

**Peptide Array, Hepatitis C Virus, J4, NS4B Protein**

**Catalog No. NR-3744**

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**Product Description:** The 40-peptide array spans the NS4B protein of hepatitis C virus, J4 (genotype 1b; GenPept: AAC15722). Peptides are 12- to 18-mers, with 11 or 12 amino acid overlaps.

**Lot: T5253-1 to T5253-40**

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 <sup>a</sup>	Peptide Content <sup>b</sup>
1 of 40	4/14/2011	18	1 ASQLPYIEQGMQLAEQFK 18	2081.39	-0.48	89.3%	90.2%
2 of 40	4/14/2011	18	8 EQGMQLAEQFKQKALGLL 25	2032.41	-0.34	94.2%	85.6%
3 of 40	4/14/2011	18	15 EQFKQKALGLLQTATKQA 32	2003.35	94.2	91.1%	82.5%
4 of 40	4/14/2011	18	22 LGLLQTATKQAEAAAPVV 39	1781.10	0.61	94.2%	88.5%
5 of 40	4/14/2011	18	29 TKQAEAAAPVVESKWRAL 46	1955.26	-0.31	93.6%	81.1%
6 of 40	4/14/2011	18	36 APVVESKWRALTFWAKH 53	2155.51	-0.39	90.8%	79.5%
7 of 40	4/14/2011	16	43 WRALETFWAKHMMWVNF 58	2136.53	-0.16	97.4%	82.4%
8 of 40	4/14/2011	18	48 TFWAKHMMWVNFISGIQYLA 65	2213.61	0.27	98.6%	85.6%
9 of 40	4/14/2011	16	55 WNFISGIQYLAGLSTL 70	1783.07	0.79	92.2%	88.7%
10 of 40	4/14/2011	18	60 GIQYLAGLSTLPGNPAIA 77	1756.05	0.64	97.4%	88.5%
11 of 40	4/14/2011	18	67 LSTLPGNPAIASLMAFTA 84	1775.11	0.98	92.3%	88.5%
12 of 40	4/14/2011	17	74 PAIASLMAFTASITSPL 90	1691.03	1.26	Crude	88.1%
13 of 40	4/14/2011	18	80 MAFTASITSPLTQNTLL 97	1910.23	0.58	92.9%	89.0%
14 of 40	4/14/2011	18	87 TSPLTQNTLLFNILGGW 104	1976.28	0.28	87.5%	89.7%
15 of 40	4/14/2011	17	94 NTLNLFNILGGWVAAQLA 110	1801.14	1.13	91.5%	87.8%
16 of 40	4/14/2011	18	100 ILGGWVAAQLAPPSAASA 117	1679.95	0.95	93.3%	88.1%
17 of 40	4/14/2011	18	107 AQLAPPSAASAFVAGIA 124	1598.83	1.04	87.1%	87.5%
18 of 40	4/14/2011	18	114 AASAFVAGIAGAAVGS 131	1489.70	1.64	Crude	85.7%
19 of 40	4/14/2011	18	121 AGIAGAAVGSIGLGKVLV 138	1552.89	1.65	99.7%	87.2%
20 of 40	4/14/2011	17	128 VGSIGLGKVLVDILAGY 144	1674.03	1.39	99.7%	88.0%
21 of 40	4/14/2011	18	134 GKVLVDILAGYGAGVAGA 151	1630.92	1.18	91.8%	87.5%
22 of 40	4/14/2011	18	141 LAGYGAGVAGALVAFKVM 158	1695.07	1.51	99.4%	88.0%
23 of 40	4/14/2011	15	148 VAGALVAFKVMMSGEV 162	1477.8	1.45	94.3%	86.6%
24 of 40	4/14/2011	18	152 LVAFKVMMSGEVPSTEDLV 169	1921.26	0.68	89.1%	89.6%
25 of 40	4/14/2011	18	159 SGEVPSTEDLVNLLPAIL 176	1867.14	0.56	93.1%	89.1%

Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC <sup>a</sup>	Peptide Content <sup>b</sup>
26 of 40	4/14/2011	18	166 EDLVNLLPAILSPGALVV 183	1833.22	1.38	91.5%	87.9%
27 of 40	4/14/2011	18	173 PAILSPGALVVGVCVAAI 190	1650.07	2.13	90.7%	87.9%
28 of 40	4/14/2011	16	180 ALVVGVCVCAAILRRHV 195	1676.12	1.78	84.6%	78.7%
29 of 40	4/14/2011	18	185 VVCVCAAILRRHVGPGEVAV 202	1804.16	0.81	95.4%	79.8%
30 of 40	4/14/2011	18	192 RRHVGPGEVAVQWMNRLI 209	2076.43	-0.58	91.2%	78.8%
31 of 40	4/14/2011	16	199 EGAVQWMNRLIAFASR 214	1849.16	0.06	95.8%	84.4%
32 of 40	4/14/2011	15	204 WMNRLIAFASRGNIHV 218	1772.08	-0.03	93.3%	79.6%
33 of 40	4/14/2011	17	208 LIAFASRGNIHVSPHYV 224	1869.13	0.18	93.6%	80.4%
34 of 40	4/14/2011	18	214 RGNHVSPHYVPESDAAA 231	1908.03	-0.82	85.7%	81.7%
35 of 40	4/14/2011	17	221 THYVPESDAAARVTQIL 237	1871.1	-0.07	99.3%	84.5%
36 of 40	4/14/2011	16	227 SDAAARVTQILSSLT 242	1645.89	0.68	98.2%	86.8%
37 of 40	4/14/2011	18	232 RV/TQILSSLTITQLL 249	2083.57	0.48	99.7%	82.4%
38 of 40	4/14/2011	15	239 SLTITQLLKRHLQWI 253	1850.25	0.17	93.5%	80.2%
39 of 40	4/14/2011	18	243 TQLLKRHLQWINECDSTP 260	2182.5	-0.86	94.6%	82.5%
40 of 40	4/14/2011	12	250 HQWINECDSTPC 261	1432.56	-0.98	95.2%	85.4%

<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 40	Expected	2.00				6.00	1.00		1.00	2.00	1.00	1.00	1.00	1.00	1.00			1.00	
	Actual	1.87				5.68	1.11		0.81	1.76	0.94	0.95	1.04	0.98	1.00			0.89	
2 of 40	Expected	2.00				6.00	2.00			4.00	2.00	1.00	1.00						
	Actual	1.97				5.70	2.10			3.77	1.73	1.00	1.10						
3 of 40	Expected	3.00				5.00	1.00			3.00	3.00		1.00			2.00			
	Actual	2.71				4.78	1.00			2.71	2.75		1.09			1.81			
4 of 40	Expected	5.00				3.00	1.00			3.00	1.00			1.00		2.00			2.00
	Actual	4.68				2.85	1.08			2.70	1.00			1.06		1.69			0.92 <sup>a</sup>
5 of 40	Expected	5.00	1.00			3.00				1.00	2.00			1.00	1.00	1.00	1.00		2.00
	Actual	4.80	1.00			2.95				0.96	2.03			1.04	0.94	0.75	0.00 <sup>b</sup>		0.58 <sup>a</sup>
6 of 40	Expected	3.00	1.00			2.00		1.00		1.00	2.00		1.00	1.00	1.00	1.00	2.00		2.00
	Actual	2.66	0.89			1.95		1.00		0.96	1.96		0.99	1.05	0.86	0.82	0.00 <sup>b</sup>		0.61 <sup>b</sup>
7 of 40	Expected	2.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	2.00			1.00	3.00		
	Actual	1.80	1.09	0.85		0.89		1.06	0.86	1.00	1.04	0.94	1.95			0.98	0.00 <sup>b</sup>		
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	1.00	2.00	1.00	
	Actual	1.70		0.80		0.85	1.03	1.01	1.71	0.87	0.89	0.99	2.00		0.95	0.90	0.00 <sup>b</sup>	1.08	
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	
	Actual	0.93		0.80		0.66	2.10		1.64	2.77			1.00		1.83	0.80	0.00 <sup>b</sup>	1.17	
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	2.86		1.00		0.82	3.10		1.81	3.00				2.13	0.83	0.89			0.82
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	3.70		0.95			1.15		1.03	2.80		0.99	1.08	2.00	1.91	1.66			
12 of 40	Expected	4.00							2.00	2.00		1.00	1.00	2.00	3.00	2.00			
	Actual	3.61							1.86	1.70		0.85	0.75	1.98	2.60	2.00			

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)
13 of 40	Expected	2.00		1.00		1.00			1.00	3.00		1.00	1.00	1.00	2.00	5.00			
	Actual	1.98		0.96		0.91			0.90	2.95		0.95	1.00	1.10	2.00	4.70			
14 of 40	Expected			2.00		1.00	2.00		1.00	4.00			1.00	1.00	1.00	4.00	1.00		
	Actual			1.75		0.93	1.94		0.85	3.78			1.15	1.13	1.00	3.65	0.00 <sup>b</sup>		
15 of 40	Expected	3.00		2.00		1.00	2.00		1.00	4.00			1.00			1.00	1.00		1.00
	Actual	2.70		1.71		1.00	2.10		0.94	3.50			1.16			0.98	0.00 <sup>b</sup>		0.99
16 of 40	Expected	6.00				1.00	2.00		1.00	2.00				2.00	2.00		1.00		1.00
	Actual	5.90				1.00	2.10		0.80	1.85				2.20	1.66		0.00 <sup>b</sup>		0.92
17 of 40	Expected	7.00				1.00	2.00		1.00	1.00			1.00	2.00	2.00				1.00
	Actual	6.70				0.97	2.00		0.96	1.02			0.94	1.95	2.00				0.93
18 of 40	Expected	7.00					4.00		2.00				1.00		2.00				2.00
	Actual	6.71					3.56		1.70				0.80		1.70				1.60
19 of 40	Expected	4.00					5.00		2.00	2.00	1.00				1.00				3.00
	Actual	4.00					5.00		2.11	1.88	0.94				0.97				2.70
20 of 40	Expected	1.00		1.00			4.00		2.00	3.00	1.00				1.00			1.00	3.00
	Actual	1.10		0.90			3.89		1.71	2.91	1.08				1.00			1.00	2.63
21 of 40	Expected	4.00		1.00			5.00		1.00	2.00	1.00							1.00	3.00
	Actual	3.80		1.07			5.10		0.99	1.89	1.00							1.14	2.70
22 of 40	Expected	5.00					4.00			2.00	1.00	1.00	1.00					1.00	3.00
	Actual	5.00					3.80			1.90	0.90	0.93	1.00					0.99	2.80
23 of 40	Expected	3.00				1.00	2.00			1.00	1.00	1.00	1.00		1.00				4.00
	Actual	2.70				0.87	2.10			1.10	0.73	0.83	0.80		1.00				3.60
24 of 40	Expected	1.00		1.00		2.00	1.00			2.00	1.00	1.00	1.00	1.00	2.00	1.00			4.00
	Actual	0.86		1.00		1.81	1.12			1.84	0.98	0.94	0.97	0.98	2.05	0.94			3.67
25 of 40	Expected	1.00		2.00		2.00	1.00		1.00	4.00				2.00	2.00	1.00			2.00
	Actual	1.00		1.70		1.65	1.06		0.89	3.80				1.88	1.94	1.00			1.75
26 of 40	Expected	2.00		2.00		1.00	1.00		1.00	5.00				2.00	1.00				3.00
	Actual	1.90		1.84		0.99	1.19		0.93	4.70				2.00	1.16				1.99 <sup>a</sup>
27 of 40	Expected	4.00			1.00		2.00		2.00	2.00				2.00	1.00				4.00
	Actual	3.79			0.53 <sup>c</sup>		2.00		1.81	1.90				1.91	1.11				2.48 <sup>a</sup>
28 of 40	Expected	3.00	2.00		1.00		1.00	1.00	1.00	2.00									5.00
	Actual	2.79	2.20		0.55 <sup>c</sup>		0.97	1.00	0.96	1.80									2.66 <sup>a</sup>
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	2.88	2.12		0.53 <sup>c</sup>	1.00	2.90	0.95	0.85	0.91				1.01					2.50 <sup>b</sup>
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	0.97	3.01	0.87		1.70	3.00	1.07	0.95	0.97		1.05		1.12			0.00 <sup>b</sup>		1.90
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	2.90	1.99	1.00		1.80	1.12		0.99	0.83		0.98	0.98		0.92		0.00 <sup>b</sup>		0.70
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	1.94	2.02	2.00			1.08	0.87	0.96	0.92		0.97	0.99		1.03		0.00 <sup>b</sup>		0.89
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	1.95	1.06	0.96			1.06	1.70	0.85	0.86			0.97	1.00	1.94	0.88		0.98	1.81
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	2.68	1.11	1.71		0.88	1.10	1.91						1.77	2.00	0.92		1.11	1.75
35 of 40	Expected	3.00	1.00	1.00		2.00	0.00	1.00	1.00	1.00				1.00	1.00	2.00		1.00	2.00
	Actual	2.80	1.03	0.86		1.75	0.00	1.04	0.80	0.87				1.00	0.99	1.69		0.93	1.67
36 of 40	Expected	3.00	1.00	1.00		1.00			2.00	2.00					3.00	2.00			1.00
	Actual	3.00	0.86	1.12		0.84			1.90	1.81					3.10	1.61			0.83

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)
37 of 40	Expected		2.00			2.00			2.00	5.00	1.00				2.00	3.00			1.00
	Actual		2.00			2.11			1.80	4.62	0.99				2.06	2.66			0.88
38 of 40	Expected		1.00			2.00		1.00	2.00	4.00	1.00				1.00	2.00	1.00		
	Actual		0.97			2.00		1.00	1.74	3.71	1.10				1.05	1.72	0.00 <sup>b</sup>		
39 of 40	Expected		1.00	2.00	1.00	3.00		1.00	1.00	3.00	1.00			1.00	1.00	2.00	1.00		
	Actual		1.12	2.00	0.55 <sup>c</sup>	2.90		1.10	0.95	2.78	1.03			1.10	1.15	2.05	0.00 <sup>b</sup>		
40 of 40	Expected			2.00	2.00	2.00		1.00	1.00					1.00	1.00	1.00	1.00		
	Actual			1.65	0.90 <sup>c</sup>	1.77		1.10	0.94					1.06	1.00	0.96	0.00 <sup>b</sup>		

<sup>a</sup>Val-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis  
<sup>b</sup>Trp was completely destroyed during hydrolysis  
<sup>c</sup>Cys was partially destroyed during hydrolysis

Date: 11 OCT 2011

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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