

## Peptide Array, Hepatitis C Virus, K3a/650, NS5b Protein

### Catalog No. NR-4070

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**Product Description:** The 90-peptide array spans the NS5b protein of hepatitis C virus, K3a/650 (genotype 3a; GenPept: BAA06044). Peptides are 14- to 19-mers, with 11 or 12 amino acid overlaps.

### Lot: N847-1 to N847-90

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by MALDI-TOF
- 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 <sup>a</sup>	Peptide Content <sup>b</sup>
1 of 90	9/15/2006	16	1 SMSYSWTGALITPCSA 16	1674.93	0.47	84.8%	88.0%
2 of 90	9/15/2006	18	6 WTGALITPCSAEEEEKLPI 23	1958.28	0.09	93.5%	89.6%
3 of 90	9/15/2006	18	13 PCSAEEEEKLPISPLSNL 30	1914.18	-0.32	90.6%	89.4%
4 of 90	9/15/2006	18	20 KLPISPLSNLLRHHNLV 37	2038.44	0.02	84.8%	78.2%
5 of 90	9/15/2006	17	27 SNLLRHHNLVYSTSSR 43	1971.18	-0.75	80.7%	77.6%
6 of 90	9/15/2006	18	33 HHNLVYSTSSRSASQRQK 50	2086.27	-1.44	81.4%	75.3%
7 of 90	9/15/2006	18	40 TSSRSASQRQKVTFDRL 57	2095.36	-1.32	96.5%	75.4%
8 of 90	9/15/2006	18	46 SQRQKVTFDRLQVLDLDDH 63	2213.5	-1.32	94.4%	76.4%
9 of 90	9/15/2006	16	53 TFDRLQVLDLDDHYKTAL 68	1935.18	-0.51	93.4%	80.9%
10 of 90	9/15/2006	18	57 LQVLDLDDHYKTALQEVKER 74	2185.48	-0.94	90.9%	79.3%
11 of 90	9/15/2006	18	64 YKTALQEVKERASRVKAR 81	2133.5	-1.16	88.5%	72.8%
12 of 90	9/15/2006	18	71 VKERASRVKARMLSIIEEA 88	2073.46	-0.52	91.0%	75.2%
13 of 90	9/15/2006	18	78 VKARMLSIIEEACALVPPH 95	1964.4	0.43	88.4%	81.2%
14 of 90	9/15/2006	17	85 IEEACALVPPHSARSKF 101	1855.16	-0.01	86.9%	80.3%
15 of 90	9/15/2006	18	91 LVPPHSARSKFGYSKDV 108	1959.25	-0.43	92.2%	77.5%
16 of 90	9/15/2006	18	98 RSKFGYSKDVRSLSKA 115	1987.26	-0.86	91.3%	74.4%
17 of 90	9/15/2006	18	105 AKDVRSLSKAINQIRSV 122	1972.29	-0.32	81.5%	77.6%
18 of 90	9/15/2006	16	112 SSKAINQIRSVWEDLL 127	1859.13	-0.19	88.9%	84.5%
19 of 90	9/15/2006	18	117 NQIRSVWEDLLEDTTTTPI 134	2130.36	-0.56	89.9%	90.3%
20 of 90	9/15/2006	18	124 EDLLEDTTTTPIPTTIMAK 141	1989.29	-0.24	88.9%	89.7%
21 of 90	9/15/2006	17	131 TTIPTTIMAKNEVFCV 147	1865.26	0.56	87.0%	89.1%
22 of 90	9/15/2006	18	137 TIMAKNEVFCVDPKGGGR 154	1936.3	-0.12	84.5%	80.9%
23 of 90	9/15/2006	18	144 VFCVDPKGGRKAARLIV 161	1900.34	0.49	93.9%	76.9%
24 of 90	9/15/2006	18	151 KGGRKAARLIVPDLGVR 168	1969.38	-0.27	93.5%	74.2%
25 of 90	9/15/2006	18	158 RLIVPDLGVRVCEKRAL 175	2100.58	0.28	87.0%	78.7%
26 of 90	9/15/2006	18	165 LGVRVCEKRALYDVIQRL 182	2131.59	0.18	87.7%	78.9%
27 of 90	9/15/2006	16	172 KRALYDVIQRLSIETM 187	1936.32	-0.11	82.2%	80.9%
28 of 90	9/15/2006	17	177 DVIQRLSIETMGSA YGF 193	1887.16	0.24	87.5%	89.2%
29 of 90	9/15/2006	18	183 SIETMGSA YGFQYSPRQR 200	2078.31	-0.92	93.4%	85.9%

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Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
30 of 90	9/15/2006	18	190 AYGFAQSPRQRVERLLKM 207	2242.65	-0.83	89.6%	79.7%
31 of 90	9/15/2006	16	197 PRQRVERLLKMWTSKK 212	2056.53	-1.41	89.2%	72.0%
32 of 90	9/15/2006	18	202 ERLMKWTSKKTPLGFSY 219	2185.64	-0.6	80.2%	79.3%
33 of 90	9/15/2006	16	209 TSKKTPLGFSYDTRCF 224	1851.13	-0.68	84.8%	80.2%
34 of 90	9/15/2006	15	214 PLGFSYDTRCFDSTV 228	1707.89	-0.11	90.4%	88.2%
35 of 90	9/15/2006	18	218 SYDTRCFDSTVTGQDIRV 235	2063.25	-0.57	92.3%	85.8%
36 of 90	9/15/2006	16	225 DSTVTGQDIRVEEAVY 240	1781.91	-0.44	84.4%	88.7%
37 of 90	9/15/2006	16	230 GQDIRVEEAVYQCCNL 245	1840.08	-0.23	84.7%	89.0%
38 of 90	9/15/2006	18	235 VEEAVYQCCNLEPEPGQA 252	1979.19	-0.48	92.4%	89.7%
39 of 90	9/15/2006	18	242 CCNLEPEPGQAISLTER 259	1947.19	-0.5	92.6%	89.5%
40 of 90	9/15/2006	18	249 PGQAISLTERLYCGGPM 266	1880.19	-0.07	100.0%	89.2%
41 of 90	9/15/2006	17	256 LTERLYCGGPMNSKGA 272	1811.08	-0.63	81.9%	84.1%
42 of 90	9/15/2006	17	262 CGGPMNSKGAQCGYLR 278	1756.03	-0.69	96.1%	83.7%
43 of 90	9/15/2006	18	268 NSKGAQCGYLRCRASGVL 285	1883.2	-0.2	94.1%	80.5%
44 of 90	9/15/2006	15	275 GYLRCRASGVLPTSF 289	1626.91	0.26	91.4%	82.6%
45 of 90	9/15/2006	18	279 CRASGVLPTSFNGTITCY 296	1890.18	0.37	88.8%	89.2%
46 of 90	9/15/2006	18	286 PTSFGNTITCYIKATAA 303	1830.11	0.4	84.2%	88.9%
47 of 90	9/15/2006	17	293 ITCYIKATAAARAAGLR 309	1750.11	0.59	84.2%	79.3%
48 of 90	9/15/2006	17	299 ATAAARAAGLRNPDLFV 315	1713.97	0.39	82.1%	83.4%
49 of 90	9/15/2006	18	305 AAGLRNPDLFVCGDDL 322	1874.16	0.67	81.1%	89.2%
50 of 90	9/15/2006	18	312 DFLVCGDDLVVVAESDGV 329	1852.06	0.92	84.4%	89.0%
51 of 90	9/15/2006	18	319 DLVVVAESDGVDEDRATL 336	1903.05	0.03	85.6%	89.3%
52 of 90	9/15/2006	18	326 SDGVDEDRATLRAFTEAM 343	1984.14	-0.61	80.6%	85.3%
53 of 90	9/15/2006	16	333 RATLRAFTEAMTRYSA 348	1845.13	-0.34	84.7%	80.2%
54 of 90	9/15/2006	16	338 AFTEAMTRYSAAPPGDA 353	1684.86	-0.42	80.7%	88.1%
55 of 90	9/15/2006	18	343 MTRYSAAPPGDAPQTYDL 360	1980.2	-0.96	80.8%	89.7%
56 of 90	9/15/2006	18	350 PGDAPQPTYDLELITSCS 367	1907.1	-0.39	80.3%	89.3%
57 of 90	9/15/2006	18	357 TYDLELITSCSSNVSVAR 374	1958.19	0.22	83.2%	89.6%
58 of 90	9/15/2006	18	364 TSCSSNVSVARDDK GKRY 381	1973.17	-1.12	86.0%	77.6%
59 of 90	9/15/2006	18	371 SVARDDK GKRYYYLTRDA 388	2177.42	-1.44	85.3%	76.1%
60 of 90	9/15/2006	18	378 GKRYYYLTRDATTPLARA 395	2116.43	-0.88	81.2%	78.8%
61 of 90	9/15/2006	18	385 TRDATTPLARA AWETARH 402	2024.24	-0.9	85.9%	78.0%
62 of 90	9/15/2006	18	392 LARA AWETARHTPVNSWL 409	2079.37	-0.32	91.2%	82.0%
63 of 90	9/15/2006	18	399 TARHTPVNSWLGSII MYA 416	2017.35	0.23	91.3%	85.5%
64 of 90	9/15/2006	18	406 NSWLGSII MYAPTIWVRM 423	2138.6	0.65	81.2%	90.4%
65 of 90	9/15/2006	18	413 IMYAPTIWVRMVMTHFF 430	2274.88	1.08	81.8%	86.9%
66 of 90	9/15/2006	19	420 WVRMVMTHFFSILQSQE I 438	2383.9	0.58	80.1%	87.5%
67 of 90	9/15/2006	18	428 HFFSILQSQEILDRPLDF 445	2205.52	0.02	85.3%	86.6%
68 of 90	9/15/2006	18	435 SQEILDRPLDFEMYGATY 452	2148.39	-0.53	85.8%	90.4%
69 of 90	9/15/2006	18	442 PLDFEMYGATYSVTPLDL 459	2032.31	0.18	86.4%	89.9%
70 of 90	9/15/2006	18	449 GATYSVTPLDLPAIERL 466	1929.26	0.53	80.3%	89.4%
71 of 90	9/15/2006	17	456 PLDLPAIERLHGLSAF 472	1862.22	0.68	93.5%	84.5%
72 of 90	9/15/2006	16	462 IERLHGLSAFVSHSY 477	1829.1	0.43	96.0%	80.0%
73 of 90	9/15/2006	18	467 HGLSAFVSHSYSPVELNR 484	2000.22	-0.21	82.1%	81.4%
74 of 90	9/15/2006	18	474 VHSYSPVELNRVAGTLRK 491	2026.34	-0.37	93.3%	78.0%
75 of 90	9/15/2006	18	481 ELNRVAGTLRKLGCPLR 498	1993.42	-0.3	83.7%	77.8%
76 of 90	9/15/2006	18	488 TLRKLGCPLRAWRHRAR 505	2187.67	-0.96	82.7%	70.6%
77 of 90	9/15/2006	18	495 PPLRAWRHRARAVRAKLI 512	2167.66	-0.57	92.2%	70.4%
78 of 90	9/15/2006	18	502 HRARAVRAKLI AQGGRAK 519	1959.35	-0.66	90.9%	68.2%
79 of 90	9/15/2006	18	509 AKLIAQGGRAKICGLYLF 526	1922.38	0.71	88.2%	80.8%
80 of 90	9/15/2006	18	516 GRAKICGLYLFNWAVRTK 533	2096.55	0.07	93.8%	78.6%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
81 of 90	9/15/2006	17	523 LYLFNWAVR TKTKLTP L 539	2064.52	0.14	85.5%	81.9%
82 of 90	9/15/2006	17	529 AVRTKTKLTP LPAAGQL 545	1765.15	-0.03	82.0%	79.5%
83 of 90	9/15/2006	17	535 KLTPLPAAGQLD LSSWF 551	1844.16	0.23	83.1%	89.0%
84 of 90	9/15/2006	15	541 AAGQLD LSSWFTVGV 555	1550.75	0.76	81.5%	87.2%
85 of 90	9/15/2006	18	545 LD LSSWFTVGVGGNDIYH 562	1980.18	0.22	89.7%	89.7%
86 of 90	9/15/2006	17	552 TVGVGGNDIYHSVSRAR 568	1787.97	-0.3	84.6%	79.7%
87 of 90	9/15/2006	17	558 NDIYHSVSRARTRYLL L 574	2077.39	-0.39	85.1%	78.5%
88 of 90	9/15/2006	18	564 VSRARTRYLL LCLLL LTV 581	2103.66	1.24	85.4%	82.2%
89 of 90	9/15/2006	18	571 YLL LCLLL LTVGVGIFLL 588	1976.6	2.76	Crude	89.7%
90 of 90	9/15/2006	14	578 LLTVGVGIFLLPAR 591	1468.86	1.79	82.8%	86.6%

<sup>a</sup>% full-length  
<sup>b</sup>Remainder 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 of 90	Expected	2.00			1.00		1.00		1.00	1.00		1.00		1.00	4.00	2.00	1.00	1.00	
	Actual	1.70			0.46 <sup>b</sup>		1.00		0.99	1.02		0.93		1.13	3.60	1.78	0.00 <sup>a</sup>	1.09	
2 of 90	Expected	2.00			1.00	3.00	1.00		2.00	2.00	1.00			2.00	1.00	2.00	1.00		
	Actual	1.87			0.51 <sup>b</sup>	2.90	1.10		2.00	2.03	0.92			2.19	1.00	1.75	0.00 <sup>a</sup>		
3 of 90	Expected	1.00		1.00	1.00	3.00			1.00	3.00	1.00			3.00	4.00				
	Actual	1.04		0.88	0.53 <sup>b</sup>	2.57			1.05	2.88	0.79			3.00	3.77				
4 of 90	Expected		1.00	2.00				2.00	1.00	5.00	1.00			2.00	3.00				1.00
	Actual		1.07	1.67				2.11	1.00	4.70	0.78			1.96	2.89				0.92
5 of 90	Expected		2.00	2.00				2.00		3.00					5.00	1.00		1.00	1.00
	Actual		2.00	1.70				2.31		2.80					4.76	1.00		0.78	0.75
6 of 90	Expected	1.00	2.00	1.00		2.00		2.00		1.00	1.00				5.00	1.00		1.00	1.00
	Actual	1.10	2.29	0.90		1.91		2.10		1.11	1.09				5.00	0.98		0.94	0.94
7 of 90	Expected	1.00	3.00	1.00		2.00				1.00	2.00		1.00		4.00	2.00			1.00
	Actual	1.12	3.06	0.85		1.62				1.02	1.95		1.07		3.64	1.72			1.00
8 of 90	Expected		2.00	3.00		3.00		1.00		2.00	2.00		1.00		1.00	1.00			2.00
	Actual		2.20	2.77		2.67		1.09		1.81	1.81		1.09		0.95	1.00			1.78
9 of 90	Expected	1.00	1.00	3.00		1.00		1.00		3.00	1.00		1.00			2.00		1.00	1.00
	Actual	0.94	0.98	2.82		0.99		1.01		2.71	0.94		0.93			1.78		1.00	0.87
10 of 90	Expected	1.00	1.00	2.00		4.00		1.00		3.00	2.00					1.00		1.00	2.00
	Actual	1.00	1.20	1.75		3.79		1.17		2.85	1.76					1.02		0.85	1.78
11 of 90	Expected	3.00	3.00			3.00				1.00	3.00				1.00	1.00		1.00	2.00
	Actual	2.85	3.30			2.87				1.04	3.05				0.87	1.00		1.09	1.70
12 of 90	Expected	3.00	3.00			3.00		1.00	1.00	2.00	1.00				2.00				2.00
	Actual	2.97	3.00			2.66		0.82	1.01	1.84	0.93				1.72				1.78
13 of 90	Expected	3.00	1.00		1.00	2.00		1.00	1.00	2.00	1.00	1.00		2.00	1.00				2.00
	Actual	2.92	0.98		0.50 <sup>b</sup>	1.92		1.12	0.92	1.99	1.05	0.98		2.00	1.03				2.09
14 of 90	Expected	3.00	1.00		1.00	2.00		1.00	1.00	1.00	1.00		1.00	2.00	2.00				1.00
	Actual	2.68	1.09		0.49 <sup>b</sup>	1.72		1.16	0.80	0.93	0.98		0.87	2.00	2.05				0.97
15 of 90	Expected	2.00	1.00	1.00			1.00	1.00		1.00	2.00		1.00	2.00	3.00			1.00	2.00
	Actual	1.90	1.00	0.96			1.00	1.02		0.77	1.97		0.91	1.72	2.84			1.09	1.70
16 of 90	Expected	2.00	2.00	1.00			1.00			1.00	3.00		1.00		5.00			1.00	1.00
	Actual	1.76	1.89	0.85			1.01			0.98	2.67		1.01		4.62			1.17	1.00
17 of 90	Expected	2.00	2.00	2.00		1.00			2.00	1.00	2.00				4.00				2.00
	Actual	2.00	1.75	1.95		1.09			1.90	1.20	1.75				3.90				1.99

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 90	Expected	1.00	1.00	2.00		2.00			2.00	2.00	1.00				3.00		1.00		1.00
	Actual	1.00	0.84	1.95		2.01			1.73	2.12	1.01				2.79		0.00 <sup>a</sup>		0.88
19 of 90	Expected		1.00	3.00		3.00			2.00	2.00				1.00	1.00	3.00	1.00		1.00
	Actual		0.71	2.74		2.92			1.72	2.00				1.12	1.00	2.77	0.00 <sup>a</sup>		0.86
20 of 90	Expected	1.00		2.00		2.00			2.00	2.00	1.00	1.00		2.00		5.00			
	Actual	1.16		1.78		1.90			1.73	2.02	1.09	0.98		2.00		4.77			
21 of 90	Expected	1.00		1.00	1.00	1.00			2.00		1.00	1.00	1.00	2.00		4.00			2.00
	Actual	1.00		0.98	0.51 <sup>b</sup>	0.97			1.80		0.96	0.89	0.87	2.03		3.76			1.71
22 of 90	Expected	2.00	1.00	2.00	1.00	1.00	2.00		1.00		2.00	1.00	1.00	1.00		1.00			2.00
	Actual	1.78	1.09	1.84	0.59 <sup>b</sup>	0.96	2.07		0.95		1.78	0.98	0.76	1.00		0.86			1.70
23 of 90	Expected	3.00	2.00	1.00	1.00		2.00		1.00	1.00	2.00		1.00	1.00					3.00
	Actual	3.00	2.69	0.91	0.54 <sup>b</sup>		2.24		0.61 <sup>c</sup>	1.02	1.76		0.70	1.22					2.32 <sup>c</sup>
24 of 90	Expected	2.00	3.00	1.00			3.00		1.00	2.00	2.00			1.00				1.00	2.00
	Actual	1.97	2.74	0.81			2.90		0.57 <sup>c</sup>	1.93	1.86			1.08				1.00	1.48 <sup>c</sup>
25 of 90	Expected	1.00	3.00	1.00	1.00	1.00	1.00		1.00	3.00	1.00			1.00				1.00	3.00
	Actual	0.99	2.84	0.92	0.46 <sup>b</sup>	0.94	1.02		0.53 <sup>c</sup>	2.66	1.04			1.00				0.80	2.36 <sup>c</sup>
26 of 90	Expected	1.00	3.00	1.00	1.00	2.00	1.00		1.00	3.00	1.00							1.00	3.00
	Actual	0.98	3.20	1.00	0.51 <sup>b</sup>	1.99	1.03		0.55 <sup>c</sup>	2.95	0.93							0.99	2.38 <sup>c</sup>
27 of 90	Expected	1.00	2.00	1.00		2.00			2.00	2.00	1.00	1.00			1.00	1.00		1.00	1.00
	Actual	0.77	1.96	0.99		1.79			1.37 <sup>c</sup>	1.72	0.96	1.01			1.04	1.00		0.95	0.55 <sup>c</sup>
28 of 90	Expected	1.00	1.00	1.00		2.00	2.00		2.00	1.00		1.00	1.00		2.00	1.00		1.00	1.00
	Actual	1.00	1.00	1.04		1.94	1.88		1.36 <sup>c</sup>	0.98		0.92	0.93		1.77	0.94		0.97	0.49 <sup>c</sup>
29 of 90	Expected	1.00	2.00			3.00	2.00		1.00			1.00	1.00	1.00	3.00	1.00		2.00	
	Actual	0.93	2.12			2.73	2.01		0.93			0.77	0.94	1.00	2.75	0.77		1.82	
30 of 90	Expected	1.00	3.00			3.00	1.00			2.00	1.00	1.00	1.00	1.00	1.00			2.00	1.00
	Actual	0.76	3.00			3.03	0.81			1.92	1.14	1.29	0.93	1.06	0.83			2.13	1.07
31 of 90	Expected		3.00			2.00				2.00	3.00	1.00		1.00	1.00	1.00	1.00		1.00
	Actual		3.00			1.74				1.82	2.80	0.82		1.06	1.02	1.05	0.00 <sup>a</sup>		0.93
32 of 90	Expected		1.00			1.00	1.00			3.00	3.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	
	Actual		1.16			0.84	1.10			2.89	2.78	1.01	0.93	1.22	1.80	1.92	0.00 <sup>a</sup>		1.00
33 of 90	Expected		1.00	1.00	1.00		1.00			1.00	2.00		2.00	1.00	2.00	3.00		1.00	
	Actual		0.86	0.91	0.52 <sup>b</sup>		1.06			0.92	1.83		1.82	1.00	1.80	2.75		1.06	
34 of 90	Expected		1.00	2.00	1.00		1.00			1.00			2.00	1.00	2.00	2.00		1.00	1.00
	Actual		0.97	1.77	0.53 <sup>b</sup>		1.05			0.94			1.75	1.00	1.71	1.63		1.05	0.94
35 of 90	Expected		2.00	3.00	1.00	1.00	1.00		1.00				1.00		2.00	3.00		1.00	2.00
	Actual		1.69	3.03	0.56 <sup>b</sup>	1.12	1.16		0.83				0.92		1.96	2.65		0.85	2.00
36 of 90	Expected	1.00	1.00	2.00		3.00	1.00		1.00						1.00	2.00		1.00	3.00
	Actual	1.04	0.65	2.00		2.97	1.08		0.80						0.94	1.80		0.89	2.76
37 of 90	Expected	1.00	1.00	2.00	2.00	4.00	1.00		1.00	1.00								1.00	2.00
	Actual	1.00	0.84	1.96	1.16 <sup>b</sup>	3.81	1.03		0.77	1.08								0.95	1.82
38 of 90	Expected	2.00		1.00	2.00	6.00	1.00			1.00				2.00				1.00	2.00
	Actual	2.01		0.89	0.93 <sup>b</sup>	5.79	1.11			1.07				2.00				0.84	1.70
39 of 90	Expected	1.00	1.00	1.00	2.00	4.00	1.00		1.00	2.00				2.00	2.00	1.00			
	Actual	1.22	0.94	0.85	0.98 <sup>b</sup>	3.28	0.98		1.13	1.90				2.00	1.65	0.88			
40 of 90	Expected	1.00	1.00		1.00	2.00	3.00		1.00	2.00		1.00		2.00	2.00	1.00		1.00	
	Actual	0.90	0.87		0.51 <sup>b</sup>	1.45	2.77		0.87	1.91	0.00	1.10		1.71	1.62	0.98		1.00	
41 of 90	Expected	1.00	1.00	2.00	1.00	1.00	3.00			2.00	1.00	1.00		1.00	1.00	1.00		1.00	
	Actual	1.10	1.22	1.70	0.59 <sup>b</sup>	1.14	2.83			2.15	0.83	0.90		0.93	0.83	1.00		1.23	
42 of 90	Expected	1.00	1.00	2.00	2.00	1.00	4.00			1.00	1.00	1.00		1.00	1.00			1.00	
	Actual	0.81	1.12	2.11	0.97 <sup>b</sup>	0.90	3.89			0.91	0.96	0.96		1.00	0.79			1.03	

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)	
43 of 90	Expected	2.00	2.00	1.00	2.00	1.00	3.00			2.00	1.00				2.00			1.00	1.00	
	Actual	1.80	2.00	0.86	0.96 <sup>b</sup>	1.04	3.04			1.91	0.90				1.66			0.98	0.71	
44 of 90	Expected	1.00	2.00		1.00		2.00			2.00			1.00	1.00	2.00	1.00		1.00	1.00	
	Actual	1.06	2.11		0.51 <sup>b</sup>		2.00			1.72			0.88	1.08	1.82	0.93		0.98	0.76	
45 of 90	Expected	1.00	1.00	1.00	2.00		2.00		1.00	1.00			1.00	1.00	2.00	3.00		1.00	1.00	
	Actual	1.00	1.04	1.00	0.965 <sup>b</sup>		2.21		0.94	0.82			0.83	0.98	1.94	2.87		1.04	0.92	
46 of 90	Expected	4.00		1.00	1.00		1.00		2.00		1.00		1.00	1.00	1.00	4.00		1.00		
	Actual	3.68		1.01	0.52 <sup>b</sup>		0.97		1.44		0.92		0.90	1.00	0.96	3.69		0.85		
47 of 90	Expected	6.00	2.00		1.00		1.00		2.00	1.00	1.00					2.00		1.00		
	Actual	6.00	2.17		0.55 <sup>b</sup>	0.00	1.11		1.73	1.09	0.89					1.94		0.93		
48 of 90	Expected	6.00	2.00	2.00			1.00			2.00			1.00	1.00		1.00			1.00	
	Actual	5.68	2.08	1.74			1.08			1.70			0.93	1.00		0.90			0.89	
49 of 90	Expected	2.00	1.00	4.00	1.00		2.00			3.00			1.00	1.00					3.00	
	Actual	2.05	0.77	3.67	0.52 <sup>b</sup>		2.00			2.85			0.84	1.04					1.82 <sup>c</sup>	
50 of 90	Expected	1.00		4.00	1.00	1.00	2.00			2.00			1.00		1.00				5.00	
	Actual	1.19		3.65	0.51 <sup>b</sup>	1.00	2.13			1.75			0.94		0.91				3.49 <sup>c</sup>	
51 of 90	Expected	2.00	1.00	4.00		2.00	1.00			2.00					1.00	1.00			4.00	
	Actual	1.96	1.21	3.67		1.92	1.00			1.89					1.06	0.82			2.08 <sup>c</sup>	
52 of 90	Expected	3.00	2.00	3.00	2.00	1.00	1.00			1.00		1.00	1.00		1.00	2.00			1.00	
	Actual	3.00	1.93	2.69		2.06	0.93			1.08		0.62	0.90		0.78	1.83			0.96	
53 of 90	Expected	4.00	3.00			1.00				1.00		1.00	1.00		1.00	3.00		1.00		
	Actual	3.66	3.00			0.99	0.00			0.97		0.84	0.91		0.89	2.64		0.92		
54 of 90	Expected	4.00	1.00	1.00		1.00	1.00						1.00	1.00	2.00	1.00	2.00		1.00	
	Actual	3.60	1.00	0.73		1.11	0.84						1.08	1.00	1.88	0.93	1.84		1.06	
55 of 90	Expected	2.00	1.00	2.00		1.00	1.00			1.00		1.00		4.00	1.00	2.00		2.00		
	Actual	1.76	0.73	1.76		0.95	1.07			0.97		1.00		3.65	1.00	1.46		1.85		
56 of 90	Expected	1.00		2.00	1.00	2.00	1.00		1.00	2.00				3.00	2.00	2.00		1.00		
	Actual	1.00		1.91	0.52 <sup>b</sup>	1.80	1.00		0.91	1.78				2.84	1.68	1.73		0.91		
57 of 90	Expected	1.00	1.00	2.00	1.00	1.00			1.00	2.00					4.00	2.00		1.00	2.00	
	Actual	0.89	0.94	1.77	0.43 <sup>b</sup>	1.02			0.93	2.01					3.66	1.87		1.00	1.68	
58 of 90	Expected	1.00	2.00	3.00	1.00		1.00				2.00				4.00	1.00		1.00	2.00	
	Actual	0.91	2.12	3.00	0.50 <sup>b</sup>		1.00				1.81				3.82	0.78		1.08	1.94	
59 of 90	Expected	2.00	3.00	3.00			1.00			1.00	2.00				1.00	1.00		3.00	1.00	
	Actual	1.80	3.00	2.78			1.04			0.94	1.72				0.94	0.84		2.92	1.00	
60 of 90	Expected	3.00	3.00	1.00			1.00			2.00	1.00			1.00		3.00		3.00		
	Actual	2.70	2.80	0.71			1.03			1.62	0.80			0.94		2.60		3.00		
61 of 90	Expected	5.00	3.00	1.00		1.00		1.00	0.00	1.00				1.00		4.00	1.00			
	Actual	4.69	2.74	1.00		1.01		0.95	0.00	1.01				1.14		3.66	0.00 <sup>a</sup>			
62 of 90	Expected	4.00	2.00	1.00		1.00		1.00						1.00	1.00	2.00	2.00		1.00	
	Actual	3.70	2.04	0.86		0.87		1.02						1.00	0.97	1.72	0.00 <sup>a</sup>		0.95	
63 of 90	Expected	2.00	1.00	1.00			1.00	1.00	2.00	1.00		1.00		1.00	2.00	2.00	1.00	1.00	1.00	
	Actual	1.74	1.28	0.86			0.99	1.00	0.76 <sup>c</sup>	0.97		0.87		1.02	1.93	1.78	0.00 <sup>a</sup>	1.12	0.91	
64 of 90	Expected	1.00	1.00	1.00			1.00		3.00	1.00		2.00		1.00	2.00	1.00	2.00	1.00	1.00	
	Actual	1.06	0.81	0.86			0.86		1.17 <sup>c</sup>	0.66		1.82		1.00	1.89	0.75	0.00 <sup>a</sup>	1.01	0.83	
65 of 90	Expected	1.00	1.00					1.00	2.00				4.00	2.00	1.00		2.00	1.00	2.00	
	Actual	0.91	1.23					1.00	1.80				3.74	1.78	1.04		1.72	0.00 <sup>a</sup>	1.02	
66 of 90	Expected		1.00			3.00		1.00	2.00	1.00		3.00	2.00		2.00	1.00	1.00		2.00	
	Actual		1.00			3.18		0.94	1.69	0.92		2.74	1.81		2.00	0.74	0.00 <sup>a</sup>		1.70	
67 of 90	Expected		1.00	2.00		3.00		1.00	2.00	3.00			3.00	1.00	2.00					
	Actual		1.04	1.80		2.71		0.97	1.50	2.56			2.73	1.00	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)
68 of 90	Expected	1.00	1.00	2.00		3.00	1.00		1.00	2.00		1.00	1.00	1.00	1.00	1.00		2.00	
	Actual	1.00	1.24	1.97		2.98	1.05		0.79	1.82		0.89	0.99	1.06	1.08	1.00		1.65	
69 of 90	Expected	1.00		2.00		1.00	1.00			3.00		1.00	1.00	2.00	1.00	2.00		2.00	1.00
	Actual	0.96		1.94		0.99	0.96			2.92		0.15	0.91	2.00	0.99	1.98		1.65	1.01
70 of 90	Expected	2.00	1.00	1.00		1.00	1.00		2.00	3.00				2.00	1.00	2.00		1.00	1.00
	Actual	1.90	0.75	0.99		0.93	1.01		0.95 <sup>c</sup>	2.73				2.00	0.95	1.94		1.03	1.01
71 of 90	Expected	2.00	1.00	1.00		1.00	1.00	1.00	2.00	4.00			1.00	2.00	1.00				
	Actual	1.90	1.00	1.00		0.92	0.99	1.10	0.96 <sup>c</sup>	3.67			0.96	2.08	1.03				
72 of 90	Expected	1.00	1.00			1.00	1.00	2.00	2.00	2.00			1.00		3.00			1.00	1.00
	Actual	0.87	1.00			1.01	0.94	1.93	0.82 <sup>c</sup>	1.74			0.98		2.67			1.26	0.79
73 of 90	Expected	1.00	1.00	1.00		1.00	1.00	2.00		2.00			1.00	1.00	4.00			1.00	2.00
	Actual	0.97	1.04	0.93		0.79	0.95	1.76		1.96			0.92	1.00	3.89			0.91	1.62
74 of 90	Expected	1.00	2.00	1.00		1.00	1.00	1.00		2.00	1.00			1.00	2.00	1.00		1.00	3.00
	Actual	1.00	2.12	0.94		0.88	0.97	0.78		1.74	1.01			0.96	1.68	0.83		1.64	2.70
75 of 90	Expected	1.00	3.00	1.00	1.00	1.00	2.00			4.00	1.00			2.00		1.00			1.00
	Actual	0.96	2.94	1.00	0.48 <sup>b</sup>	0.95	2.00			3.65	1.09			1.83		0.87			0.92
76 of 90	Expected	2.00	5.00		1.00		1.00	1.00		3.00	1.00			2.00		1.00	1.00		
	Actual	1.89	5.00		0.46 <sup>b</sup>		0.93	1.06		2.67	1.03			1.99		0.96	0.00 <sup>a</sup>		
77 of 90	Expected	4.00	5.00					1.00	1.00	2.00	1.00			2.00			1.00		1.00
	Actual	3.67	5.00					1.12	0.94	1.81	0.91			1.94			0.00 <sup>a</sup>		0.75
78 of 90	Expected	5.00	4.00			1.00	2.00	1.00	1.00	1.00	2.00								1.00
	Actual	4.67	3.80			1.07	2.02	1.00	0.96	1.06	1.93								0.90
79 of 90	Expected	3.00	1.00		1.00	1.00	3.00		2.00	3.00	2.00		1.00					1.00	
	Actual	2.71	1.09		0.55 <sup>b</sup>	1.01	2.97		1.67	2.62	1.67		0.96					1.00	
80 of 90	Expected	2.00	2.00	1.00	1.00		2.00		1.00	2.00	2.00		1.00			1.00	1.00	1.00	1.00
	Actual	2.28	2.00	0.88	0.50 <sup>b</sup>		2.29		0.76	1.99	1.87		1.12			1.05	0.00 <sup>a</sup>	1.14	1.01
81 of 90	Expected	1.00	1.00	1.00						4.00	2.00		1.00	1.00		3.00	1.00	1.00	1.00
	Actual	1.07	0.83	0.79						3.63	1.76		1.02	1.05		2.64	0.00 <sup>a</sup>	1.00	0.84
82 of 90	Expected	3.00	1.00			1.00	1.00			3.00	2.00			2.00		3.00			1.00
	Actual	2.84	0.71			1.04	1.07			2.86	2.00			1.85		2.69			0.70
83 of 90	Expected	2.00		1.00		1.00	1.00			4.00	1.00		1.00	2.00	2.00	1.00	1.00		
	Actual	2.07		1.00		1.03	1.21			3.94	0.89		1.01	1.96	1.87	0.97	0.00 <sup>a</sup>		
84 of 90	Expected	2.00		1.00		1.00	2.00			2.00			1.00		2.00	1.00	1.00		2.00
	Actual	1.89		1.05		0.75	1.91			1.95			1.08		1.96	0.87	0.00 <sup>a</sup>		2.00
85 of 90	Expected			3.00			3.00	1.00	1.00	2.00			1.00		2.00	1.00	1.00	1.00	2.00
	Actual			2.73			2.90	0.92	0.76	1.79			1.05		1.93	0.92	0.00 <sup>a</sup>	0.66	2.00
86 of 90	Expected	1.00	2.00	2.00			3.00	1.00	1.00						2.00	1.00		1.00	3.00
	Actual	0.95	2.04	2.07			3.00	1.24	0.86						1.89	0.94		0.90	2.68
87 of 90	Expected	1.00	3.00	2.00				1.00	1.00	3.00					2.00	1.00		2.00	1.00
	Actual	1.00	2.93	1.71				0.88	0.73	2.78					1.76	1.06		1.81	0.91
88 of 90	Expected	1.00	3.00		1.00					7.00					1.00	2.00		1.00	2.00
	Actual	1.07	2.79		0.46 <sup>b</sup>					4.64					1.00	1.70		0.83	1.75
89 of 90	Expected				1.00		2.00		1.00	9.00			1.00			1.00		1.00	2.00
	Actual				0.51 <sup>b</sup>		2.65		0.79	5.68			0.86			1.00		0.82	2.23
90 of 90	Expected	1.00	1.00				2.00		1.00	4.00			1.00	1.00		1.00			2.00
	Actual	1.00	1.09				1.83		0.68	3.53			0.73	0.98		0.81			1.96

<sup>a</sup>Trp was completely destroyed during hydrolysis.

<sup>b</sup>Cys was partially destroyed during hydrolysis.

<sup>c</sup>Val-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis.

**Date:** 24 JAN 2007

**Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication

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