

**Peptide Array, Hepatitis C Virus, H77, E1 Protein**

**Catalog No. NR-3748**

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**Product Description:** The 29-peptide array spans the E1 protein of hepatitis C virus, H77 (genotype 1a; GenPept: AAB67036). Peptides are 15- to 18-mers, with 11 or 12 amino acid overlaps.

**Lot: T5267-1 to T5267-29**

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 29	4/14/2011	18	1 YQVRNSSGLYHVTNDPCN 18	2067.24	-0.97	83.3%	85.8%
2 of 29	4/14/2011	18	8 GLYHVTNDPCNSSIVYEA 25	1982.17	-0.17	88.1%	89.5%
3 of 29	4/14/2011	17	15 DCPNSSIVYEAADAILH 31	1818.01	0.19	90.8%	88.9%
4 of 29	4/14/2011	16	21 IVYEAADAILHTPGCV 36	1671.95	0.93	86.4%	87.0%
5 of 29	4/14/2011	15	26 ADAILHTPGCVPCVR 40	1551.86	0.65	80.5%	81.9%
6 of 29	4/14/2011	17	30 LHTPGCVPCVREGNASR 46	1796.07	-0.34	91.2%	79.9%
7 of 29	4/14/2011	16	36 VPCVREGNASRCWVAV 51	1746.06	0.36	92.3%	83.6%
8 of 29	4/14/2011	18	41 EGNASRCWVAVTPTVATR 58	1918.18	-0.07	83.8%	84.9%
9 of 29	4/14/2011	15	48 WVAV/TPTVATRDGKL 62	1613.89	0.21	86.0%	82.5%
10 of 29	4/14/2011	18	52 TPTVATRDGKLPTTQLRR 69	2011.33	-0.99	87.3%	76.9%
11 of 29	4/14/2011	17	59 DGKLPTTQLRRHIDLLV 75	1975.34	-0.36	81.2%	77.6%
12 of 29	4/14/2011	16	65 TQLRRHIDLLVGSATL 80	1793.12	0.24	92.1%	79.7%
13 of 29	4/14/2011	17	70 HIDLLVGSATLCSALYV 86	1775.11	1.38	91.0%	88.2%
14 of 29	4/14/2011	18	76 GSATLCSALYVGDLCGSV 93	1715.98	1.07	84.0%	88.3%
15 of 29	4/14/2011	18	83 ALYVGDLCGSVFLVGQLF 100	1901.27	1.52	Crude	89.3%
16 of 29	4/14/2011	18	90 CGSVFLVGQLFTFSPRRH 107	2051.42	0.36	91.5%	81.9%
17 of 29	4/14/2011	18	97 GQLFTFSPRRHWTTQDCN 114	2194.43	-1.12	93.8%	82.8%
18 of 29	4/14/2011	18	104 PRRHWTTQDCNCSIYPGH 121	2171.42	-1.36	93.7%	79.2%
19 of 29	4/14/2011	18	110 TQDCNCSIYPGHITGHRM 127	2033.31	-0.63	91.0%	81.6%
20 of 29	4/14/2011	17	117 IYPGHITGHRMAWDMMM 133	2047.49	-0.08	87.1%	81.8%
21 of 29	4/14/2011	18	123 TGHRMAWDMMMNWSPTAA 140	2094.46	-0.43	85.0%	86.0%
22 of 29	4/14/2011	18	130 DMMMNWSPTAALVVAQLL 147	1991.44	0.91	90.3%	89.7%
23 of 29	4/14/2011	18	137 PTAALVVAQLLRIPQAIM 154	1905.39	1.25	95.8%	89.0%
24 of 29	4/14/2011	18	144 AQLLRIPQAIMDMIAGAH 161	1949.39	0.66	90.6%	85.1%

# Certificate of Analysis for NR-3748

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
25 of 29	4/14/2011	17	150 PQAIMDMIAGAHWGVLA 166	1781.14	0.85	90.9%	88.7%
26 of 29	4/14/2011	18	156 MIAGAHWGVLAGIAYFSM 173	1895.29	1.3	93.5%	89.3%
27 of 29	4/14/2011	18	163 GVLAGIAYFSMVGWAKV 180	1883.26	1.08	84.1%	89.5%
28 of 29	4/14/2011	18	170 YFSMVGWAKVLLVLLLF 187	2099.63	1.69	85.2%	90.2%
29 of 29	4/14/2011	16	177 WAKVLLVLLLFAGVDA 192	1714.14	1.97	Crude	87.5%

<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 29	Expected		1.00	4.00	1.00	1.00	1.00	1.00		1.00				1.00	2.00	1.00		2.00	2.00
	Actual		0.89	3.71	0.43 <sup>a</sup>	0.98	1.08	0.96		0.99				0.93	1.95	1.00		2.22	1.85
2 of 29	Expected	1.00		3.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	2.00	1.00		2.00	2.00
	Actual	1.00		2.76	0.47 <sup>a</sup>	0.98	1.02	0.88	0.71 <sup>b</sup>	1.02				1.14	1.97	0.87		2.02	1.42 <sup>b</sup>
3 of 29	Expected	3.00		3.00	1.00	1.00		1.00	2.00	1.00				1.00	2.00			1.00	1.00
	Actual	2.86		3.07	0.38 <sup>a</sup>	0.94		1.10	1.34 <sup>b</sup>	0.80				1.00	1.99			0.94	0.63 <sup>b</sup>
4 of 29	Expected	3.00		1.00	1.00	1.00	1.00	1.00	2.00	1.00				1.00		1.00		1.00	2.00
	Actual	2.83		0.85	0.36 <sup>a</sup>	0.93	1.13	1.11	1.31 <sup>b</sup>	0.81				1.07		1.00		1.06	1.39 <sup>b</sup>
5 of 29	Expected	2.00	1.00	1.00	2.00		1.00	1.00	1.00	1.00				2.00		1.00			2.00
	Actual	2.00	0.84	1.00	0.87 <sup>a</sup>		1.13	1.18	0.87	0.74				2.10		0.94			1.75
6 of 29	Expected	1.00	2.00	1.00	2.00	1.00	2.00	1.00		1.00				2.00	1.00	1.00			2.00
	Actual	0.98	1.85	0.85	0.58 <sup>a</sup>	0.91	2.05	1.05		0.98				2.00	0.98	0.99			1.80
7 of 29	Expected	2.00	2.00	1.00	2.00	1.00	1.00							1.00	1.00		1.00		4.00
	Actual	1.85	2.00	0.88	0.84 <sup>a</sup>	0.91	1.10							0.99	0.96		0.00 <sup>c</sup>		3.71
8 of 29	Expected	3.00	2.00	1.00	1.00	1.00	1.00							1.00	1.00	3.00	1.00		3.00
	Actual	2.73	2.00	0.84	0.96 <sup>a</sup>	0.93	1.06							1.05	1.00	2.70	0.00 <sup>c</sup>		2.77
9 of 29	Expected	2.00	1.00	1.00			1.00			1.00	1.00			1.00		3.00	1.00		3.00
	Actual	1.85	1.03	1.00			1.02			0.92	0.82			1.00		2.72	0.00 <sup>c</sup>		2.76
10 of 29	Expected	1.00	3.00	1.00		1.00	1.00			2.00	1.00			2.00		5.00			1.00
	Actual	0.92	2.80	0.88		0.90	1.06			1.83	0.87			2.00		4.59			0.96
11 of 29	Expected		2.00	2.00		1.00	1.00	1.00	1.00	4.00	1.00			1.00		2.00			1.00
	Actual		2.06	1.93		0.93	1.04	1.00	0.87	3.80	1.04			1.00		1.94			0.94
12 of 29	Expected	1.00	2.00	1.00		1.00	1.00	1.00	1.00	4.00					1.00	2.00			1.00
	Actual	1.00	1.80	0.88		0.86	0.85	0.82	0.75	3.71					0.98	1.67			0.85
13 of 29	Expected	2.00		1.00	1.00		1.00	1.00	1.00	4.00					2.00	1.00		1.00	2.00
	Actual	2.03		0.80	0.53 <sup>a</sup>		1.00	0.84	0.75	3.84					2.04	1.00		0.90	2.07
14 of 29	Expected	2.00		1.00	2.00		3.00			3.00					3.00	1.00		1.00	2.00
	Actual	2.00		1.03	0.99 <sup>a</sup>		2.76			2.60					2.71	0.75		1.12	1.86
15 of 29	Expected	1.00		1.00	1.00	1.00	3.00			4.00			2.00		1.00			1.00	3.00
	Actual	0.86		0.88	0.69 <sup>a</sup>	1.07	3.00			3.57			1.73		0.95			0.95	2.88
16 of 29	Expected		2.00		1.00	1.00	2.00	1.00		2.00			3.00	1.00	2.00	1.00			2.00
	Actual		2.00		0.56 <sup>a</sup>	1.02	1.98	1.07		1.74			2.77	0.97	1.91	0.99			1.80

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)
17 of 29	Expected		2.00	2.00	1.00	2.00	1.00	1.00		1.00			2.00	1.00	1.00	3.00	1.00		
	Actual		2.03	1.68	0.52 <sup>a</sup>	1.78	1.07	1.00		0.92			1.95	1.06	0.97	2.65	0.00 <sup>c</sup>		
18 of 29	Expected		2.00	2.00	2.00	1.00	1.00	2.00	1.00					2.00	1.00	2.00	1.00	1.00	
	Actual		2.11	1.61	0.88 <sup>a</sup>	0.96	1.01	2.09	0.75					2.00	0.95	1.94	0.00 <sup>c</sup>	0.85	
19 of 29	Expected		1.00	2.00	2.00	1.00	2.00	2.00	2.00			1.00		1.00	1.00	2.00			1.00
	Actual		1.04	1.71	0.86 <sup>a</sup>	0.86	1.96	2.07	1.70			0.88		1.00	0.95	1.80		0.97	
20 of 29	Expected	1.00	1.00	1.00			2.00	2.00	2.00			4.00		1.00		1.00	1.00	1.00	
	Actual	1.02	1.02	0.77			1.99	1.61	1.82			3.65		1.00		0.94	0.00 <sup>c</sup>	0.85	
21 of 29	Expected	3.00	1.00	2.00			1.00	1.00				4.00		1.00	1.00	2.00	2.00		
	Actual	2.72	1.08	1.84			1.07	1.06				3.65		1.00	1.07	2.00	0.00 <sup>c</sup>		
22 of 29	Expected	3.00		2.00		1.00				3.00		3.00		1.00	1.00	1.00	1.00		2.00
	Actual	2.98		1.79		0.93				2.69		2.79		1.05	0.96	1.00	0.00 <sup>c</sup>		1.14 <sup>b</sup>
23 of 29	Expected	4.00	1.00			2.00			2.00	3.00		1.00		2.00		1.00			2.00
	Actual	4.00	1.02			1.97			1.99	2.71		0.95		2.15		1.00			1.18 <sup>b</sup>
24 of 29	Expected	4.00	1.00	1.00		2.00	1.00	1.00	3.00	2.00		2.00		1.00					
	Actual	3.73	1.09	0.89		2.01	1.05	1.07	2.74	1.93		1.94		1.00					
25 of 29	Expected	4.00		1.00		1.00	2.00	1.00	2.00	1.00		2.00		1.00				1.00	1.00
	Actual	3.66		1.04		1.06	2.09	0.97	1.81	0.77		1.70		1.12				0.00 <sup>c</sup>	1.00
26 of 29	Expected	4.00					3.00	1.00	2.00	1.00		2.00	1.00		1.00		1.00	1.00	1.00
	Actual	3.63					3.17	0.97	1.91	1.14		1.76	0.94		0.97		0.00 <sup>c</sup>	1.00	0.94
27 of 29	Expected	3.00		1.00			3.00		1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	3.00
	Actual	2.82		0.97			3.17		0.94	1.00	1.04	0.90	1.10		0.96		0.00 <sup>c</sup>	0.99	3.00
28 of 29	Expected	1.00		1.00			1.00			4.00	1.00	1.00	2.00		1.00		1.00	1.00	4.00
	Actual	1.04		0.78			1.00			3.95	1.01	0.73	1.96		0.93		0.00 <sup>c</sup>	1.04	3.29 <sup>b</sup>
29 of 29	Expected	3.00		1.00			1.00			4.00	1.00		1.00					1.00	4.00
	Actual	2.75		1.04			1.14			3.22	1.00		0.74					0.00 <sup>c</sup>	2.46 <sup>b</sup>

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

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

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

Date: 23 AUG 2011

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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