

Peptide Array, Influenza Virus A/Vietnam/1203/2004 (H5N1) Hemagglutinin Protein

Catalog No. NR-50715

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Product Description: The 9-peptide array spans the hemagglutinin protein of the A/Vietnam/1203/2004 (H5N1) strain of influenza virus (GenPept: AAW80717). The initial 16-amino-acid signal peptide has been excluded; therefore, the array starts from the mature N-terminus. In addition, cysteine residues have been substituted with serine at positions C4, C42, C67 (peptide 2 of 9 only), C274, C467, C541, C548 and C551. Peptides are 75- to 80-mers, with 20 or 22 amino acid overlaps.

Lot: P5745-1 to P5745-9

Manufacturing Date: 14MAR2017

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 tables below.

Table 1

Peptide	Length	Sequence
1 of 9	80	1-DQISIGYHANNSTEQVDTIMEKNVTVTHAQDILEKKHNGKLSLDLGVKPLILRDCSVAGWLLGNPMCDEFINVPEWSYIV-80
2 of 9	80	61-LLGNPMSDEFINVPEWSYIVEKANPVNDLCYPGDFNDYEELKHLLSRINHFEDIQIIPKSSWSSHEASLGVSSACPYQGK-140
3 of 9	80	121-SWSSHEASLGVSSACPYQGKSSFFRNVVWLIKKNSTYPTIKRSYNNTNQEDLLVLWGIHHPNDAAEQTKLYQNPTTYISV-200
4 of 9	80	181-PNDAAEQTKLYQNPTTYISVGTSTLNQRLVPRIATRSKVNQSGRMEFFWTILKPNDAINFESNGNFIAPYAYKIVKKG-260
5 of 9	79	241-FESNGNFIAPYAYKIVKKG DSTIMKSELEYGNSNTKCQTPMGAINSSMPFHNIHPLTIGECKPKYVKS NRLVLATGLRN-319
6 of 9	80	300-GECKPKYVKS NRLVLATGLRNSPQRERRRKRGLFGAIAGFIEGGWQGMVDGWYGYHHSNEQSGYAADKESTQKAIDGVT-379
7 of 9	80	358-NEQSGGYAADKESTQKAIDGVTNKVNSIIDKMNTQFEAVGREFNLERRIENLNKKMEDGFLDVWVTYNAELLVLMENERT-437
8 of 9	80	418-FLDVWVTYNAELLVLMENERTLDFHDSNVKNLYDKVRLQLRDNAKELGNGSFEFYHKCDNECMESVRNGTYDYPQYSEEAR-497
9 of 9	75	478-CMESVRNGTYDYPQYSEEARLKREEISGVKLESIGIYQILSIYSTVASSLALAIMVAGLSLWMSSNGSLQSRISI-552

Table 2

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 9	Expected	3.00	1.00	13.00	2.00	8.00	5.00	3.00	7.00	7.00	5.00	2.00	1.00	3.00	5.00	4.00	2.00	2.00	7.00
	Actual	2.79	0.99	12.80	0.96 ^a	7.87	5.00	2.96	5.52 ^c	6.83	4.93	2.09	1.00	3.17	4.73	4.12	0.00 ^b	2.00	6.12 ^c
2 of 9	Expected	3.00	1.00	10.00	2.00	9.00	4.00	3.00	6.00	7.00	5.00	1.00	3.00	6.00	10.00		2.00	4.00	4.00
	Actual	3.14	0.99	9.77	1.55 ^a	8.86	4.05	3.13	4.13 ^c	6.83	4.87	0.93	2.92	5.92	9.74		0.00 ^b	4.05	2.88 ^c
3 of 9	Expected	4.00	2.00	9.00	1.00	7.00	3.00	3.00	4.00	6.00	5.00		2.00	4.00	11.00	6.00	3.00	5.00	5.00
	Actual	3.82	2.00	8.76	0.59 ^a	6.93	2.90	2.85	3.97	5.82	5.10		1.79	4.06	10.82	6.01	0.00 ^b	5.01	3.86 ^c
4 of 9	Expected	6.00	4.00	10.00		8.00	5.00		6.00	4.00	6.00	1.00	4.00	5.00	5.00	7.00	1.00	4.00	4.00
	Actual	5.88	4.14	9.99		8.06	4.91		5.21 ^c	4.03	5.78	1.00	4.00	4.97	4.95	7.02	0.00 ^b	3.84	2.94 ^c
5 of 9	Expected	4.00	2.00	9.00	2.00	6.00	6.00	2.00	6.00	5.00	7.00	3.00	3.00	5.00	7.00	5.00		4.00	3.00
	Actual	3.84	1.98	8.89	1.25 ^a	5.95	6.12	2.00	5.42 ^c	4.88	6.81	3.03	2.84	4.93	6.92	4.99		3.92	2.26 ^c
6 of 9	Expected	6.00	7.00	6.00	1.00	9.00	13.00	2.00	3.00	4.00	6.00	1.00	2.00	2.00	5.00	3.00	2.00	4.00	4.00
	Actual	6.04	6.86	6.00	0.33 ^a	8.91	13.04	2.04	3.06	3.94	6.13	1.03	1.78	2.06	4.84	3.13	0.00 ^b	3.96	3.84
7 of 9	Expected	5.00	4.00	15.00		13.00	5.00		4.00	6.00	6.00	3.00	3.00		3.00	5.00	1.00	2.00	5.00
	Actual	5.05	4.05	14.79		12.94	4.92		2.88 ^c	5.94	5.78	2.88	3.03		2.89	4.98	0.00 ^b	2.05	4.72
8 of 9	Expected	3.00	5.00	15.00	2.00	11.00	3.00	2.00		9.00	4.00	2.00	4.00	1.00	4.00	3.00	1.00	6.00	5.00
	Actual	3.02	5.00	14.91	2.09 ^a	10.96	3.04	2.03		8.72	3.86	1.94	3.86	1.05	4.06	3.00	0.00 ^b	6.06	4.88
9 of 9	Expected	5.00	4.00	3.00	1.00	9.00	5.00		8.00	8.00	2.00	3.00		1.00	14.00	2.00	1.00	5.00	4.00
	Actual	4.73	3.89	3.01	0.34 ^a	9.03	4.85		8.10	7.95	2.06	3.07		0.77	13.75	1.98	0.00 ^b	4.96	3.87

^aCys was partially destroyed during hydrolysis.

^bTrp was completely destroyed during hydrolysis.

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

Table 3

Peptide	Molecular Weight (amu)	Hydrophilicity	Purity by HPLC ^a	Peptide Content ^b	Solubility	Solvent
1 of 9	8969.18	0.49	98.4%	88.7%	1 mg/mL	100% DMSO
2 of 9	9098.22	0.51	98.8%	88.9%	1 mg/mL	70% acetonitrile in water
3 of 9	9119.15	0.48	98.5%	87.9%	1 mg/mL	Water
4 of 9	9011.19	0.42	98.9%	87.8%	1 mg/mL	100% DMSO
5 of 9	8767.07	0.46	97.2%	86.5%	1 mg/mL	Water
6 of 9	8843.89	0.23	97.4%	82.9%	1 mg/mL	Water
7 of 9	9186.21	0.31	99.1%	88.0%	1 mg/mL	Water
8 of 9	9592.57	0.36	97.9%	87.5%	1 mg/mL	100% DMSO
9 of 9	8266.47	0.5	95.1%	91.2%	1 mg/mL	100% DMSO

^a% full-length

^bRemainder is salt and water

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