

Peptide Array, Hepatitis C Virus, H77, NS4B Protein

Catalog No. NR-3754

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Product Description: The 40-peptide array spans the NS4B protein of hepatitis C virus, H77 (genotype 1a; GenPept: AAB67036). Peptides are 12- to 18-mers, with 11 or 12 amino acid overlaps.

Lot: N673-1 to N673-40

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 40	7/27/2006	18	1 SQHLPYIEQGMMLAEQFK 18	2150.52	-0.46	100.0%	86.3%
2 of 40	7/27/2006	18	8 EQGMMLAEQFKQKALGLL 25	2035.47	-0.04	95.6%	85.6%
3 of 40	7/27/2006	18	15 EQFKQKALGLLQTASRHA 32	2026.34	-0.66	89.8%	78.0%
4 of 40	7/27/2006	18	22 LGLLQTASRHAEVITPAV 39	1876.2	0.6	96.7%	84.6%
5 of 40	7/27/2006	18	29 SRHAEVITPAVQTNWQKL 46	2078.38	-0.56	86.2%	82.0%
6 of 40	7/27/2006	18	36 TPAVQTNWQKLEFWAKH 53	2183.52	-0.62	83.3%	82.7%
7 of 40	7/27/2006	16	43 WQKLEFWAKHMWNFI 58	2163.59	-0.15	88.8%	82.6%
8 of 40	7/27/2006	18	48 VFWAKHMWNFISGIQYLA 65	2211.64	0.54	89.0%	86.6%
9 of 40	7/27/2006	16	55 WNFISGIQYLAGLSTL 70	1783.07	0.79	100.0%	88.7%
10 of 40	7/27/2006	18	60 GIQYLAGLSTLPGNPAIA 77	1756.05	0.64	97.0%	88.5%
11 of 40	7/27/2006	18	67 LSTLPGNPAIASLMAFTA 84	1775.11	0.98	89.5%	88.6%
12 of 40	7/27/2006	17	74 PAIASLMAFTAAVTSP 90	1661.01	1.4	Crude	87.9%
13 of 40	7/27/2006	18	80 MAFTAAVTSP 97	1823.15	0.88	89.8%	88.9%
14 of 40	7/27/2006	18	87 TSPLTTGQTL 104	1919.23	0.46	100.0%	89.4%
15 of 40	7/27/2006	18	93 GQTL 110	1872.21	1.04	93.8%	89.1%
16 of 40	7/27/2006	18	100 ILGGWVAAQLA 117	1637.91	1.17	87.6%	87.8%
17 of 40	7/27/2006	18	107 AQLAAPGAATAFV 124	1556.8	1.22	80.7%	87.2%
18 of 40	7/27/2006	18	114 AATAFVGAGLAGAAIGSV 131	1503.73	1.61	Crude	86.8%
19 of 40	7/27/2006	18	121 AGLAGAAIGSVGLGKVLV 138	1552.89	1.61	94.0%	87.2%
20 of 40	7/27/2006	17	128 IGSVGLGKVLVDILAGY 144	1674.03	1.39	97.1%	88.0%
21 of 40	7/27/2006	18	134 GKVLVDILAGYGAGVAGA 151	1630.92	1.18	85.0%	87.7%
22 of 40	7/27/2006	18	141 LAGYGAGVAGALVAFKIM 158	1709.1	1.52	91.0%	88.2%
23 of 40	7/27/2006	15	148 VAGALVAFKIMSGEV 162	1491.83	1.47	92.8%	86.7%
24 of 40	7/27/2006	18	152 LVAFKIMSGEVPSTEDLV 169	1935.28	0.69	92.6%	89.5%
25 of 40	7/27/2006	18	159 SGEVPSTEDLVNLLPAIL 176	1867.14	0.56	99.6%	89.1%
26 of 40	7/27/2006	18	166 EDLVNLLPAILSPGALVV 183	1833.22	1.38	94.4%	88.9%
27 of 40	7/27/2006	18	173 PAILSPGALVVGVC 190	1650.07	2.13	89.0%	87.9%
28 of 40	7/27/2006	16	180 ALVVGVVCAAILRRHV 195	1676.12	1.78	89.5%	78.6%
29 of 40	7/27/2006	18	185 VVCAAILRRHVGP 202	1804.16	0.81	100.0%	79.8%
30 of 40	7/27/2006	18	192 RRHVGP 209	2076.43	-0.58	95.5%	78.5%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
31 of 40	7/27/2006	16	199 EGAVQWMNRLIAFASR 214	1849.16	0.06	94.3%	84.4%
32 of 40	7/27/2006	15	204 WMNRLIAFASRGNHV 218	1772.08	-0.03	95.4%	79.5%
33 of 40	7/27/2006	17	208 LIAFASRGNHVSPTHYV 224	1869.13	0.18	94.0%	80.4%
34 of 40	7/27/2006	18	214 RGNHVSPTHYVPESDAAA 231	1908.03	-0.82	99.0%	80.7%
35 of 40	7/27/2006	17	221 THYVPESDAAARVTAIL 237	1814.04	0.24	89.0%	84.1%
36 of 40	7/27/2006	16	227 SDAARVTAILSSLTV 242	1574.81	0.99	89.0%	87.4%
37 of 40	7/27/2006	18	232 RVTAILSSLTVTQLLRRL 249	2040.5	0.72	81.1%	81.7%
38 of 40	7/27/2006	15	239 SLTVTQLLRRLHQWI 253	1864.24	0.11	97.8%	80.3%
39 of 40	7/27/2006	18	243 TQLLRRLHQWISSECTTP 260	2169.51	-0.58	99.3%	82.6%
40 of 40	7/27/2006	12	250 HQWISSECTTPC 261	1391.56	-0.52	91.1%	85.9%

^a% full-length
^bRemainder 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 40	Expected	1.00				5.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00				1.00
	Actual	0.90				4.90	1.00	1.02	0.72	1.76	0.85	1.71	1.01	1.00	0.94				0.89
2 of 40	Expected	2.00				5.00	2.00			4.00	2.00	2.00	1.00						
	Actual	2.08				4.80	2.21			3.94	1.83	2.00	1.25						
3 of 40	Expected	3.00	1.00			4.00	1.00	1.00		3.00	2.00		1.00		1.00	1.00			
	Actual	2.84	0.94			4.01	1.19	1.00		3.23	1.81		1.29		0.87	1.22			
4 of 40	Expected	3.00	1.00			2.00	1.00	1.00	1.00	3.00				1.00	1.00	2.00			2.00
	Actual	2.66	1.04			1.77	1.01	1.04	0.68 ^a	2.62				1.00	0.97	1.84			1.41 ^a
5 of 40	Expected	2.00	1.00	1.00		3.00		1.00	1.00	1.00	1.00			1.00	1.00	2.00	1.00		2.00
	Actual	1.90	0.97	0.75		2.62		1.11	0.65 ^a	1.00	0.82			1.18	0.88	1.96	0.00 ^b		1.49 ^a
6 of 40	Expected	2.00		1.00		3.00		1.00		1.00	2.00		1.00	1.00		2.00	2.00		2.00
	Actual	1.75		0.92		2.90		1.00		0.97	1.65		0.84	1.20		1.81	0.00 ^b		1.76
7 of 40	Expected	1.00		1.00		2.00		1.00	1.00	1.00	2.00	1.00	2.00					3.00	1.00
	Actual	1.10		1.00		1.97		1.29	1.03	1.14	1.79	0.99	1.95					0.00 ^b	0.87
8 of 40	Expected	2.00		1.00		1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00		1.00		2.00	1.00	1.00
	Actual	1.70		0.85		0.78	0.98	1.00	1.73	0.95	0.87	0.95	1.63		0.85		0.00 ^b	1.04	0.84
9 of 40	Expected	1.00		1.00		1.00	2.00		2.00	3.00			1.00		2.00	1.00	1.00	1.00	1.00
	Actual	1.01		0.86		0.81	2.21		1.75	2.73			1.00		1.99	1.00	0.00 ^b	1.09	
10 of 40	Expected	3.00		1.00		1.00	3.00		2.00	3.00				2.00	1.00	1.00			1.00
	Actual	2.56		0.91		0.87	2.92		2.03	2.68				1.89	1.00	0.91			1.17
11 of 40	Expected	4.00		1.00			1.00		1.00	3.00		1.00	1.00	2.00	2.00	2.00			
	Actual	3.60		0.93			1.00		1.14	2.99		1.09	1.23	2.20	2.11	1.95			
12 of 40	Expected	5.00							1.00	2.00		1.00	1.00	2.00	2.00	2.00			1.00
	Actual	4.01							1.02	1.81		0.92	1.15	1.91	2.00	1.72			1.03
13 of 40	Expected	3.00				1.00	1.00			3.00		1.00	1.00	1.00	1.00	5.00			1.00
	Actual	2.60				0.91	1.03			2.68		1.01	1.03	1.00	1.02	4.55			0.96
14 of 40	Expected			1.00		1.00	3.00		1.00	4.00			1.00	1.00	1.00	4.00	1.00		
	Actual			1.00		1.04	3.33		0.86	3.80			1.21	1.27	1.07	3.96	0.00 ^b		
15 of 40	Expected	3.00		1.00		2.00	3.00		1.00	4.00			1.00			1.00	1.00		1.00
	Actual	2.93		0.96		1.85	3.14		0.90	3.68			1.00			0.93	0.00 ^b		1.00
16 of 40	Expected	7.00				1.00	3.00		1.00	2.00				1.00		1.00	1.00		1.00
	Actual	6.71				1.00	3.20		0.90	1.98				1.25		0.94	0.00 ^b		1.05
17 of 40	Expected	8.00				1.00	3.00			2.00			1.00	1.00		1.00			1.00
	Actual	7.77				1.00	3.07			2.03			0.94	1.03		0.95			0.73
18 of 40	Expected	7.00					4.00		1.00	1.00			1.00		1.00				2.00
	Actual	6.55					3.65		0.87	1.03			0.98		1.00	0.94			1.82
19 of 40	Expected	4.00					5.00		1.00	3.00	1.00				1.00				3.00
	Actual	3.57					5.00		1.17	2.91	0.88				1.14				2.86
20 of 40	Expected	1.00		1.00			4.00		2.00	3.00	1.00				1.00			1.00	3.00
	Actual	1.08		0.92			4.00		1.82	2.61	0.79				1.05			1.20	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)
21 of 40	Expected	4.00		1.00			5.00		1.00	2.00	1.00							1.00	3.00
	Actual	3.67		1.00			4.98		0.95	1.79	0.90							1.02	2.79
22 of 40	Expected	5.00					4.00		1.00	2.00	1.00	1.00	1.00					1.00	2.00
	Actual	4.53					4.00		0.84	1.89	1.09	0.95	1.01					0.91	1.81
23 of 40	Expected	3.00				1.00	2.00		1.00	1.00	1.00	1.00	1.00		1.00				3.00
	Actual	2.66				1.00	2.25		0.76	0.96	0.89	0.85	0.94		1.11				2.75
24 of 40	Expected	1.00		1.00		2.00	1.00		1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00			3.00
	Actual	0.94		0.98		1.85	1.15		0.80	1.80	0.97	0.81	0.98	1.07	2.01	1.00			2.77
25 of 40	Expected	2.00			1.00	2.00	2.00				4.00	1.00		1.00	2.00		2.00		1.00
	Actual	1.82			1.03	1.94	2.00				3.54	0.89		1.16	1.77		1.70		1.03
26 of 40	Expected	2.00		2.00		1.00	1.00		1.00	5.00				2.00	1.00				3.00
	Actual	1.87		1.95		0.88	1.10		0.88	5.13				2.23	1.00				1.80 ^a
27 of 40	Expected	4.00			1.00		2.00		2.00	2.00				2.00	1.00				4.00
	Actual	3.62			0.46 ^c		1.98		1.86	2.07				1.98	1.00				1.72 ^a
28 of 40	Expected	3.00	2.00		1.00		1.00	1.00	1.00	2.00									5.00
	Actual	2.89	2.27		0.45 ^c		1.00	0.96	0.82	1.66									2.91 ^a
29 of 40	Expected	3.00	2.00		1.00	1.00	3.00	1.00	1.00	1.00				1.00					4.00
	Actual	2.66	2.26		0.48 ^c	1.00	2.95	1.00	0.81	0.92				1.10					2.89 ^a
30 of 40	Expected	1.00	3.00	1.00		2.00	3.00	1.00	1.00	1.00		1.00		1.00			1.00		2.00
	Actual	0.96	3.18	0.93		1.71	2.95	1.00	0.96	0.97		0.93		1.21			0.00 ^b		1.73
31 of 40	Expected	3.00	2.00	1.00		2.00	1.00		1.00	1.00		1.00	1.00		1.00		1.00		1.00
	Actual	2.61	2.16	0.93		1.69	1.13		1.00	0.93		1.05	1.13		0.98		0.00 ^b		0.75
32 of 40	Expected	2.00	2.00	2.00			1.00	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00
	Actual	1.93	1.87	1.84			1.18	1.00	1.03	1.00		0.89	1.17		1.06		0.00 ^b		0.86
33 of 40	Expected	2.00	1.00	1.00			1.00	2.00	1.00	1.00			1.00	1.00	2.00	1.00		1.00	2.00
	Actual	1.79	1.06	0.83			1.00	1.73	0.83	0.88			1.00	1.01	1.75	0.85		1.12	1.82
34 of 40	Expected	3.00	1.00	2.00		1.00	1.00	2.00						2.00	2.00	1.00		1.00	2.00
	Actual	2.75	1.22	1.75		1.00	1.13	2.14						2.00	1.98	1.04		1.16	1.97
35 of 40	Expected	4.00	1.00	1.00		1.00		1.00	1.00	1.00				1.00	1.00	2.00		1.00	2.00
	Actual	4.00	1.02	1.06		1.10		0.91	0.86	0.82				1.10	1.10	1.90		0.91	1.85
36 of 40	Expected	4.00	1.00	1.00					1.00	2.00					3.00	2.00			2.00
	Actual	3.62	1.00	1.01					0.79	1.87					3.01	1.89			2.13
37 of 40	Expected	1.00	3.00			1.00			1.00	5.00					2.00	3.00			2.00
	Actual	1.11	2.98			1.12			0.83	5.00					2.21	2.91			2.16
38 of 40	Expected		2.00			2.00		1.00	1.00	4.00					1.00	2.00	1.00		1.00
	Actual		1.91			1.90		1.00	0.98	3.64					1.01	1.66	0.00 ^b		1.09
39 of 40	Expected		2.00		1.00	3.00	1.00	1.00	1.00	3.00				1.00	2.00	3.00	1.00		
	Actual		2.16		0.53 ^c	2.92		1.11	0.92	2.91				1.29	2.00	2.87	0.00 ^b		
40 of 40	Expected				2.00	2.00		1.00	1.00					1.00	2.00	2.00	1.00		
	Actual				0.92 ^c	2.03		1.08	0.94					1.21	2.09	2.00	0.00 ^b		

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

^bTrp was completely destroyed during hydrolysis

^cCys was partially destroyed during hydrolysis

Date: 27 APR 2011

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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