

Peptide Array, Dengue Virus Type 2, New Guinea C (NGC), E Protein

Catalog No. NR-507

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

Product Description: The 67-peptide array spans the E protein of Dengue virus type 2, New Guinea C (GenPept: AAA42941). Peptides are 15- to 20-mers, with 10 or 11 amino acid overlaps.

Lot: 3898688

The following information applies to all peptides:

- Appearance
- Mass spectral analysis
- Counter Ion

White lyophilized powder
Electrospray "Exhibits correct MW"
Trifluoroacetate

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	11/2/2004	15	MRCIGISNRDFVEGV	1696.0	91.5%	83.0%
2	11/22/2004	18	ISNRDFVEGVSGGSWVDI	1937.1	72.0%	90.0%
3	11/22/2004	18	GVSGGSWVDIVLEHGSCV	1801.0	66.0%	90.0%
4	11/22/2004	17	DIVLEHGSCVTTMAKNK	1846.2	91.8%	79.0%
5	11/5/2004	18	SCVTTMAKNKPTLDFELI	2011.4	91.7%	85.0%
6	11/8/2004	18	NKPTLDFELIETEAQKPA	2044.3	90.0%	85.0%
7	11/5/2004	17	LIETEAQKPATLRKYCI	1977.4	98.3%	80.0%
8	10/29/2004	15	KQPATLRKYCIEAKL	1762.2	91.7%	74.0%
9	11/5/2004	18	LRKYCIEAKLTNTTTDSR	2113.4	90.0%	77.0%
10	11/3/2004	19	KLNTTTDSRCPTQGEPSSL	2049.2	97.7%	85.0%
11	11/3/2004	18	RCPTQGEPSSLNEEQDKRF	2134.3	95.0%	81.0%
12	11/3/2004	17	SLNEEQDKRFVCKHSMV	2050.3	90.1%	77.0%
13	11/19/2004	20	KRFVCKHSMVDRGWGNGCGL	2250.7	93.3%	89.0%
14	11/4/2004	17	DRGWGNGCGLFGKGGIV	1692.9	91.7%	83.0%
15	11/24/2004	18	CGLFGKGGIVTCAMFTCK	1836.3	22.0%	84.0%
16	11/8/2004	18	IVTCAMFTCKKNMKGVV	2001.6	95.5%	76.0%
17	11/3/2004	17	CKKNMKGVVQPENLEY	2008.4	96.3%	76.0%
18	11/24/2004	17	KVVQPENLEYTIVITPH	1980.3	90.1%	85.0%
19	11/3/2004	17	LEYTIVITPHSGEEHAV	1895.1	95.1%	84.0%
20	11/19/2004	17	TPHSGEEHAVGNDTGKH	1772.8	94.4%	75.0%
21	11/25/2004	16	HAVGNDTGKHGKEIKI	1703.9	90.0%	70.0%
22	11/10/2004	16	TGKHGKEIKITPQSSI	1724.0	96.5%	74.0%
23	11/3/2004	18	EIKITPQSSITEAELTGY	1980.2	92.6%	90.0%
24	11/26/2004	15	SITEAELTGYGTVTM	1572.8	93.8%	89.0%
25	11/22/2004	18	ELTGYGTVMESPRTGL	1915.2	90.4%	89.0%

Table 1 (continued)						
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Purity by HPLC ^a	Peptide Content ^b
26	11/5/2004	18	TMECSPR TGLDFNEMVLL	2056.4	90.0%	90.0%
27	11/3/2004	18	GLDFNEMVLLQ MENKAWL	2151.5	90.3%	90.0%
28	11/3/2004	17	LLQ MENKAWLVHRQWFL	2212.7	97.9%	82.0%
29	11/8/2004	17	AWLVHRQWFLDLPWPWL	2190.6	90.6%	86.0%
30	11/19/2004	20	WFLDLPWPWLP GADTQGSNW	2313.6	94.8%	90.0%
31	11/8/2004	17	PGADTQGSNWIQKETLV	1844.0	95.3%	89.0%
32	11/24/2004	18	SNWIQKETLVTFKNPHAK	2141.5	95.9%	77.0%
33	11/5/2004	17	LVTFKNPHAKKQDVVVL	1936.3	96.5%	76.0%
34	11/11/2004	18	HAKKQDVVVLG SQEGAMH	1934.2	90.0%	76.0%
35	11/3/2004	16	VLG SQEGAMHTALTGA	1542.7	98.2%	88.0%
36	11/25/2004	15	GAMHTALTGATEIQM	1531.8	92.5%	88.0%
37	11/24/2004	17	ALTGATEIQMSSGNLLF	1753.0	68.3%	89.0%
38	11/18/2004	18	IQMSSGNLLFTGHLKCR L	2018.4	93.2%	81.0%
39	11/8/2004	18	LFTGHLKCR LRMDKLQ LK	2200.7	96.4%	71.0%
40	11/5/2004	16	RLRMDKLQLKGMSYSM	1957.4	91.6%	76.0%
41	11/25/2004	18	LQLKGMSYSMCTGKFKVV	2020.5	90.6%	81.0%
42	12/3/2004	18	SMCTGKFKV VKEIAETQH	2036.4	91.7%	77.0%
43	11/12/2004	17	VVKEIAETQHGTIVIRV	1892.2	90.1%	80.0%
44	11/26/2004	20	TQHGTIVIRVQYEGDGS PCK	2188.4	34.7%	81.0%
45	11/8/2004	17	VQYEGDGS PCKIPFEIM	1913.2	90.1%	89.0%
46	11/11/2004	18	SPCKIPFEIMDLEKRHVL	2155.6	95.2%	78.0%
47	11/8/2004	16	IMDLEKRHVLGR LITV	1893.3	94.6%	76.0%
48	11/15/2004	17	RHVLGR LITVNP I VTEK	1945.3	92.6%	76.0%
49	11/18/2004	18	ITVNP I VTEKDS P V NIEA	1939.2	90.2%	89.0%
50	11/7/2004	18	EKDS P V NIEAEPFGDSY	1994.1	95.3%	90.0%
51	11/7/2004	15	EAEPFGDSY IIIIGV	1606.8	93.6%	88.0%
52	11/7/2004	17	FGDSY IIIIGV EPGQLKL	1849.2	90.7%	89.0%
53	11/7/2004	15	IGV EPGQLKLNWFKK	1757.1	98.9%	79.0%
54	11/15/2004	18	GQLKLNWFKKGSSIGQMI	2035.4	92.0%	81.0%
55	11/26/2004	18	KKGSSIGQMIETTMRGAK	1923.3	95.7%	76.0%
56	11/11/2004	15	MIETTMRGAKRMAIL	1722.2	98.1%	78.0%
57	11/22/2004	17	MRGAKRMAILGDTAWDF	1939.3	91.4%	79.0%
58	11/11/2004	17	AILGDTAWDFGSLGGVF	1725.9	91.6%	89.0%
59	11/22/2004	18	WDFGSLGGVFTSIGKALH	1892.1	95.9%	85.0%
60	11/8/2004	17	VFTSIGKALHQVFGAIY	1851.2	94.1%	84.0%
61	11/24/2004	17	ALHQVFGAIYGA AFGSV	1707.9	44.7%	90.0%
62	11/24/2004	18	AIYGA AFGSVWIMKILI	1940.4	15.3%	90.0%
63	11/28/2004	17	GVSWIMKILIGVIITWI	1942.5	19.5%	89.0%
64	11/14/2004	15	ILIGVIITWIGMNSR	1686.1	23.6%	89.0%
65	11/24/2004	18	IITWIGMNSRSTSLSVSL	1965.3	30.4%	90.0%
66	11/24/2004	18	SRSTSLSVSLVLGVVTL	1817.2	24.1%	89.0%
67	11/22/2004	18	SLVLGVVVTLYLGV MVQA	1861.3	24.8%	90.0%

^a% full-length
^bRemainder 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	Expected		2.00	2.00	1.00	1.00	2.00		2.00			1.00	1.00		1.00				2.00
	Actual		2.01	2.00	0.57 ^a	1.01	1.99		2.00			1.00	1.02		0.98				1.97
2	Expected		1.00	3.00		1.00	3.00		2.00				1.00		3.00		1.00		3.00
	Actual		1.02	3.00		1.03	3.02		2.01				1.00		2.97		0.00 ^a		3.02
3	Expected			1.00	1.00	1.00	4.00	1.00	1.00	1.00					3.00		1.00		4.00
	Actual			1.03	0.53 ^a	1.00	3.97	1.00	0.74	1.00					3.02		0.00 ^a		3.74
4	Expected	1.00		2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00			1.00	2.00			2.00
	Actual	1.00		1.96	0.59 ^a	1.03	1.01	0.99	0.72 ^b	1.00	1.97	1.01			0.97	2.03			1.70 ^b
5	Expected	1.00		2.00	1.00	1.00			1.00	2.00	2.00	1.00	1.00	1.00	1.00	3.00			1.00
	Actual	1.00		2.01	0.54 ^a	1.03			1.02	1.99	1.98	1.00	1.00	0.99	1.00	2.99			1.00
6	Expected	2.00		2.00		4.00			1.00	2.00	2.00		1.00	2.00		2.00			
	Actual	1.97		1.99		3.97			1.02	2.03	2.00		1.00	2.02		2.03			
7	Expected	2.00	1.00		1.00	3.00			2.00	2.00	2.00			1.00		2.00		1.00	
	Actual	2.03	1.00		0.55 ^a	3.02			2.02	2.03	2.00			0.97		1.99		1.00	
8	Expected	2.00	1.00		1.00	2.00			1.00	2.00	3.00			1.00		1.00		1.00	
	Actual	1.97	1.02		0.57 ^a	2.00			1.00	1.99	3.00			1.02		0.97		1.02	
9	Expected	1.00	2.00	2.00	1.00	1.00			1.00	2.00	2.00				1.00	4.00		1.00	
	Actual	1.02	2.03	1.99	0.54 ^a	1.00			1.02	2.00	1.98				1.00	4.03		1.00	
10	Expected		1.00	2.00	1.00	2.00	1.00			2.00	1.00			2.00	2.00	5.00			
	Actual		1.02	2.01	0.54 ^a	2.00	1.02			2.01	1.00			1.99	2.01	4.98			
11	Expected		2.00	2.00	1.00	5.00	1.00			1.00	1.00		1.00	2.00	1.00	1.00			
	Actual		2.00	1.98	0.56 ^a	5.05	1.00			1.00	1.00		1.01	2.03	1.03	1.02			
12	Expected		1.00	2.00	1.00	3.00		1.00		1.00	2.00	1.00	1.00		2.00				2.00
	Actual		1.00	2.01	0.52 ^a	3.03		1.00		1.00	1.97	1.03	0.99		1.98				2.01
13	Expected		2.00	2.00	2.00		4.00	1.00		1.00	2.00	1.00	1.00		1.00		1.00		2.00
	Actual		2.03	1.99	1.03 ^a		4.02	0.98		1.00	2.03	1.00	0.98		0.99		0.00 ^a		2.01
14	Expected		1.00	2.00	1.00		7.00		1.00	1.00	1.00		1.00				1.00		1.00
	Actual		1.00	2.01	0.56 ^a		7.06		0.70 ^b	1.00	1.01		1.02				0.00 ^a		0.76 ^b
15	Expected	1.00			3.00		4.00		1.00	1.00	2.00	1.00	2.00			2.00			1.00
	Actual	0.97			1.63 ^a		3.97		0.77 ^b	1.02	2.01	1.00	2.00			2.01			0.75 ^b
16	Expected	1.00		1.00	2.00		1.00		1.00		4.00	2.00	1.00			2.00			3.00
	Actual	1.02		1.00	1.06 ^a		1.00		0.75 ^b		4.02	2.00	1.03			2.03			2.23 ^b
17	Expected			2.00	1.00	3.00	1.00			1.00	4.00	1.00		1.00				1.00	2.00
	Actual			2.03	0.53 ^a	3.01	1.02			1.02	4.05	1.00		1.01				1.02	1.67 ^b
18	Expected			1.00		3.00		1.00	2.00	1.00	1.00			2.00		2.00		1.00	3.00
	Actual			1.00		3.04		1.00	1.56 ^b	1.00	1.02			2.01		2.01		1.00	2.03 ^b
19	Expected	1.00				3.00	1.00	2.00	2.00	1.00				1.00	1.00	2.00		1.00	2.00
	Actual	1.00				3.02	1.01	2.00	1.52 ^b	1.00				1.02	1.02	2.03		1.00	1.56 ^b
20	Expected	1.00		2.00		2.00	3.00	3.00			1.00			1.00	1.00	2.00			1.00
	Actual	1.02		2.03		2.01	3.00	3.04			1.00			0.99	1.02	2.01			1.00
21	Expected	1.00		2.00		1.00	3.00	2.00	2.00		3.00					1.00			1.00
	Actual	1.03		2.01		1.03	3.01	2.01	1.96		3.01					1.00			1.03
22	Expected					2.00	2.00	1.00	3.00		3.00			1.00	2.00	2.00			
	Actual					2.00	1.99	1.00	3.01		2.99			1.00	1.97	2.00			

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)
23	Expected	1.00				4.00	1.00		3.00	1.00	1.00			1.00	2.00	3.00		1.00	
	Actual	1.03				4.01	1.00		2.98	1.00	1.02			1.00	1.97	3.00		1.00	
24	Expected	1.00				2.00	2.00		1.00	1.00		1.00			1.00	4.00		1.00	1.00
	Actual	1.00				2.03	1.99		1.02	1.00		1.03			1.00	3.97		1.02	1.00
25	Expected		1.00		1.00	2.00	3.00			2.00		1.00		1.00	1.00	4.00		1.00	1.00
	Actual		1.02		0.56 ^a	2.01	3.00			2.04		1.00		1.03	1.00	3.97		1.03	1.00
26	Expected		1.00	2.00	1.00	2.00	1.00			3.00		2.00	1.00	1.00	1.00	2.00			1.00
	Actual		1.00	2.01	0.56 ^a	1.99	1.02			2.97		2.01	1.00	1.01	1.00	2.01			1.03
27	Expected	1.00		3.00		3.00	1.00			4.00	1.00	2.00	1.00				1.00		1.00
	Actual	1.02		3.02		3.03	1.00			4.05	1.00	2.01	0.99				0.00 ^a		1.02
28	Expected	1.00	1.00	1.00		3.00		1.00		4.00	1.00	1.00	1.00				2.00		1.00
	Actual	1.00	0.98	1.00		2.99		1.00		4.01	1.00	1.01	1.02				0.00 ^a		1.00
29	Expected	1.00	1.00	1.00		1.00		1.00		5.00			1.00	2.00			3.00		1.00
	Actual	1.00	1.00	1.02		1.00		0.99		5.03			1.00	2.01			0.00 ^a		1.02
30	Expected	1.00		3.00		1.00	2.00			4.00			1.00	3.00	1.00	1.00	3.00		
	Actual	1.03		3.01		1.00	2.00			4.05			1.00	3.01	0.98	1.02	0.00 ^a		
31	Expected	1.00		2.00		3.00	2.00	1.00	1.00	1.00	1.00			1.00	1.00	2.00	1.00		1.00
	Actual	1.02		2.03		3.00	1.99	1.02	1.00	1.00	1.00			1.03	0.97	2.00	0.00 ^a		1.00
32	Expected	1.00		2.00		2.00		1.00	1.00	1.00	3.00		1.00	1.00	1.00	2.00	1.00		1.00
	Actual	1.03		2.00		2.01		1.00	1.03	1.00	2.99		1.02	0.99	0.96	2.00	0.00 ^a		1.03
33	Expected	1.00		2.00		1.00		1.00		2.00	3.00		1.00	1.00		1.00			4.00
	Actual	1.00		2.01		1.00		1.03		2.01	3.01		1.00	0.97		1.00			3.01 ^b
34	Expected	2.00		1.00		3.00	2.00	2.00		1.00	2.00	1.00			1.00				3.00
	Actual	2.01		1.00		2.99	2.01	1.99		1.00	2.01	1.01			1.02				2.05 ^b
35	Expected	3.00				2.00	3.00	1.00		2.00		1.00			1.00	2.00			1.00
	Actual	3.02				1.99	3.00	1.00		2.01		1.00			0.98	2.00			1.00
36	Expected	3.00				2.00	2.00	1.00	1.00	1.00		2.00				3.00			
	Actual	3.02				2.00	2.01	0.99	1.02	1.00		2.03				3.02			
37	Expected	2.00		1.00		2.00	2.00		1.00	3.00		1.00	1.00		2.00	2.00			
	Actual	2.03		1.00		1.99	1.97		1.00	2.99		1.02	1.00		2.01	2.01			
38	Expected		1.00	1.00	1.00	1.00	2.00	1.00	1.00	4.00	1.00	1.00	1.00		2.00	1.00			
	Actual		0.98	0.99	0.56 ^a	1.03	1.96	1.00	1.00	4.05	0.98	1.01	1.00		1.97	1.03			
39	Expected		2.00	1.00	1.00	1.00	1.00	1.00		5.00	3.00	1.00	1.00			1.00			
	Actual		2.01	1.00	0.55 ^a	0.97	1.01	1.00		5.06	3.01	1.00	1.03			1.00			
40	Expected		2.00	1.00		1.00	1.00			3.00	2.00	3.00			2.00			1.00	
	Actual		2.01	1.00		1.02	1.00			2.98	2.00	3.01			1.97			1.00	
41	Expected				1.00	1.00	2.00			2.00	3.00	2.00	1.00		2.00	1.00		1.00	2.00
	Actual				0.47 ^a	0.97	2.03			2.01	3.02	1.97	0.97		1.99	1.00		1.02	1.46 ^b
42	Expected	1.00			1.00	3.00	1.00	1.00	1.00		3.00	1.00	1.00		1.00	2.00			2.00
	Actual	1.00			0.53 ^a	3.04	0.97	1.00	1.01		3.03	0.97	1.00		1.01	1.97			1.47 ^b
43	Expected	1.00	1.00			3.00	1.00	1.00	3.00		1.00					2.00			4.00
	Actual	1.02	1.00			3.02	0.99	0.98	2.43 ^b		1.02					1.98			3.08 ^b
44	Expected		1.00	1.00	1.00	3.00	3.00	1.00	2.00		1.00			1.00	1.00	2.00		1.00	2.00
	Actual		1.02	0.98	0.55 ^a	3.04	3.02	0.99	1.57 ^b		1.01			0.96	1.01	1.95		1.00	1.54 ^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)
45	Expected			1.00	1.00	3.00	2.00		2.00		1.00	1.00	1.00	2.00	1.00			1.00	1.00
	Actual			1.02	0.53 ^a	3.00	2.03		2.01		1.00	1.00	1.03	2.01	0.97			1.00	1.01
46	Expected		1.00	1.00	1.00	2.00		1.00	2.00	2.00	2.00	1.00	1.00	2.00	1.00				1.00
	Actual		1.02	1.00	0.56 ^a	2.00		1.00	2.03	1.99	2.01	1.00	0.99	1.99	0.97				1.01
47	Expected		2.00	1.00		1.00	1.00	1.00	2.00	3.00	1.00	1.00				1.00			2.00
	Actual		2.03	1.00		1.00	1.01	1.03	2.00	2.99	1.00	0.99				1.02			1.99
48	Expected		2.00	1.00		1.00	1.00	1.00	2.00	2.00	1.00			1.00		2.00			3.00
	Actual		2.01	1.00		1.00	1.01	0.99	1.76 ^b	1.98	1.00			1.00		2.01			2.74 ^b
49	Expected	1.00		3.00		2.00			3.00		1.00			2.00	1.00	2.00			3.00
	Actual	0.99		2.96		1.97			2.72 ^b		1.03			2.02	1.00	1.97			2.77 ^b
50	Expected	1.00		3.00		3.00	1.00		1.00		1.00		1.00	3.00	2.00			1.00	1.00
	Actual	1.02		3.01		3.00	1.00		1.00 ^b		0.99		0.97	3.02	2.01			1.02	1.00
51	Expected	1.00		1.00		2.00	2.00		3.00				1.00	2.00	1.00			1.00	1.00
	Actual	0.97		1.00		2.01	1.99		1.98 ^b				1.02	1.99	1.02			1.00	1.00
52	Expected			1.00		2.00	3.00		3.00	2.00	1.00		1.00	1.00	1.00			1.00	1.00
	Actual			1.02		2.01	3.00		2.06 ^b	2.01	1.00		0.97	0.99	1.01			1.00	1.02
53	Expected			1.00		2.00	2.00		1.00	2.00	3.00		1.00	1.00			1.00		1.00
	Actual			1.02		2.01	2.01		0.98	2.02	3.02		1.02	1.00			0.00 ^a		1.03
54	Expected			1.00		2.00	3.00		2.00	2.00	3.00	1.00	1.00		2.00		1.00		
	Actual			0.98		1.99	3.02		2.01	1.99	3.01	1.00	1.00		1.97		0.00 ^a		
55	Expected	1.00	1.00			2.00	3.00		2.00		3.00	2.00			2.00	2.00			
	Actual	1.00	1.02			2.00	3.01		1.98		3.01	2.01			2.03	2.01			
56	Expected	2.00	2.00			1.00	1.00		2.00	1.00	1.00	3.00				2.00			
	Actual	2.01	2.01			1.00	0.99		2.01	1.02	1.01	3.00				1.98			
57	Expected	3.00	2.00	2.00			2.00		1.00	1.00	1.00	2.00	1.00			1.00	1.00		
	Actual	3.05	2.01	1.97			1.96		1.00	0.95	1.01	2.00	0.99			1.02	0.00 ^a		
58	Expected	2.00		2.00			4.00		1.00	2.00			2.00		1.00	1.00	1.00		1.00
	Actual	2.03		1.99			4.05		1.02	2.03			2.00		1.00	1.00	0.00 ^a		0.99
59	Expected	1.00		1.00			4.00	1.00	1.00	2.00	1.00		2.00		2.00	1.00	1.00		1.00
	Actual	1.00		1.01			3.94	1.03	1.01	2.01	1.02		2.03		1.98	1.00	0.00 ^a		1.02
60	Expected	2.00				1.00	2.00	1.00	2.00	1.00	1.00		2.00		1.00	1.00		1.00	2.00
	Actual	2.03				1.01	2.03	1.00	2.01	1.02	1.00		1.99		1.03	1.00		1.00	2.03
61	Expected	4.00				1.00	3.00	1.00	1.00	1.00			2.00		1.00			1.00	2.00
	Actual	4.05				1.02	3.02	1.00	0.98	0.99			2.01		0.97			1.00	2.02
62	Expected	3.00					2.00		4.00	1.00	1.00	1.00	1.00		2.00		1.00	1.00	1.00
	Actual	3.00					2.03		4.02	1.00	1.02	1.00	1.00		1.98		0.00 ^a	1.00	1.02
63	Expected						2.00		6.00	1.00	1.00	1.00			1.00	1.00	2.00		2.00
	Actual						2.03		5.20 ^b	1.00	1.03	1.02			0.98	1.00	0.00 ^a		1.77 ^b
64	Expected		1.00	1.00			2.00		5.00	1.00		1.00			1.00	1.00	1.00		1.00
	Actual		0.98	0.97			1.99		4.30 ^b	1.00		1.02			1.03	1.02	0.00 ^a		0.74 ^b
65	Expected		1.00	1.00			1.00		3.00	2.00		1.00			5.00	2.00	1.00		1.00
	Actual		1.00	1.02			1.02		2.55 ^b	2.00		0.99			5.02	2.00	0.00 ^a		1.02
66	Expected		1.00				1.00			4.00					5.00	2.00			5.00
	Actual		1.02				1.00			3.97					5.03	2.01			4.46 ^b
67	Expected	1.00				1.00	2.00			4.00		1.00			1.00	1.00		1.00	6.00
	Actual	0.98				0.99	2.03			4.05		1.00			1.00	1.03		1.00	5.48 ^b

^aCys and/or Trp was partially or completely destroyed during hydrolysis.

^bIle-Val, Val-Ile, Ile-Ile and/or Val-Val bonds were partially destroyed during hydrolysis.

Date: 30 MAY 2007

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

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.