2.00				1.53 ^b
11	Expected	2.00		1.00		1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00		1.00			3.00
	Actual	2.00		1.00		1.00	1.00	1.00	1.00	1.99	1.01	0.99	1.99	1.00		1.02			2.50 ^b
12	Expected	3.00				1.00			1.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00			2.00
	Actual	2.99				1.00			1.00	1.00	1.99	2.01	3.02	0.99	0.99	0.98			1.97
13	Expected	2.00	1.00	2.00		2.00			1.00	1.00	1.00	1.00	2.00		1.00	1.00	1.00		2.00
	Actual	2.01	1.00	1.98		2.00			1.00	1.00	1.00	1.00	1.97		0.99	1.02	0.00 ^a		2.01
14	Expected	3.00	1.00	2.00		2.00			1.00	3.00	1.00	1.00	1.00			1.00	1.00		1.00
	Actual	2.99	1.00	2.00		1.99			1.01	3.02	1.00	1.00	1.00			1.01	0.00 ^a		0.99
15	Expected	4.00		2.00		1.00		1.00	1.00	3.00		2.00	2.00					1.00	1.00
	Actual	3.99		1.99		1.00		0.99	1.00	3.02		2.01	2.01					1.00	1.00
16	Expected	2.00	1.00	1.00		3.00		1.00	2.00	2.00		1.00	2.00				1.00	1.00	1.00
	Actual	1.99	1.00	1.00		3.01		1.00	2.01	1.99		1.00	2.00				0.00 ^a	1.00	1.00
17	Expected	2.00	1.00	3.00		2.00			2.00	4.00				1.00	1.00			1.00	1.00
	Actual	1.99	1.00	2.98		2.02			2.00	4.03				0.98	1.00			0.00 ^a	1.01
18	Expected	3.00	1.00	2.00		1.00			2.00	3.00		1.00		1.00	1.00			1.00	2.00
	Actual	3.01	1.00	2.00		1.00			2.02	2.97		1.00		0.99	1.00			0.00 ^a	2.01
19	Expected	3.00	1.00	1.00					2.00	2.00		1.00	1.00		1.00	4.00	1.00	1.00	2.00
	Actual	3.01	1.00	1.00					2.01	1.98		1.00	1.00		0.98	4.02	0.00 ^a		2.01
20	Expected	2.00		1.00					1.00	4.00			1.00	1.00	1.00	4.00			3.00
	Actual	2.00		1.00					0.98	4.03			1.00	1.00	1.00	4.01			2.04 ^b

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)
21	Expected	1.00	1.00	1.00	1.00		1.00			6.00				2.00		1.00			3.00
	Actual	1.01	1.00	1.00	0.54 ^c		1.00			5.95				2.01		1.01			2.12 ^b
22	Expected	1.00	2.00	2.00	1.00		1.00		1.00	6.00				1.00		1.00		1.00	1.00
	Actual	1.00	2.00	2.01	0.54 ^c		0.99		0.98	6.04				0.98		1.00		1.00	1.01
23	Expected		1.00	2.00	1.00		1.00		2.00	5.00		1.00						1.00	2.00
	Actual		1.00	2.00	0.55 ^c		0.98		2.01	5.03		0.98						0.99	1.99
24	Expected		3.00			1.00	2.00		3.00	4.00	1.00	1.00			1.00			1.00	1.00
	Actual		3.01			1.00	1.99		2.97	3.95	1.02	1.00			0.99			1.00	1.00
25	Expected	3.00	2.00			1.00	2.00		1.00	1.00	4.00				2.00				
	Actual	3.01	1.98			1.00	1.99		2.01	1.00	3.99				2.01				
26	Expected	5.00	1.00		1.00	1.00	1.00			3.00	4.00				2.00				
	Actual	5.03	1.00		0.51 ^c	1.00	0.99			3.02	3.99				2.01				
27	Expected	3.00			1.00		2.00			5.00	2.00		1.00		2.00	1.00			
	Actual	2.99			0.57 ^c		2.01			4.98	2.00		1.00		2.01	1.00			
28	Expected	4.00		1.00	1.00		1.00		1.00	4.00		1.00	1.00	1.00	1.00	1.00			
	Actual	4.03		1.00	0.54 ^c		0.98		1.00	4.01		0.99	1.00	1.00	1.00	1.00			
29	Expected	3.00	1.00	3.00	1.00		2.00		2.00	3.00		1.00	1.00	2.00					
	Actual	3.01	1.00	3.00	0.57 ^c		1.97		2.01	2.99		1.00	0.99	2.00					
30	Expected	2.00	2.00	2.00	1.00		1.00		1.00	1.00	1.00			1.00					
	Actual	2.01	1.98	2.00	0.58 ^c		1.00		1.01	0.99	1.00			1.00					

^aTrp was completely destroyed during hydrolysis
^bVal-Ile and/or Val-Val bonds were only partially destroyed during hydrolysis
^cCys was partially destroyed during hydrolysis

Date: 31 JUL 2009

Signature: Signature on File

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