

Peptide Array, Dengue Virus Type 1 (DEN-1), Nauru/West Pac/1974, E Protein, Diverse Peptides

Catalog No. NR-9241

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Product Description: NR-9241 contains 27 peptides that represent regions of amino acid sequence diversity in the envelope (E) protein found in dengue virus type 1 (DEN-1), Nauru/West Pac/1974 (GenPept: P17763) compared to DEN-1, Singapore/S275/1990. DEN-1, Nauru/West Pac/1974 E protein is identical to that of DEN-1, Singapore/S275/1990 with the exception of 13 amino acids. A complete 84-peptide array of the E protein of DEN-1, Nauru/West Pac/1974 can be constructed by using these 27 peptides and peptides from DEN-1, Singapore/S275/1990 (BEI Resources NR-4551).

Lot: R681-1 to R681-27

The following information applies to all peptides:

- Appearance
- Mass spectral analysis
- Counter Ion

White lyophilized powder
Correct MW by MALDI-TOF
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 84	6/12/2007	17	1-MRCVGIGNRDFVEGLSG-17	1810.07	0.1	100.0%	84.1%
2 of 84	6/12/2007	17	7-GNRDFVEGLSGATWVDV-23	1821.97	0.0	98.4%	88.9%
13 of 84	6/12/2007	17	72-SRCPTQGEATLVEEQDT-88	1864.00	0.6	80.1%	89.1%
14 of 84	6/12/2007	17	78-GEATLVEEQDTNFVCR-94	1967.16	0.5	85.3%	85.2%
15 of 84	6/12/2007	17	83-VEEQDTNFVCRRTFVDR-99	2114.33	0.6	93.2%	82.3%
18 of 84	6/12/2007	16	100-GWGNCGFLFGKSLIT-115	1566.79	-0.6	98.2%	87.3%
19 of 84	6/12/2007	16	105-CGLFGKSLITCAKFK-120	1673.09	-0.3	100.0%	78.6%
20 of 84	6/12/2007	17	110-KGSLITCAKFKCVTKLE-126	1869.35	0.2	100.0%	76.6%
27 of 84	6/12/2007	17	149-HQVGNETTEHGTATIT-165	1796.89	0.0	87.4%	84.0%
28 of 84	6/12/2007	16	155-TTEHGTTATITPQAPT-170	1626.79	-0.2	90.0%	87.7%
29 of 84	6/12/2007	17	160-TTATITPQAPTSEIQLT-176	1773.02	-0.3	99.9%	88.6%
34 of 84	6/12/2007	17	190-GLDFNEMVLLTMEKKS-206	2041.44	0.0	81.9%	85.7%
35 of 84	6/12/2007	17	196-MVLLTMEKKS-212	2157.70	-0.4	82.5%	79.1%
36 of 84	6/12/2007	17	202-EKKS-218	2167.61	-0.2	99.4%	79.2%
57 of 84	6/12/2007	17	325-KYEGTDAPCKIPFSSQD-341	1886.10	0.4	92.7%	84.7%
58 of 84	6/12/2007	17	331-APCKIPFSSQDEKGV-347	1835.09	0.3	98.5%	84.3%
59 of 84	6/12/2007	18	337-FSSQDEKGV-354	1951.14	0.2	98.6%	85.1%
60 of 84	6/12/2007	18	343-KGV-360	1897.17	0.0	97.0%	84.7%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
62 of 84	6/12/2007	15	356-PIVTDKEKPVNIEAE-370	1681.93	0.7	94.9%	83.1%
63 of 84	6/12/2007	16	360-DKEKPVNIEAEPFGE-375	1799.00	0.9	95.7%	84.0%
64 of 84	6/12/2007	17	365-VNIEAEPFGEYIVVG-381	1820.04	-0.2	98.8%	88.9%
66 of 84	6/12/2007	17	377-YIVVGAGEKALKLSWFK-393	1909.34	-0.3	87.5%	80.7%
67 of 84	6/12/2007	17	383-GEKALKLSWFKGSSIG-399	1836.20	0.2	90.6%	76.3%
68 of 84	6/12/2007	17	388-KLSWFKGSSIGKMFEA-404	1944.37	0.1	93.4%	77.3%
74 of 84	6/12/2007	17	424-SIGGVFTSVGKLIHQIF-440	1803.13	-0.7	94.2%	84.1%
75 of 84	6/12/2007	17	430-TSVGKLIHQIFGTAYGV-446	1791.09	-0.7	97.4%	84.0%
76 of 84	6/12/2007	16	436-IHQIFGTAYGVLFSGV-451	1708.98	-1.0	90.7%	88.2%

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

Note: Actual amino acid results which are not within 20% of expected results are highlighted in red.

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 84	Expected		2.00	2.00	1.00	1.00	4.00		1.00	1.00		1.00	1.00		1.00				2.00
	Actual		2.08	1.78	0.53 ^a	1.00	3.86		1.07	1.09		1.08	1.08		1.06				1.78
2 of 84	Expected	1.00	1.00	3.00		1.00	3.00			1.00			1.00		1.00	1.00	1.00		3.00
	Actual	1.03	1.10	2.81		1.04	3.04			1.03			0.98		1.00	0.95	0.00 ^b		2.73
13 of 84	Expected	1.00	1.00	1.00	1.00	5.00	1.00			1.00				1.00	1.00	3.00			1.00
	Actual	1.00	1.00	0.89	0.61 ^a	4.89	1.18			1.04				1.09	0.90	2.77			0.98
14 of 84	Expected	1.00	2.00	2.00	1.00	4.00	1.00			1.00			1.00			2.00			2.00
	Actual	1.06	2.07	2.00	0.64 ^a	4.09	1.04			1.06			0.98			1.84			1.88
15 of 84	Expected		3.00	3.00	1.00	3.00							2.00	0.00	0.00	2.00			3.00
	Actual		3.00	3.00	0.69 ^a	2.98							1.72	0.00	0.00	1.82			2.83
18 of 84	Expected			1.00	1.00		6.00	1.00	2.00	1.00			1.00		1.00	1.00	1.00		
	Actual			0.91	0.46 ^a		6.00	1.06	2.15	0.89			0.94		1.19	1.09	0.00 ^b		
19 of 84	Expected	1.00			2.00		3.00	1.00	2.00	3.00			2.00		1.00	1.00			
	Actual	1.00			0.63 ^a		2.93	0.97	1.79	2.98			1.84		1.02	0.76			
20 of 84	Expected	1.00			2.00	1.00	1.00	1.00	2.00	4.00			1.00		1.00	2.00			1.00
	Actual	1.00			0.64 ^a	0.98	1.10	0.89	1.78	3.82			1.05		0.96	1.91			0.96
27 of 84	Expected	1.00		1.00		3.00	2.00	2.00	1.00						0.00	6.00			1.00
	Actual	1.10		0.80		2.79	1.97	2.00	1.07							5.80			0.96
28 of 84	Expected	2.00				2.00	1.00	1.00	1.00					2.00		7.00			
	Actual	1.80				1.71	1.02	1.08	1.00					1.84		6.77			
29 of 84	Expected	2.00				3.00			2.00	1.00				2.00	1.00	6.00			
	Actual	2.07				2.93			1.87	1.16				2.14	1.13	6.00			
34 of 84	Expected			2.00		2.00	1.00			3.00	2.00	2.00	1.00		1.00	1.00	1.00		1.00
	Actual			1.79		2.00	1.21			2.95	1.72	1.85	1.00		1.13	1.08	0.00 ^b		0.87
35 of 84	Expected					2.00		1.00		3.00	3.00	2.00			1.00	1.00	2.00		2.00
	Actual					2.00		0.88		3.02	2.86	1.80			1.02	1.19	0.00 ^b		1.94
36 of 84	Expected			1.00		2.00		1.00		4.00	3.00		1.00	1.00	1.00		2.00		1.00
	Actual			0.94		1.84		1.04		3.81	2.89		1.00	1.12	1.01		0.00 ^b		0.94

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)	
57 of 84	Expected	1.00		2.00	1.00	2.00	1.00		1.00		2.00		1.00	2.00	2.00	1.00		1.00		
	Actual	0.91		1.84	0.53 ^a	1.72	1.02		0.89		1.76		1.00	1.87	1.77	0.99		1.01		
58 of 84	Expected	1.00		1.00	1.00	3.00	1.00		1.00		2.00		1.00	2.00	2.00	1.00			1.00	
	Actual	1.04		0.91	0.54 ^a	2.80	1.16		0.81		1.93		1.00	1.86	1.87	0.97			1.06	
59 of 84	Expected	1.00	1.00	2.00		3.00	2.00		1.00	1.00	1.00		1.00		2.00	2.00			1.00	
	Actual	1.04	1.05	1.81		2.96	2.08		0.93	0.93	1.13		0.97		1.77	1.70			1.00	
60 of 84	Expected	1.00	1.00	3.00		1.00	2.00		2.00	1.00	1.00			1.00		3.00			2.00	
	Actual	1.00	1.09	2.78		0.94	2.18		1.42 ^c	0.92	0.83			1.11		2.82			1.43 ^c	
62 of 84	Expected	1.00		2.00		3.00			2.00		2.00			2.00		1.00			2.00	
	Actual	1.05		1.82		3.05			1.47 ^c		2.00			2.05		1.18			1.39 ^c	
63 of 84	Expected	1.00		2.00		4.00	1.00		1.00		2.00		1.00	3.00					1.00	
	Actual	1.00		1.77		3.77	1.05		0.89		1.91		1.02	2.87					1.02	
64 of 84	Expected	1.00		1.00		3.00	2.00		2.00				1.00	2.00	1.00				1.00	3.00
	Actual	1.05		0.98		2.74	2.26		1.49 ^c				1.09	2.00	1.02				1.00	1.96 ^c
66 of 84	Expected	2.00				1.00	2.00		1.00	2.00	3.00		1.00		1.00		1.00	1.00	2.00	2.00
	Actual	1.77				0.96	2.07		0.63 ^c	1.88	2.96		1.00		1.01		0.00 ^b	0.88	1.44 ^c	
67 of 84	Expected	1.00				1.00	3.00		1.00	2.00	4.00		1.00		3.00		1.00			
	Actual	1.04				1.03	3.00		1.12	1.90	3.83		1.12		2.79		0.00 ^b			
68 of 84	Expected	1.00				1.00	2.00		1.00	1.00	4.00	1.00	2.00		3.00		1.00			
	Actual	1.00				0.93	2.03		1.08	1.00	3.70	1.09	1.78		2.86		0.00 ^b			
74 of 84	Expected					1.00	3.00	1.00	3.00	1.00	1.00		2.00		2.00	1.00				2.00
	Actual					0.97	2.97	0.88	2.73	1.01	1.00		1.97		1.97	1.09				1.94
75 of 84	Expected	1.00				1.00	3.00	1.00	2.00	1.00	1.00		1.00		1.00	2.00			1.00	2.00
	Actual	1.03				1.00	2.89	0.92	1.90	0.93	1.12		0.94		1.00	1.84			1.04	2.05
76 of 84	Expected	1.00				1.00	3.00	1.00	2.00	1.00			2.00		1.00	1.00			1.00	2.00
	Actual	1.04				0.99	3.00	0.96	1.06	0.94			1.85		1.09	0.97			1.10	1.97

^aCys was partially destroyed during hydrolysis

^bTrp was completely destroyed during hydrolysis

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

Date: 03 AUG 2007

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