

Peptide Array, Hepatitis C Virus, H77, E1 Protein

Catalog No. NR-3748

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

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: N667-1 to N667-29

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 ^a	Peptide Content ^b
1 of 29	7/27/2006	18	1 YQVRNSSGLYHVTNDPCPN 18	2067.24	-0.97	88.8%	85.8%
2 of 29	7/27/2006	18	8 GLYHVTNDPCNSSIVYE A 25	1982.17	-0.17	80.9%	89.7%
3 of 29	7/27/2006	17	15 DCPNSSIVYEAADAILH 31	1818.01	0.19	91.7%	88.9%
4 of 29	7/27/2006	16	21 IVYEAADAILHTPGCV 36	1671.95	0.93	89.7%	88.0%
5 of 29	7/27/2006	15	26 ADAILHTPGCVPCVR 40	1551.86	0.65	92.7%	81.9%
6 of 29	7/27/2006	17	30 LHTPGCVPCVREGNASR 46	1796.07	-0.34	97.7%	79.8%
7 of 29	7/27/2006	16	36 VPCVREGNASRCWVAV 51	1746.06	0.36	99.7%	83.6%
8 of 29	7/27/2006	18	41 EGNASRCWVAVTPTVATR 58	1918.18	-0.07	100.0%	84.9%
9 of 29	7/27/2006	15	48 WVAVTPTVATRDGKL 62	1613.89	0.21	99.5%	82.5%
10 of 29	7/27/2006	18	52 TPTVATRDGKLPTTQLRR 69	2011.33	-0.99	96.6%	77.9%
11 of 29	7/27/2006	17	59 DGKLPTTQLRRHIDLLV 75	1975.34	-0.36	90.0%	77.6%
12 of 29	7/27/2006	16	65 TQLRRHIDLLVGSATL 80	1793.12	0.24	81.5%	79.7%
13 of 29	7/27/2006	17	70 HIDLLVGSATLCSALYV 86	1775.11	1.38	90.6%	88.6%
14 of 29	7/27/2006	18	76 GSATLCSALYVGDLCGSV 93	1715.98	1.07	83.0%	88.3%
15 of 29	7/27/2006	18	83 ALYVGDLCGSVFLVQLF 100	1901.27	1.52	Crude	89.3%
16 of 29	7/27/2006	18	90 CGSVFLVQLFTFSPRRH 107	2051.42	0.36	90.5%	81.8%
17 of 29	7/27/2006	18	97 GQLFTFSPRRHWTTQDCN 114	2194.43	-1.12	93.0%	82.8%
18 of 29	7/27/2006	18	104 PRRHWTTQDCNCSIYPGH 121	2171.42	-1.36	93.9%	79.2%
19 of 29	7/27/2006	18	110 TQDCNCSIYPGHITGHRM 127	2033.31	-0.63	98.7%	81.7%
20 of 29	7/27/2006	17	117 IYPGHITGHRMAWDMMM 133	2047.49	-0.08	94.3%	81.8%
21 of 29	7/27/2006	18	123 TGHMAWDMMMNWSPTAA 140	2094.46	-0.43	92.7%	86.0%
22 of 29	7/27/2006	18	130 DMMMNWSPTAALVVAQLL 147	1991.44	0.91	82.7%	89.7%
23 of 29	7/27/2006	18	137 PTAALVVAQLLRIPQAIM 154	1905.39	1.25	98.4%	89.3%
24 of 29	7/27/2006	18	144 AQLLRIPQAIMDMIAGAH 161	1949.39	0.66	95.0%	85.1%
25 of 29	7/27/2006	17	150 PQAIDMIAGAHWGVLA 166	1781.14	0.85	97.1%	88.7%
26 of 29	7/27/2006	18	156 MIAGAHWGVLAGIAYFSM 173	1895.29	1.3	85.2%	89.3%
27 of 29	7/27/2006	18	163 GVLAGIAYFSMVGNWAKV 180	1883.26	1.08	84.6%	89.2%
28 of 29	7/27/2006	18	170 YFSMVGNWAKVLLVLLLF 187	2099.63	1.69	90.8%	90.2%
29 of 29	7/27/2006	16	177 WAKVLLVLLLFAGVDA 192	1714.14	1.97	Crude	88.3%

^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 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	0.41 ^a	0.98	1.08	0.96		0.99				0.93	2.02	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	0.46 ^a	0.98	1.02	0.88	0.69 ^b	1.02				1.14	2.14	0.87		2.02	1.39 ^b
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	0.35 ^a	0.94		1.13	1.32 ^b	0.80				1.00	1.99			0.94	0.61 ^b
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		0.75	0.33 ^a	0.93	1.13	1.21	1.29 ^b	0.77				1.07		1.00		1.06	1.36 ^b
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	0.85 ^a		1.13	1.18	0.87	0.71				2.17		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	0.81	0.56 ^a	0.91	2.05	1.05		0.98				2.00	0.98	0.99			1.78
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	0.82 ^a	0.91	1.10							0.99	1.01		0.00 ^c		3.68
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	0.94 ^a	0.93	1.06							1.05	1.00	2.61	0.00 ^c		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	1.83	1.03	1.00			1.02			0.92	0.82			1.00		2.69	0.00 ^c		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	3.77	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	3.63					1.04	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	0.51 ^a		1.00	0.84	0.73	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	0.98 ^a		2.76			2.60					2.66	0.71		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	1.21		1.15	0.68 ^a	1.07	3.00			3.57				1.69		1.03		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		0.54 ^a	1.02	1.98	1.07		1.71				2.42	0.97	1.83	0.99		1.78
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	0.49 ^a	1.78	1.07	1.00		0.92				1.91	1.06	1.05	2.63	0.00 ^c	
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	0.85 ^a	0.96	1.01	2.09	0.75					2.00	0.95	1.94	0.00 ^c	0.82	
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	1.67	0.84 ^a	0.86	1.96	2.07	1.70				0.88	1.00	0.92	1.76		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 ^c	0.82	
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 ^c		
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		1.76		0.93				2.69			2.79	1.05	0.96	1.00	0.00 ^c		1.12 ^b
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	2.66			0.95	2.15		1.00			1.15 ^b
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	3.32		1.04		1.06	2.09	0.97	1.73	0.77			1.70		1.12			0.00 ^c	1.00
26 of 29	Expected	4.00					3.00	1.00	2.00	1.00			2.00	1.00				1.00	1.00
	Actual	3.63					3.17	0.97	1.91	1.14			1.76	0.91		1.02		0.00 ^c	1.00
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	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 ^c	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		0.74			1.00			3.95	1.01	0.73	1.96		0.90		0.00 ^c	1.04	3.27 ^b
29 of 29	Expected	3.00		1.00			1.00			4.00	1.00		1.00					1.00	4.00
	Actual	2.73		1.04			1.14			1.97	1.00		0.74					0.00 ^c	2.44 ^b

^aCys was partially destroyed during hydrolysis

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

^cTrp was completely destroyed during hydrolysis

Date: 23 APR 2011

Signature: *Dorothy C. Young*

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.

