

Peptide Array, Hepatitis C Virus, H77, E2 Protein

Catalog No. NR-3749

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Product Description: The 56-peptide array spans the E2 protein of hepatitis C virus, H77 (genotype 1a; GenPept: AAB67036). Peptides are 13- to 19-mers, with 11 amino acid overlaps.

Lot: N668-1 to N668-56

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 56	7/27/2006	17	1 ETHVTGGNAGRTTAGLV 17	1640.79	-0.19	89.7%	82.8%
2 of 56	7/27/2006	18	7 GNAGRTTAGLVGLLTPGA 24	1625.86	0.41	86.0%	87.7%
3 of 56	7/27/2006	18	14 AGLVGLLTPGAKQNIQLI 31	1806.20	0.78	99.9%	88.8%
4 of 56	7/27/2006	18	21 TPGAKQNIQLINTNGSWH 38	1979.20	-0.86	97.9%	85.3%
5 of 56	7/27/2006	17	28 IQLINTNGSWHINSTAL 44	1882.12	0.08	90.3%	89.2%
6 of 56	7/27/2006	17	34 NGSWHINSTALNCNESL 50	1860.01	-0.51	88.6%	89.1%
7 of 56	7/27/2006	17	40 NSTALNCNESLNTGWLA 56	1807.97	-0.25	88.9%	88.8%
8 of 56	7/27/2006	18	46 CNESLNTGWLGLFYQHK 63	2081.36	-0.39	94.3%	85.9%
9 of 56	7/27/2006	18	53 GWLAGLFYQHKFNSSGCP 70	2012.29	-0.18	95.4%	85.5%
10 of 56	7/27/2006	18	60 YQHKFNSSGCPERLASCR 77	2083.35	-1.05	96.9%	78.5%
11 of 56	7/27/2006	17	67 SGCPERLASCRRLTDF 83	1882.17	-0.34	91.4%	80.5%
12 of 56	7/27/2006	17	73 LASCRRRLTDFAQGWGPI 89	1891.20	0.01	82.1%	84.7%
13 of 56	7/27/2006	19	79 LTDFAQGWGPISYANGSGL 97	1954.14	0.02	86.7%	89.6%
14 of 56	7/27/2006	18	87 GPISYANGSGLDERPYCW 104	1985.18	-0.66	86.1%	89.7%
15 of 56	7/27/2006	16	94 GSGLDERPYCWHYPPR 109	1933.15	-1.43	83.3%	80.9%
16 of 56	7/27/2006	18	99 ERPYCWHYPPRPGCIVPA 116	2141.52	-0.67	100.0%	82.4%
17 of 56	7/27/2006	18	106 YPPRPGCIVPAKSVCGPV 123	1840.26	0.26	84.1%	84.3%
18 of 56	7/27/2006	19	113 IVPKSVCGPVYCFTSPV 131	1964.39	0.87	81.6%	89.6%
19 of 56	7/27/2006	18	121 GPVYCFTSPVVVGTTDR 138	1895.18	0.24	88.5%	89.3%
20 of 56	7/27/2006	17	128 PSPVVVGTTDRSGAPTY 144	1703.88	-0.25	96.8%	88.2%
21 of 56	7/27/2006	15	134 GTTDRSGAPTYSWGA 148	1526.59	-0.87	99.4%	87.0%
22 of 56	7/27/2006	18	138 RSGAPTYSWGANDTDVFV 155	1943.08	-0.43	97.2%	89.5%
23 of 56	7/27/2006	16	145 SWGANDTDVFLNNTR 160	1808.94	-0.54	95.3%	88.8%
24 of 56	7/27/2006	18	150 DTDVFLNNTRPPLGNWF 167	2105.36	-0.35	97.1%	90.2%
25 of 56	7/27/2006	16	157 NNTRPPLGNWFGCTWM 172	1894.18	-0.7	89.0%	89.3%
26 of 56	7/27/2006	18	162 PLGNWFGCTWMNSTGFTK 179	2047.36	-0.26	87.7%	90.0%
27 of 56	7/27/2006	15	169 CTWMNSTGFTKVCGA 183	1605.89	0.25	Crude	87.6%
28 of 56	7/27/2006	16	173 NSTGFTKVCGAPPCVI 188	1593.90	0.56	93.5%	87.5%

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Table 1							
Peptide	Date of Mfg.	Length	Sequence	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b
29 of 56	7/27/2006	19	178 TKVCGAPPCVIGGVGNNTL 196	1800.14	0.56	86.5%	88.8%
30 of 56	7/27/2006	18	186 CVIGGVGNNTLLCPTDCF 203	1826.16	0.89	84.0%	88.9%
31 of 56	7/27/2006	17	193 NNTLLCPTDCFRKHPEA 209	1959.25	-0.76	82.3%	81.1%
32 of 56	7/27/2006	15	199 PTDCFRKHPEATYSR 213	1808.02	-1.51	86.5%	76.0%
33 of 56	7/27/2006	18	203 FRKHPEATYSRCGSGPW 220	2092.38	-0.92	86.7%	78.6%
34 of 56	7/27/2006	17	210 TYSRCGSGPWITPRCMV 226	1914.27	-0.15	85.7%	84.8%
35 of 56	7/27/2006	18	216 SGPWITPRCMVDYPYRLW 233	2240.65	-0.37	90.9%	86.8%
36 of 56	7/27/2006	17	223 RCMVDYPYRLWHYPCTI 239	2216.65	-0.29	96.4%	82.9%
37 of 56	7/27/2006	18	229 PYRLWHYPCTINYTIFKV 246	2314.76	-0.12	89.6%	83.5%
38 of 56	7/27/2006	18	236 PCTINYTIFKVRMYVGGV 253	2061.51	0.58	90.1%	85.8%
39 of 56	7/27/2006	18	243 IFKVRMYVGGVEHRLEAA 260	2075.48	0.22	86.3%	78.5%
40 of 56	7/27/2006	16	250 VGGVEHRLEAACNWTR 265	1798.03	-0.42	98.3%	79.8%
41 of 56	7/27/2006	17	255 HRLEAACNWTGERCDL 271	2030.29	-0.97	87.3%	78.1%
42 of 56	7/27/2006	16	261 CNWTRGERCDLEDNRD 276	2024.2	-2.01	90.6%	78.0%
43 of 56	7/27/2006	18	266 GERCDLEDNRSELSPLL 283	2103.31	-1.13	95.4%	82.2%
44 of 56	7/27/2006	17	273 DRDRSELSPLLSTTQW 289	2017.24	-0.83	95.6%	85.5%
45 of 56	7/27/2006	18	279 LSPLLSTTQWQVLPSCF 296	2033.44	0.76	95.8%	89.9%
46 of 56	7/27/2006	17	286 TTQWQVLPSCFTLPAL 302	1906.25	0.47	93.0%	89.3%
47 of 56	7/27/2006	18	292 LPCSFTLPALSTGLIHL 309	1884.29	1.12	92.3%	89.2%
48 of 56	7/27/2006	18	299 LPALSTGLIHLHQNIVDV 316	1940.29	0.78	98.4%	85.0%
49 of 56	7/27/2006	17	306 LIHLHQNIVDVQYLYGV 322	2024.37	0.56	91.1%	85.5%
50 of 56	7/27/2006	18	312 NIVDVQYLYGVGSSIASW 329	1971.21	0.56	87.1%	89.6%
51 of 56	7/27/2006	18	319 LYGVGSSIASWAIKWEYV 336	2029.34	0.54	81.4%	89.9%
52 of 56	7/27/2006	18	326 IASWAIKWEYVLLFLL 343	2177.72	1.75	81.4%	90.5%
53 of 56	7/27/2006	16	333 WEYVLLFLLADARV 348	1920.34	1.52	91.8%	89.4%
54 of 56	7/27/2006	18	338 LLFLLADARVCSCLWMM 355	2098.7	1.81	Crude	90.2%
55 of 56	7/27/2006	17	345 DARVCSCLWMMLLISQA 361	1940.41	1.09	83.9%	89.5%
56 of 56	7/27/2006	13	351 CLWMMLLISQAEA 363	1508.9	1.32	96.4%	86.9%
^a % full-length							
^b Remainder 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 56	Expected	2.00	1.00	1.00		1.00	4.00	1.00		1.00						4.00			2.00
	Actual	1.86	1.05	1.00		0.91	3.70	1.16		1.00						3.82			1.78
2 of 56	Expected	3.00	1.00	1.00			5.00			3.00				1.00		3.00			1.00
	Actual	2.76	1.12	1.00			4.71			2.69				0.90		2.81			0.80
3 of 56	Expected	2.00		1.00		2.00	3.00		2.00	4.00	1.00			1.00		1.00			1.00
	Actual	1.89		0.98		1.66	3.00		1.78	3.62	0.85			0.99		1.04			0.95
4 of 56	Expected	1.00		3.00		2.00	2.00	1.00	2.00	1.00	1.00			1.00	1.00	2.00	1.00		
	Actual	0.94		2.79		1.70	2.00	1.12	1.64	0.93	0.88			1.03	1.03	1.88	0.00 ^a		
5 of 56	Expected	1.00		3.00		1.00	1.00	1.00	3.00	2.00					2.00	2.00	1.00		
	Actual	1.08		2.78		0.97	1.14	1.09	2.66	2.15					2.00	1.93	0.00 ^a		
6 of 56	Expected	1.00		4.00	1.00	1.00	1.00	1.00	1.00	2.00					3.00	1.00	1.00		
	Actual	1.04		3.73	0.45 ^b	1.04	1.07	1.00	0.91	2.00					2.82	0.99	0.00 ^a		
7 of 56	Expected	2.00		4.00	1.00	1.00	1.00			3.00					2.00	2.00	1.00		
	Actual	2.00		3.75	0.51 ^b	1.09	1.13			2.74					2.09	1.96	0.00 ^a		
8 of 56	Expected	1.00		2.00	1.00	2.00	2.00	1.00		3.00	1.00		1.00		1.00	1.00	1.00	1.00	
	Actual	0.98		1.96	0.52 ^b	1.91	2.06	1.03		2.73	0.92		0.91		0.97	0.94	0.00 ^a	1.00	
9 of 56	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	1.00		1.03	0.48 ^b	0.96	2.86	0.97		1.76	0.88		1.77	1.03	1.89		0.00 ^a	1.02	
10 of 56	Expected	1.00	2.00	1.00	2.00	2.00	1.00	1.00		1.00	1.00		1.00	1.00	3.00			1.00	
	Actual	0.95	2.04	0.85	0.72 ^b	1.68	0.98	0.98		0.92	0.90		1.00	0.95	2.78			1.03	

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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)
11 of 56	Expected	2.00	3.00	1.00	2.00	1.00	1.00			2.00			1.00	1.00	2.00	1.00			
	Actual	1.80	2.88	1.01	0.94 ^b	0.98	1.01			1.86			0.96	1.00	1.74	1.07			
12 of 56	Expected	2.00	2.00	1.00	1.00	1.00	2.00		1.00	2.00			1.00	1.00	1.00	1.00	1.00		
	Actual	1.87	2.00	0.98	0.52 ^b	0.97	1.97		1.02	1.88			1.08	1.01	0.82	1.00	0.00 ^a		
13 of 56	Expected	2.00		2.00		1.00	4.00	0.00	1.00	2.00			1.00	1.00	2.00	1.00	1.00	1.00	
	Actual	1.92		1.82		1.04	4.00	0.00	1.07	1.97			1.13	1.13	1.91	0.96	0.00 ^a	1.17	
14 of 56	Expected	1.00	1.00	2.00	1.00	1.00	3.00		1.00	1.00				2.00	2.00		1.00	2.00	
	Actual	0.96	1.09	1.79	0.48 ^b	0.91	2.87		0.95	0.97				1.87	1.76		0.00 ^a	2.00	
15 of 56	Expected		2.00	1.00	1.00	1.00	2.00	1.00		1.00				3.00	1.00		1.00	2.00	
	Actual		2.09	0.92	0.49 ^b	0.95	2.00	1.02		0.97				2.70	0.91		0.00 ^a	1.95	
16 of 56	Expected	1.00	2.00		2.00	1.00	1.00	1.00	1.00					5.00			1.00	2.00	1.00
	Actual	0.88	2.16		0.91 ^b	0.93	1.00	1.10	0.71 ^c					4.70			0.00 ^a	1.99	0.61 ^c
17 of 56	Expected	1.00	1.00		2.00		2.00		1.00		1.00			5.00	1.00			1.00	3.00
	Actual	0.91	1.20		0.95 ^b		2.16		0.69 ^c		0.80			4.67	1.00			1.18	2.68 ^c
18 of 56	Expected	1.00			2.00		1.00		1.00		1.00		1.00	4.00	2.00	1.00		1.00	4.00
	Actual	0.97			0.93 ^b		1.14		0.65 ^c		1.00		1.09	3.68	1.84	1.02		0.79	3.40 ^c
19 of 56	Expected		1.00	1.00	1.00		2.00						1.00	3.00	1.00	3.00		1.00	4.00
	Actual		0.79	0.88	0.48 ^b		2.01						1.16	3.00	0.81	2.74		1.15	2.84 ^c
20 of 56	Expected	1.00	1.00	1.00			2.00							3.00	2.00	3.00		1.00	3.00
	Actual	1.00	1.11	0.91			2.03							2.77	1.81	2.71		1.04	1.67 ^c
21 of 56	Expected	2.00	1.00	1.00			3.00							1.00	2.00	3.00	1.00	1.00	
	Actual	1.67	1.09	0.86			2.86							1.00	1.91	2.81	0.00 ^a	1.04	
22 of 56	Expected	2.00	1.00	3.00			2.00						1.00	1.00	2.00	2.00	1.00	1.00	2.00
	Actual	1.81	1.03	2.76			2.00						0.78	1.03	1.75	1.79	0.00 ^a	1.03	1.82
23 of 56	Expected	1.00	1.00	5.00			1.00			1.00			1.00		1.00	2.00	1.00		2.00
	Actual	1.11	1.08	4.76			1.15			1.00			1.00		1.01	1.95	0.00 ^a		1.83
24 of 56	Expected		1.00	5.00			1.00			2.00			2.00	2.00		2.00	1.00		2.00
	Actual		1.22	4.78			1.17			1.96			1.84	2.25		2.00	0.00 ^a		1.76
25 of 56	Expected		1.00	3.00	1.00		2.00			1.00		1.00	1.00	2.00		2.00	2.00		
	Actual		1.08	2.63	0.49 ^b		2.00			1.03		1.02	1.09	1.99		1.76	0.00 ^a		
26 of 56	Expected			2.00	1.00		3.00			1.00	1.00	1.00	2.00	1.00	1.00	3.00	2.00		0.00
	Actual			1.77	0.45 ^b		2.94			0.99	0.92	0.90	2.03	1.00	0.84	2.83	0.00 ^a		0.00
27 of 56	Expected	1.00		1.00	2.00		2.00				1.00	1.00	1.00		1.00	3.00	1.00		1.00
	Actual	0.71		1.11	0.91 ^b		1.96				0.91	0.89	1.14		1.12	3.00	0.00 ^a		0.86
28 of 56	Expected	1.00		1.00	2.00		2.00		1.00		1.00		1.00	2.00	1.00	2.00			2.00
	Actual	1.14		1.00	0.98 ^b		2.08		0.53 ^c		1.00		1.06	2.07	0.90	1.75			1.61 ^c
29 of 56	Expected	1.00		2.00	2.00		4.00		1.00	1.00	1.00			2.00		2.00			3.00
	Actual	1.03		1.86	0.90 ^b		4.00		0.46 ^c	1.03	0.84			2.04		1.75			2.35 ^c
30 of 56	Expected			3.00	3.00		3.00		1.00	2.00			1.00	1.00		2.00			2.00
	Actual			2.67	1.43 ^b		3.00		0.63 ^c	1.94			1.06	1.09		1.79			1.65 ^c
31 of 56	Expected	1.00	1.00	3.00	2.00	1.00		1.00		2.00	1.00		1.00	2.00		2.00			
	Actual	1.00	0.89	3.15	0.92 ^b	0.91		1.05		2.23	0.94		1.00	2.08		2.00			
32 of 56	Expected	1.00	2.00	1.00	1.00	1.00		1.00			1.00		1.00	2.00	1.00	2.00		1.00	
	Actual	1.02	2.09	0.89	0.53 ^b	0.94		1.03			0.96		1.03	2.00	0.92	1.91		1.05	
33 of 56	Expected	1.00	2.00		1.00	1.00	2.00	1.00	1.00		1.00		1.00	2.00	2.00	1.00	1.00	1.00	
	Actual	1.00	2.05		0.50 ^b	0.91	2.06	1.09	0.89		1.01		0.98	1.89	1.86	1.07	0.00 ^a	1.10	
34 of 56	Expected		2.00		2.00		2.00		1.00			1.00		2.00	2.00	2.00	1.00	1.00	1.00
	Actual		2.06		0.90 ^b		2.13		0.85			0.94		1.91	2.00	1.77	0.00 ^a	1.05	0.91
35 of 56	Expected		2.00	1.00	1.00		1.00		1.00	1.00		1.00		3.00	1.00	1.00	2.00	2.00	1.00
	Actual		2.00	0.86	0.52 ^b		1.01		0.91	0.86		0.87		2.71	0.93	0.97	0.00 ^a	1.91	0.89

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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)
36 of 56	Expected		2.00	1.00	2.00			1.00	1.00	1.00		1.00		2.00		1.00	1.00	3.00	1.00
	Actual		2.11	1.02	0.93 ^b			1.00	0.88	1.06		0.94		1.86		0.89	0.00 ^a	2.76	0.96
37 of 56	Expected		1.00	1.00	1.00			1.00	2.00	1.00	1.00		1.00	2.00		2.00	1.00	3.00	1.00
	Actual		1.13	0.95	0.46 ^b			1.18	1.79	0.99	0.86		1.00	1.93		1.82	0.00 ^a	2.62	0.96
38 of 56	Expected		1.00	1.00	1.00		2.00		2.00		1.00	1.00	1.00	1.00		2.00		2.00	3.00
	Actual		0.79	1.03	0.49 ^b		1.93		1.83		1.08	1.07	0.81	1.00		1.75		1.75	2.80
39 of 56	Expected	2.00	2.00			2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00					1.00	3.00
	Actual	2.00	1.99			1.76	2.15	1.15	0.78	0.94	0.92	1.21	0.77					1.06	2.82
40 of 56	Expected	2.00	2.00	1.00	1.00	2.00	2.00	1.00		1.00						1.00	1.00		2.00
	Actual	1.85	2.16	0.82	0.51 ^b	1.71	2.00	1.16		1.00						1.04	0.00 ^a		1.78
41 of 56	Expected	2.00	3.00	2.00	2.00	2.00	1.00	1.00		2.00						1.00	1.00		
	Actual	2.00	3.16	1.76	1.11 ^b	1.88	1.07	1.00		1.95						1.08	0.00 ^a		
42 of 56	Expected		4.00	4.00	2.00	2.00	1.00			1.00						1.00	1.00		
	Actual		4.00	3.88	0.96 ^b	1.82	1.02			0.99						1.05	0.00 ^a		
43 of 56	Expected		3.00	3.00	1.00	3.00	1.00			4.00				1.00	2.00				
	Actual		3.21	3.00	0.48 ^b	2.96	1.11			3.65				1.12	2.15				
44 of 56	Expected		2.00	2.00		2.00				4.00				1.00	3.00	2.00	1.00		
	Actual		2.03	2.07		2.00				3.56				1.13	2.88	1.96	0.00 ^a		
45 of 56	Expected				1.00	2.00				5.00			1.00	2.00	3.00	2.00	1.00		1.00
	Actual				0.56 ^b	2.00				4.00			1.20	2.23	3.10	1.99	0.00 ^a		0.84
46 of 56	Expected	1.00			1.00	2.00				3.00			1.00	2.00	1.00	4.00	1.00		1.00
	Actual	1.00			0.51 ^b	1.91				2.59			1.16	2.10	1.07	3.71	0.00 ^a		0.90
47 of 56	Expected	1.00			1.00		1.00	1.00	1.00	5.00			1.00	2.00	2.00	3.00			
	Actual	1.10			0.46 ^b		1.13	0.82	0.87	4.60			1.13	1.99	2.00	2.86			
48 of 56	Expected	1.00		2.00		1.00	1.00	2.00	2.00	4.00				1.00	1.00	1.00			2.00
	Actual	1.01		1.89		0.99	1.08	1.79	1.15 ^c	3.99				1.00	1.03	0.99			1.85 ^c
49 of 56	Expected			2.00		2.00	1.00	2.00	2.00	3.00								2.00	3.00
	Actual			2.05		1.80	1.30	2.00	1.11 ^c	3.09								1.92	2.52 ^c
50 of 56	Expected	1.00		2.00		1.00	2.00		2.00	1.00					3.00		1.00	2.00	3.00
	Actual	1.00		1.81		0.78	2.03		1.37 ^c	1.16					2.75		0.00 ^a	2.05	2.44 ^c
51 of 56	Expected	2.00				1.00	2.00		2.00	1.00	1.00				3.00		2.00	2.00	2.00
	Actual	2.00				0.99	1.93		1.77	1.04	0.99				2.90		0.00 ^a	2.07	2.08
52 of 56	Expected	2.00				1.00			2.00	5.00	1.00		1.00		1.00		2.00	1.00	2.00
	Actual	2.15				0.86			2.00	3.56	0.72		0.95		0.84		0.00 ^a	0.75	0.92 ^c
53 of 56	Expected	2.00	1.00	1.00		1.00				5.00			1.00				1.00	1.00	3.00
	Actual	2.00	1.11	1.16		0.86				3.40			0.84				0.00 ^a	0.92	2.28 ^c
54 of 56	Expected	2.00	1.00	1.00	2.00					6.00		2.00	1.00		1.00		1.00		1.00
	Actual	1.79	1.11	1.00	0.92 ^b					3.70		2.16	0.78		0.86		0.00 ^a		0.97
55 of 56	Expected	2.00	1.00	1.00	2.00	1.00			1.00	3.00		2.00			2.00		1.00		1.00
	Actual	2.00	1.18	1.08	0.54 ^b	0.78			0.83	1.95		1.74			1.74		0.00 ^a		0.93
56 of 56	Expected	2.00			1.00	2.00			1.00	3.00		2.00			1.00		1.00		
	Actual	2.10			0.48 ^b	2.18			0.78	3.00		1.78			0.91		0.00 ^a		

^aTrp was completely destroyed during hydrolysis

^bCys was partially destroyed during hydrolysis

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

Certificate of Analysis for NR-3749

Date: 23 APR 2011

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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