

## Peptide Array, Dengue Virus Type 1 (DEN-1), Singapore/S275/1990, NS1 Protein

### Catalog No. NR-2751

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**Product Description:** The 61-peptide array spans the NS1 protein of Dengue virus type 1, Singapore/S275/1990 (GenPept: P33478). Peptides are 13- to 17-mers, with 11 or 12 amino acid overlaps.

### Lot: 336934 to 336994

The following information applies to all peptides:

- Appearance
  - Mass spectral analysis
  - Counter Ion
- White lyophilized powder  
Correct MW by Electro spray  
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 <sup>a</sup>	Peptide Content <sup>b</sup>
1 of 61	11/29/06	16	1 DSGCVINWKGRELKCG 16	1765.0	88.8%	75.0%
2 of 61	11/20/06	17	6 INWKGRELKCGSGIFVT 22	1908.3	93.7%	81.9%
3 of 61	12/12/06	17	11 RELKCGSGIFVTNEVHT 27	1890.2	89.3%	83.7%
4 of 61	11/22/06	17	17 SGIFVTNEVHTWTEQYK 33	2039.2	92.3%	76.7%
5 of 61	11/21/06	15	23 NEVHTWTEQYKFQAD 37	1896.0	89.1%	80.6%
6 of 61	11/21/06	16	27 TWTEQYKFQADSPKRL 42	1998.2	96.3%	77.4%
7 of 61	12/11/06	17	32 YKFQADSPKRLSAAIGK 48	1880.2	96.0%	73.6%
8 of 61	12/11/06	17	38 SPKRLSAAIGKAWEEGV 54	1799.1	96.6%	77.1%
9 of 61	11/20/06	17	44 AAIGKAWEEGVCGIRSA 60	1718.0	89.5%	76.2%
10 of 61	11/30/06	17	50 WEEGVCGIRSATRLNI 66	1933.2	91.6%	71.8%
11 of 61	12/01/06	16	56 GIRSATRLNIMWKQI 71	1916.3	90.5%	74.7%
12 of 61	12/11/06	17	61 TRLENIMWKQISNELNH 77	2126.4	88.7%	73.3%
13 of 61	12/11/06	17	67 MWKQISNELNHILLEND 83	2097.4	87.2%	78.2%
14 of 61	12/06/06	17	73 NELNHILLENDMKFTVV 89	2029.3	80.6%	85.1%
15 of 61	12/18/06	17	79 LLENDMKFTVVVGDVVG 95	1835.2	83.3%	70.0%
16 of 61	12/08/06	17	85 KFTVVVGDVVGILAQGK 101	1730.1	84.0%	81.2%
17 of 61	11/28/06	17	91 GDVVGILAQGKKMIRPQ 107	1810.2	94.0%	76.7%
18 of 61	11/20/06	17	97 LAQGKKMIRPQPMEHKY 113	2055.5	93.7%	69.5%
19 of 61	11/20/06	17	103 MIRPQPMEHKYSWKSWSG 119	2161.5	96.4%	73.1%
20 of 61	11/17/06	17	109 MEHKYSWKSWSGKAKIIG 125	2049.4	85.4%	72.8%

**Table 1**

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
21 of 61	11/21/06	17	115 WKSWSGKAKIIGADIQNT 131	1916.2	92.7%	85.2%
22 of 61	12/20/06	17	121 AKIIGADIQNTTFIIDG 137	1790.0	90.1%	73.6%
23 of 61	12/04/06	16	127 DIQNTTFIIDGPDTPPE 142	1775.9	80.4%	68.4%
24 of 61	12/11/06	17	132 TFIIDGPDTPCEPDDQR 148	1919.1	91.8%	75.3%
25 of 61	11/30/06	17	138 PDTPECPDDQRAWNIWE 154	2072.2	85.5%	85.3%
26 of 61	12/11/06	17	144 PDDQRAWNIWEVEDYGF 160	2140.3	89.6%	78.3%
27 of 61	12/15/06	17	150 WNIWEVEDYGFIFTTN 166	2091.3	92.7%	51.9%
28 of 61	12/14/06	17	155 VEDYGFIFTTNIWLKL 171	2016.3	80.1%	76.7%
29 of 61	11/28/06	17	161 GIFTTNIWLKLRSYTQ 177	2056.3	92.0%	81.4%
30 of 61	11/21/06	17	167 IWLKLRSYTQMCDHRL 183	2178.6	94.0%	75.9%
31 of 61	11/27/06	17	173 DSYTQMCDHRLMSAAIK 189	1970.3	94.4%	74.0%
32 of 61	12/04/06	17	179 CDHRLMSAAIKDSKAVH 195	1882.2	90.0%	73.6%
33 of 61	11/28/06	17	185 SAAIKDSKAVHADMGYW 201	1850.1	96.8%	81.3%
34 of 61	11/27/06	17	191 SKAVHADMGYWIESEKN 207	1965.2	92.5%	80.1%
35 of 61	11/27/06	17	197 DMGYWIESEKNETWKLA 213	2100.3	97.3%	80.9%
36 of 61	11/30/06	17	202 IESEKNETWKLARASFI 218	2022.3	94.9%	78.0%
37 of 61	12/13/06	16	207 NETWKLARASFIEVKT 222	1893.2	85.0%	88.7%
38 of 61	12/04/06	16	212 LARASFIEVKTCVWPK 227	1848.2	97.6%	77.4%
39 of 61	11/30/06	16	217 FIEVKTCVWPKSHTLW 232	1974.4	97.9%	76.9%
40 of 61	12/04/06	17	222 TCVWPKSHTLWSNGVLE 238	1957.2	95.3%	82.5%
41 of 61	12/01/06	16	228 SHTLWSNGVLESEMII 243	1816.1	90.3%	75.9%
42 of 61	12/12/06	17	233 SNGVLESEMIIPKIYGG 249	1807.1	84.1%	81.8%
43 of 61	12/01/06	17	239 SEMIIPKIYGGPISQHN 255	1884.2	92.0%	75.7%
44 of 61	11/22/06	17	245 KIYGGPISQHNYRPGYF 261	1997.2	93.2%	77.0%
45 of 61	11/30/06	16	251 ISQHNYRPGYFTQTAG 266	1840.0	97.0%	74.3%
46 of 61	12/04/06	17	256 YRPGYFTQTAGPWHLGK 272	1979.2	98.9%	75.1%
47 of 61	12/11/06	17	262 TQTAGPWHLGKLELDFD 278	1928.1	95.2%	78.9%
48 of 61	12/12/06	17	268 WHLGKLELDFDLCEGTT 284	1977.2	51.6%	74.3%
49 of 61	12/18/06	17	273 LELDFDLCEGTTVVVDE 289	1897.1	95.2%	67.1%
50 of 61	12/15/06	17	279 LCEGTTVVVDEHCGNRG 295	1789.0	96.9%	71.7%
51 of 61	11/20/06	17	285 VVVDEHCGNRGPSLRRT 301	1840.1	95.2%	72.9%
52 of 61	11/20/06	17	291 CGNRGPSLRRTTIVTGKI 307	1761.0	95.3%	80.6%
53 of 61	11/20/06	15	297 SLRTTIVTGKIIHEW 311	1742.0	91.8%	66.9%
54 of 61	12/18/06	17	301 TIVTGKIIHEWCCRST 317	1938.3	86.5%	71.1%
55 of 61	12/11/06	17	307 IHEWCCRSTLPLRF 323	2074.5	90.4%	74.7%
56 of 61	12/05/06	16	313 CRSTLPLRFKGEDG 328	1779.1	84.1%	69.2%
57 of 61	12/05/06	17	318 LPLRFKGEDGCWYGME 334	1998.3	91.5%	78.1%
58 of 61	12/13/06	17	324 KGEDGCWYGMEIRPVKE 340	1997.3	88.2%	73.0%
59 of 61	12/12/06	17	330 WYGMEIRPVKEEENLV 346	2120.5	99.4%	71.1%
60 of 61	12/11/06	17	336 RPVKEEENLVKSMVSA 352	1944.3	98.1%	76.5%
61 of 61	12/06/06	13	341 KEENLVKSMVSAG 353	1391.6	93.6%	82.8%

<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)
1 of 61	Expected		1.00	2.00	2.00	1.00	3.00		1.00	1.00	2.00				1.00		1.00		1.00
	Actual		1.09	1.73	0.00 <sup>a</sup>	0.85	3.29		0.49 <sup>b</sup>	1.00	2.01				0.85		0.00 <sup>c</sup>		0.22 <sup>b</sup>
2 of 61	Expected		1.00	1.00	1.00	1.00	3.00		2.00	1.00	2.00		1.00		1.00	1.00	1.00		1.00
	Actual		1.06	0.85	0.00 <sup>a</sup>	1.00	3.07		1.89	1.02	2.01		0.90		0.88	0.91	0.00 <sup>c</sup>		1.06
3 of 61	Expected		1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00		1.00		1.00	2.00			2.00
	Actual		0.95	1.05	0.00 <sup>a</sup>	2.00	2.10	1.04	1.01	0.99	1.02		0.95		0.88	1.90			2.19
4 of 61	Expected			1.00		3.00	1.00	1.00	1.00		1.00		1.00		1.00	3.00	1.00	1.00	2.00
	Actual			1.03		3.00	1.04	1.01	0.97		1.02		0.92		0.88	2.82	0.00 <sup>c</sup>	1.00	2.18
5 of 61	Expected	1.00		2.00		4.00		1.00			1.00		1.00			2.00	1.00	1.00	1.00
	Actual	0.97		2.01		4.00		1.00			1.04		0.90			1.97	0.00 <sup>c</sup>	1.04	1.05
6 of 61	Expected	1.00	1.00	1.00		3.00				1.00	2.00		1.00	1.00	1.00	2.00	1.00	1.00	
	Actual	0.99	1.17	1.01		3.00				0.97	2.00		0.90	0.88	0.86	1.86	0.00 <sup>c</sup>	1.00	
7 of 61	Expected	3.00	1.00	1.00		1.00	1.00		1.00	1.00	3.00		1.00	1.00	2.00			1.00	
	Actual	3.00	1.00	1.02		1.04	1.01		0.99	1.03	3.00		0.92	1.08	1.60			0.94	
8 of 61	Expected	3.00	1.00			2.00	2.00		1.00	1.00	2.00			1.00	2.00		1.00		1.00
	Actual	3.05	1.14			1.93	2.00		0.97	1.01	1.98			1.09	1.69		0.00 <sup>c</sup>		1.08
9 of 61	Expected	4.00	1.00		1.00	2.00	3.00		2.00		1.00				1.00		1.00		1.00
	Actual	4.09	1.16		0.00 <sup>a</sup>	2.00	3.10		1.94		1.03				0.81		0.00 <sup>c</sup>		1.08
10 of 61	Expected	1.00	2.00	1.00	1.00	3.00	2.00		2.00	1.00					1.00	1.00	1.00		1.00
	Actual	1.07	2.33	1.08	0.00 <sup>a</sup>	3.00	2.07		2.05	1.08					0.91	0.97	0.00 <sup>c</sup>		1.07
11 of 61	Expected	1.00	2.00	1.00		2.00	1.00		3.00	1.00	1.00	1.00			1.00	1.00	1.00		
	Actual	1.02	2.05	1.04		2.00	1.01		2.94	1.03	1.03	1.00			0.84	0.93	0.00 <sup>c</sup>		
12 of 61	Expected		1.00	3.00		3.00		1.00	2.00	2.00	1.00	1.00			1.00	1.00	1.00		
	Actual		1.15	3.20		3.00		0.99	2.07	2.16	1.07	1.12			1.01	1.00	0.00 <sup>c</sup>		
13 of 61	Expected			4.00		3.00		1.00	2.00	3.00	1.00	1.00			1.00		1.00		
	Actual			4.00		2.81		1.06	2.03	3.18	1.03	1.08			0.91		0.00 <sup>c</sup>		
14 of 61	Expected			4.00		2.00		1.00	1.00	3.00	1.00	1.00	1.00			1.00			2.00
	Actual			4.02		2.00		1.07	0.97	3.08	1.08	1.06	0.93			1.07			2.13
15 of 61	Expected			3.00		1.00	2.00			2.00	1.00	1.00	1.00			1.00			5.00
	Actual			3.00		0.89	2.09			1.78	1.01	1.02	1.03			1.04			5.16
16 of 61	Expected	1.00		1.00		1.00	3.00		1.00	1.00	2.00		1.00			1.00			5.00
	Actual	0.82		1.02		1.00	2.62		0.85	1.23	1.73		0.91			0.98			3.37 <sup>b</sup>
17 of 61	Expected	1.00	1.00	1.00		2.00	3.00		2.00	1.00	2.00	1.00		1.00					2.00
	Actual	1.08	0.96	1.07		2.00	3.22		1.98	1.07	1.98	1.03		0.97					1.85
18 of 61	Expected	1.00	1.00			3.00	1.00	1.00	1.00	1.00	3.00	2.00		2.00					1.00
	Actual	1.01	1.02			3.00	1.02	1.03	0.99	1.02	3.06	2.09		2.16					0.98
19 of 61	Expected		1.00			2.00	1.00	1.00	1.00		2.00	2.00		2.00	2.00		2.00	1.00	
	Actual		1.22			2.00	1.01	1.00	0.95		1.98	2.05		2.09	1.64		0.00 <sup>c</sup>	0.97	
20 of 61	Expected	1.00				1.00	2.00	1.00	2.00		4.00	1.00			2.00		2.00	1.00	
	Actual	1.06				0.95	2.12	1.02	1.60 <sup>b</sup>		4.11	1.05			1.73		0.00 <sup>c</sup>	1.03	
21 of 61	Expected	2.00		2.00		1.00	2.00		3.00		3.00				1.00	1.00	2.00		
	Actual	2.00		1.98		1.00	1.98		2.48 <sup>b</sup>		2.91				0.84	0.91	0.00 <sup>c</sup>		
22 of 61	Expected	2.00		3.00		1.00	2.00		5.00		1.00		1.00			2.00			
	Actual	2.09		3.12		1.00	2.08		4.28 <sup>b</sup>		1.02		1.05			1.92			
23 of 61	Expected			4.00		2.00	1.00		3.00				1.00	2.00		3.00			
	Actual			4.00		2.00	1.02		2.47 <sup>b</sup>				1.02	2.14		2.84			

**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)
24 of 61	Expected		1.00	4.00	1.00	2.00	1.00		2.00				1.00	3.00		2.00			
	Actual		0.95	3.97	0.00 <sup>a</sup>	2.00	0.99		1.58 <sup>b</sup>				0.96	3.17		1.92			
25 of 61	Expected	1.00	1.00	4.00	1.00	3.00			1.00					3.00		1.00	2.00		
	Actual	1.02	0.98	3.87	0.00 <sup>a</sup>	3.00			0.98					3.28		0.98	0.00 <sup>c</sup>		
26 of 61	Expected	1.00	1.00	4.00		3.00	1.00		1.00				1.00	1.00			2.00	1.00	1.00
	Actual	1.03	1.19	4.11		3.00	1.03		0.96				0.90	1.06			0.00 <sup>c</sup>	0.95	1.08
27 of 61	Expected			3.00		2.00	2.00		2.00				2.00			2.00	2.00	1.00	1.00
	Actual			3.01		2.00	2.07		1.90				1.99			1.91	0.00 <sup>c</sup>	0.97	1.06
28 of 61	Expected			2.00		1.00	2.00		2.00	2.00	1.00		2.00			2.00	1.00	1.00	1.00
	Actual			2.00		0.89	2.05		1.91	2.08	1.02		1.83			1.85	0.00 <sup>c</sup>	0.92	0.99
29 of 61	Expected		1.00	2.00		1.00	1.00		2.00	2.00	1.00		1.00		1.00	3.00	1.00	1.00	
	Actual		1.12	2.09		1.00	1.05		2.01	2.10	1.05		0.92		0.90	3.04	0.00 <sup>c</sup>	1.03	
30 of 61	Expected		2.00	2.00	1.00	1.00		1.00	1.00	3.00	1.00	1.00			1.00	1.00	1.00	1.00	
	Actual		2.24	2.00	0.00 <sup>a</sup>	1.00		0.99	0.94	2.98	1.00	1.03			0.85	0.92	0.00 <sup>c</sup>	0.99	
31 of 61	Expected	2.00	1.00	2.00	1.00	1.00		1.00	1.00	1.00	1.00	2.00			2.00	1.00		1.00	
	Actual	2.00	0.98	2.04	0.00 <sup>a</sup>	1.03		1.01	0.97	1.04	1.00	2.12			1.70	0.91		0.99	
32 of 61	Expected	3.00	1.00	2.00	1.00			2.00	1.00	1.00	2.00	1.00			2.00				1.00
	Actual	3.06	0.94	2.00	0.00 <sup>a</sup>			1.97	0.98	0.98	2.05	1.06			1.70				1.00
33 of 61	Expected	4.00		2.00			1.00	1.00	1.00		2.00	1.00			2.00		1.00	1.00	1.00
	Actual	4.07		2.05			1.00	1.00	0.96		2.03	1.07			1.70		0.00 <sup>c</sup>	1.02	1.04
34 of 61	Expected	2.00		2.00		2.00	1.00	1.00	1.00		2.00	1.00			2.00		1.00	1.00	1.00
	Actual	2.03		2.03		2.00	1.02	0.99	0.98		2.02	1.07			1.78		0.00 <sup>c</sup>	1.00	1.00
35 of 61	Expected	1.00		2.00		3.00	1.00		1.00	1.00	2.00	1.00			1.00	1.00	2.00	1.00	
	Actual	1.03		2.04		3.00	1.02		0.98	1.03	2.05	1.06			0.86	0.93	0.00 <sup>c</sup>	1.01	
36 of 61	Expected	2.00	1.00	1.00		3.00			2.00	1.00	2.00		1.00		2.00	1.00	1.00		
	Actual	2.05	1.16	1.04		3.00			1.98	1.04	2.08		0.93		1.72	0.91	0.00 <sup>c</sup>		
37 of 61	Expected	2.00	1.00	1.00		2.00			1.00	1.00	2.00		1.00		1.00	2.00	1.00		1.00
	Actual	2.14	1.13	1.00		2.07			1.05	1.07	2.15		1.00		0.92	1.92	0.00 <sup>c</sup>		1.14
38 of 61	Expected	2.00	1.00		1.00	1.00			1.00	1.00	2.00		1.00	1.00	1.00	1.00	1.00		2.00
	Actual	1.98	1.09		0.00 <sup>a</sup>	1.14			0.99	1.00	2.03		0.93	1.17	0.89	0.85	0.00 <sup>c</sup>		2.13
39 of 61	Expected				1.00	1.00		1.00	1.00	1.00	2.00		1.00	1.00	1.00	2.00	2.00		2.00
	Actual				0.00 <sup>a</sup>	1.09		1.02	0.95	1.00	1.99		0.92	1.12	0.91	1.79	0.00 <sup>c</sup>		2.10
40 of 61	Expected			1.00	1.00	1.00	1.00	1.00		2.00	1.00			1.00	2.00	2.00	2.00		2.00
	Actual			1.00	0.00 <sup>a</sup>	1.05	1.01	1.01		1.99	1.00			1.00	1.79	1.70	0.00 <sup>c</sup>		2.09
41 of 61	Expected			1.00		2.00	1.00	1.00	2.00	2.00		1.00			3.00	1.00	1.00		1.00
	Actual			1.00		1.85	1.02	0.95	1.71	1.99		1.04			2.57	0.85	0.00 <sup>c</sup>		1.07
42 of 61	Expected			1.00		2.00	3.00		3.00	1.00	1.00	1.00		1.00	2.00			1.00	1.00
	Actual			1.05		2.11	3.11		2.70	1.07	1.07	1.13		1.10	1.68			1.00	1.12
43 of 61	Expected			1.00		2.00	2.00	1.00	4.00		1.00	1.00		2.00	2.00			1.00	
	Actual			1.00		2.01	2.14	1.02	3.70		1.06	1.03		2.23	1.80				0.87
44 of 61	Expected		1.00	1.00		1.00	3.00	1.00	2.00		1.00		1.00	2.00	1.00				3.00
	Actual		0.98	1.00		0.94	3.00	1.00	1.88		0.97		0.92	2.05	0.85				2.96
45 of 61	Expected	1.00	1.00	1.00		2.00	2.00	1.00	1.00				1.00	1.00	1.00	2.00			2.00
	Actual	1.07	1.09	1.09		2.17	2.17	1.10	1.05				0.97	1.09	0.89	1.94			2.03
46 of 61	Expected	1.00	1.00			1.00	3.00	1.00		1.00	1.00		1.00	2.00		2.00	1.00	2.00	
	Actual	1.02	1.14			1.04	3.07	1.01		1.00	1.00		0.95	2.16		1.89	0.00 <sup>c</sup>	1.91	

**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)	
47 of 61	Expected	1.00		2.00		2.00	2.00	1.00		3.00	1.00		1.00	1.00		2.00	1.00			
	Actual	1.01		2.02		2.00	2.02	0.99		2.97	1.00		0.89	1.00		1.90	0.00 <sup>c</sup>			
48 of 61	Expected			2.00	1.00	2.00	2.00	1.00		4.00	1.00		1.00			2.00	1.00			
	Actual			2.14	0.00 <sup>a</sup>	2.00	2.05	1.01		4.05	1.01		0.94			1.90	0.00 <sup>c</sup>			
49 of 61	Expected			3.00	1.00	3.00	1.00			3.00			1.00			2.00			3.00	
	Actual			2.88	0.00 <sup>a</sup>	2.86	1.00			2.76			0.84			1.81			2.91	
50 of 61	Expected		1.00	2.00	2.00	2.00	3.00	1.00		1.00						2.00			3.00	
	Actual		0.99	2.04	0.00 <sup>a</sup>	1.82	3.00	1.03		0.97						1.89			3.04	
51 of 61	Expected		2.00	2.00	1.00	1.00	2.00	1.00		1.00				1.00	1.00	2.00			3.00	
	Actual		2.00	1.95	0.00 <sup>a</sup>	1.00	2.01	0.98		1.01				0.99	0.89	1.85			2.44 <sup>b</sup>	
52 of 61	Expected		2.00	1.00	1.00		3.00		1.00	1.00	1.00			1.00	1.00	4.00			1.00	
	Actual		1.94	0.94	0.00 <sup>a</sup>		3.00		1.07	0.98	1.07			0.93	0.90	3.57			1.02	
53 of 61	Expected		1.00			1.00	1.00	1.00	2.00	1.00	1.00				1.00	4.00	1.00		1.00	
	Actual		1.12			1.06	1.09	1.05	1.59 <sup>b</sup>	1.00	1.06				0.86	3.78	0.00 <sup>c</sup>		1.10	
54 of 61	Expected		1.00		3.00	1.00	1.00	1.00	2.00		1.00				1.00	4.00	1.00		1.00	
	Actual		1.01		0.00 <sup>a</sup>	0.98	1.00	0.99	1.53 <sup>b</sup>		1.01				0.80	3.36	0.00 <sup>c</sup>		1.01	
55 of 61	Expected		2.00		3.00	1.00		1.00	2.00	2.00			1.00	2.00	1.00	1.00	1.00			
	Actual		2.27		0.00 <sup>a</sup>	1.00		1.03	1.33 <sup>b</sup>	2.18			0.98	2.29	0.86	1.02	0.00 <sup>c</sup>			
56 of 61	Expected		2.00	1.00	2.00	1.00	2.00			2.00	1.00		1.00	2.00	1.00	1.00				
	Actual		1.97	1.00	0.00 <sup>a</sup>	1.00	2.01			2.00	1.01		0.91	2.15	0.85	0.98				
57 of 61	Expected		1.00	1.00	1.00	2.00	3.00			2.00	1.00	1.00	1.00	2.00				1.00	1.00	
	Actual		1.33	1.02	0.00 <sup>a</sup>	2.00	3.10			1.95	1.02	1.04	1.01	1.97				0.00 <sup>c</sup>	0.96	
58 of 61	Expected		1.00	1.00	1.00	3.00	3.00		1.00		2.00	1.00		1.00				1.00	1.00	1.00
	Actual		1.20	1.03	0.00 <sup>a</sup>	3.00	3.13		0.97		2.06	1.07		1.11				0.00 <sup>c</sup>	1.00	1.07
59 of 61	Expected		1.00	1.00		4.00	1.00		1.00	1.00	2.00	1.00		1.00				1.00	1.00	2.00
	Actual		1.16	1.03		4.00	1.03		0.99	1.03	2.06	1.07		1.12				0.00 <sup>c</sup>	0.98	2.19
60 of 61	Expected	1.00	1.00	1.00		3.00				1.00	3.00	1.00		1.00	2.00					3.00
	Actual	1.03	1.01	1.05		3.00				1.05	3.13	1.10		0.96	1.70					3.34
61 of 61	Expected	1.00		1.00		2.00	1.00			1.00	2.00	1.00			2.00					2.00
	Actual	1.03		1.03		2.00	1.03			1.02	2.05	1.07			1.70					2.21

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

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

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

**Date:** 30 APR 2007

**Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication or designee

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