

Peptide Array, Dengue Virus Type 2 (DEN-2), New Guinea C (NGC), NS2a Protein

Catalog No. NR-2747

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Product Description: The 35-peptide array spans the NS2a protein of Dengue virus type 2, New Guinea C (GenPept: AAA42941). Peptides are 15- to 17-mers, with 11 amino acid overlaps.

Lot: PC0328

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by ESI/MS
- 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
1 of 35	12/28/2006	17	1 GHGQIDNFSLGVLGMAL 17	1728.74	0.62	90.4%	68.7%
2 of 35	02/14/2007	17	7 NFSLGVLGMAFLFLEEML 23	1883.27	1.31	84.7%	68.7%
3 of 35	12/28/2006	17	13 LGMALFLEEMLRTRVGT 29	1937.94	0.56	87.3%	70.0%
4 of 35	01/08/2007	17	19 LEEMLRTRVGTKHAILL 35	1980.53	0.16	83.5%	65.8%
5 of 35	02/21/2007	17	25 TRVGTKHAILLVAVSFV 41	1810.86	1.24	86.9%	66.9%
6 of 35	02/28/2007	17	31 HAILLVAVSFVTLITGN 47	1768.47	1.77	Unknown ^c	72.1%
7 of 35	02/21/2007	17	37 AVSFVTLITGNMSFRDL 53	1870.47	0.88	66.2%	79.9%
8 of 35	01/02/2007	17	43 LITGNMSFRDLGRVMVM 59	1940.86	0.63	82.8%	76.8%
9 of 35	01/26/2007	17	49 SFRDLGRVMVMVGATMT 65	1871.27	0.66	80.7%	74.0%
10 of 35	02/19/2007	17	55 RVMVMVGATMTDDIGMG 71	1783.40	0.73	81.7%	88.9%
11 of 35	01/24/2007	17	61 GATMTDDIGMGVTYLAL 77	1728.07	0.71	82.5%	63.6%
12 of 35	02/21/2007	17	67 DIGMGVTYLALLAAFKV 83	1781.47	1.42	69.0%	87.2%
13 of 35	01/03/2007	17	73 TYLALLAAFKVRPTFAA 89	1853.60	1.03	90.4%	84.1%
14 of 35	01/24/2007	17	79 AAFKVRPTFAAGLLLRK 95	1859.94	0.52	93.8%	74.1%
15 of 35	01/24/2007	17	85 PTFAAGLLLRKLTSEKEL 101	1858.34	0.32	89.5%	68.5%
16 of 35	02/05/2007	17	91 LLLRKLTSKELMMTTIG 107	1947.93	0.48	98.6%	81.7%
17 of 35	03/06/2007	17	97 TSKELMMTTIGIVLLSQ 113	1864.73	0.79	88.2%	84.3%
18 of 35	02/21/2007	17	103 MTTIGIVLLSQSTIPET 119	1803.07	0.81	82.7%	63.6%
19 of 35	01/05/2007	17	109 VLLSQSTIPETILELTD 125	1871.27	0.54	90.4%	83.1%
20 of 35	01/05/2007	17	115 TIPETILELTDALALGM 131	1800.20	0.89	92.0%	79.1%
21 of 35	01/26/2007	17	121 LELTDALALGMMVLKVM 137	1847.53	1.45	93.4%	79.2%
22 of 35	12/29/2006	17	127 LALGMMVLKVMVRKMEKY 143	2041.80	0.46	89.5%	72.9%
23 of 35	01/02/2007	17	133 VLKVMVRKMEKYQLAVTI 149	2049.94	0.3	88.0%	86.9%
24 of 35	02/21/2007	17	139 KMEKYQLAVTIMAILCV 155	1953.66	1.06	Unknown ^c	79.1%
25 of 35	03/21/2007	17	145 LAVTIMAILCVPNAVIL 161	1753.13	2.44	Unknown ^c	81.1%
26 of 35	01/02/2007	17	151 AILCVPNAVILQNAWKV 167	1851.60	1.19	80.7%	86.0%
27 of 35	03/20/2007	17	157 NAVILQNAWKVSCTILA 173	1843.53	0.95	Unknown ^c	74.0%
28 of 35	04/11/2007	15	163 NAWKVSCTILAVVSV 177	1589.33	1.37	81.2%	77.4%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
29 of 35	03/01/2007	17	167 VSCTILAVVS/SPLFLT 183	1748.40	2.02	Unknown ^c	85.3%
30 of 35	01/02/2007	17	173 AVVS/SPLFLTSSQQKA 189	1761.33	0.6	95.5%	81.0%
31 of 35	02/01/2007	17	179 PLFLTSSQQKADWIPLA 195	1915.33	0.09	95.4%	66.4%
32 of 35	01/11/2007	17	185 SQQKADWIPLALTIKGL 201	1882.20	0.08	99.1%	58.4%
33 of 35	02/05/2007	17	191 WIPLALTIKGLNPTAIF 207	1867.67	1.06	93.9%	65.3%
34 of 35	01/05/2007	17	197 TIKGLNPTAIFLTTLSR 213	1845.80	0.44	90.3%	74.9%
35 of 35	01/22/2007	16	203 PTAIFLTTLSRTNKKR 218	1847.80	-0.55	94.2%	60.8%

^a% full-length
^bRemainder is salt and water
^cPeptide incompatible with HPLC conditions

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 of 35	Expected	1.00		2.00		1.00	4.00	1.00	1.00	3.00		1.00	1.00		1.00				1.00
	Actual	1.08		2.08		0.97	4.10	1.05	0.87	2.99		1.01	0.99		1.04				1.03
2 of 35	Expected	1.00		1.00		2.00	2.00			5.00		2.00	2.00		1.00				1.00
	Actual	1.90		1.00		1.63	1.15			3.74		1.32	1.05		1.00	0.99			1.79
3 of 35	Expected	1.00	2.00			2.00	2.00			4.00		2.00	1.00			2.00			1.00
	Actual	1.02	1.99			2.07	1.99			4.15		1.99	0.94			2.04			1.01
4 of 35	Expected	1.00	2.00			2.00	1.00	1.00	1.00	4.00	1.00	1.00				2.00			1.00
	Actual	1.04	1.97			2.02	1.01	1.02	0.94	4.07	1.01	1.02				2.01			0.98
5 of 35	Expected	2.00	1.00				1.00	1.00	1.00	2.00	1.00		1.00		1.00	2.00			4.00
	Actual	2.09	1.03				1.06	1.00	0.94	2.08	1.03		0.96		1.09	1.93			3.93
6 of 35	Expected	2.00		1.00			1.00	1.00	2.00	3.00			1.00		1.00	2.00			3.00
	Actual	2.05		1.02			1.08	1.06	1.91	3.15			0.95		1.06	1.95			2.90
7 of 35	Expected	1.00	1.00	2.00			1.00		1.00	2.00		1.00	2.00		2.00	2.00			2.00
	Actual	1.06	1.03	2.01			1.04		0.96	2.10		1.01	1.88		2.10	1.96			2.05
8 of 35	Expected		2.00	2.00			2.00		1.00	2.00		3.00	1.00		1.00	1.00			2.00
	Actual		2.06	2.09			2.17		0.88	2.17		2.74	1.08		0.87	0.98			2.05
9 of 35	Expected	1.00	2.00	1.00			2.00			1.00		3.00	1.00		1.00	2.00			3.00
	Actual	1.03	1.97	1.07			2.03			1.02		3.11	0.94		1.01	1.99			3.11
10 of 35	Expected	1.00	1.00	2.00			3.00		1.00			4.00				2.00			3.00
	Actual	1.06	1.02	2.09			2.98		1.01			3.91				1.97			2.88
11 of 35	Expected	2.00		2.00			3.00		1.00	2.00		2.00				3.00		1.00	1.00
	Actual	2.00		2.07			2.97		0.94	2.11		2.03				2.89		1.04	1.00
12 of 35	Expected	3.00		1.00			2.00		1.00	3.00	1.00	1.00	1.00			1.00		1.00	2.00
	Actual	3.06		0.99			1.88		0.82	3.07	1.07	1.00	1.03			1.00		0.92	2.08
13 of 35	Expected	5.00	1.00							3.00	1.00		2.00	1.00		2.00		1.00	1.00
	Actual	4.98	1.03							3.05	1.05		1.80	1.05		2.01		1.00	0.99
14 of 35	Expected	4.00	2.00				1.00			3.00	2.00		2.00	1.00		1.00			1.00
	Actual	4.05	1.90				1.08			3.13	2.06		1.90	0.93		1.04			1.02
15 of 35	Expected	2.00	1.00			1.00	1.00			5.00	2.00		1.00	1.00	1.00	2.00			
	Actual	1.92	0.99			1.07	1.03			4.98	1.96		1.02	1.07	1.07	1.95			
16 of 35	Expected		1.00			1.00	1.00		1.00	5.00	2.00	2.00			1.00	3.00			
	Actual		0.94			1.09	1.06		0.94	5.25	2.10	2.04			1.01	2.96			
17 of 35	Expected					2.00	1.00		2.00	3.00	1.00	2.00			2.00	3.00			1.00
	Actual					2.11	1.03		1.88 ^a	3.16	1.09	2.10			2.09	3.07			0.86 ^a

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)
18 of 35	Expected					2.00	1.00		3.00	2.00		1.00		1.00	2.00	4.00			1.00
	Actual					2.10	1.01		2.94 ^a	2.00		1.08		0.96	1.92	3.99			1.09
19 of 35	Expected			1.00		3.00			2.00	4.00				1.00	2.00	3.00			1.00
	Actual			1.05		3.14			1.91	4.27				1.04	2.04	2.95			0.98
20 of 35	Expected	2.00		1.00		2.00	1.00		2.00	4.00		1.00		1.00		3.00			
	Actual	2.00		1.08		2.03	1.00		1.81	4.04		1.01		1.07		2.88			
21 of 35	Expected	2.00		1.00		1.00	1.00			5.00	1.00	3.00				1.00			2.00
	Actual	1.94		1.05		1.02	1.00			5.07	1.08	2.92				0.97			1.95
22 of 35	Expected	1.00	1.00			1.00	1.00			3.00	3.00	4.00						1.00	2.00
	Actual	0.99	1.01			1.06	1.04			2.93	2.91	3.91						1.02	1.94
23 of 35	Expected	1.00	1.00			2.00			1.00	2.00	3.00	2.00				1.00		1.00	3.00
	Actual	1.07	0.99			2.09			0.98	2.05	3.01	1.96				0.97		1.01	2.94
24 of 35	Expected	2.00			1.00	2.00			2.00	2.00	2.00	2.00		0.00		1.00		1.00	2.00
	Actual	2.04			0.00 ^b	1.86			2.12	2.08	1.97	2.11		0.21 ^b		1.06		0.88	2.04
25 of 35	Expected	3.00		1.00	1.00				3.00	3.00		1.00		1.00		1.00			3.00
	Actual	3.05		1.06	0.00 ^b				2.71 ^a	3.11		1.03		1.32 ^b		0.94			2.59 ^a
26 of 35	Expected	3.00		2.00	1.00	1.00			2.00	2.00	1.00			1.00			1.00		3.00
	Actual	2.83		2.03	0.00 ^b	1.00			1.64 ^a	1.93	1.08			1.80 ^b			0.00 ^c		2.65 ^a
27 of 35	Expected	3.00		2.00	1.00	1.00			2.00	2.00	1.00			0.00	1.00	1.00	1.00		2.00
	Actual	3.13		1.99	0.00 ^b	1.07			1.77 ^a	2.08	1.04			0.44 ^b	0.76	1.00	0.00 ^c		1.83 ^a
28 of 35	Expected	2.00		1.00	1.00				1.00	1.00	1.00			0.00	2.00	1.00	1.00		4.00
	Actual	2.12		1.02	0.00 ^b				1.02	1.01	1.04			0.29 ^b	1.82	1.01	0.00 ^c		3.71 ^a
29 of 35	Expected	1.00			1.00				1.00	3.00			1.00	1.00	3.00	2.00			4.00
	Actual	1.02			0.00 ^b				1.01	3.05			0.97	1.13 ^b	2.91	2.10			3.87 ^a
30 of 35	Expected	2.00				2.00				2.00	1.00		1.00	1.00	4.00	1.00			3.00
	Actual	2.08				2.06				2.09	1.03		1.03	1.06	3.92	0.99			2.78 ^a
31 of 35	Expected	2.00		1.00		2.00			1.00	3.00	1.00		1.00	2.00	2.00	1.00	1.00		
	Actual	2.09		1.01		2.09			0.98	3.02	1.03		1.00	2.05	2.03	0.97	0.00 ^c		
32 of 35	Expected	2.00		1.00		2.00	1.00		2.00	3.00	2.00			1.00	1.00	1.00	1.00		
	Actual	2.05		0.97		2.09	1.06		1.96	3.08	2.00			1.01	1.08	0.95	0.00 ^c		
33 of 35	Expected	2.00		1.00			1.00		3.00	3.00	1.00		1.00	2.00		2.00	1.00		
	Actual	1.92		1.04			1.04		2.77	3.06	1.02		1.01	2.10		1.97	0.00 ^c		
34 of 35	Expected	1.00	1.00	1.00			1.00		2.00	3.00	1.00		1.00	1.00	1.00	4.00			
	Actual	1.09	0.97	0.99			1.07		1.91	3.06	1.03		0.97	1.02	1.02	3.98			
35 of 35	Expected	1.00	2.00	1.00					1.00	2.00	2.00		1.00	1.00	1.00	4.00			
	Actual	1.02	1.87	0.99					0.99	2.10	2.08		1.04	1.04	1.09	3.84			

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

^bCys was partially destroyed during hydrolysis and Cys degradation products co-elute with Pro

^cTrp was completely destroyed during hydrolysis

Date: 30 APR 2007

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