

Peptide Array, Influenza Virus A/Wisconsin/67/2005 (H3N2) Hemagglutinin Protein Diverse Peptides

Catalog No. NR-18969

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Product Description: NR-18969 contains 19 peptides that represent regions of amino acid sequence diversity in the hemagglutinin (HA) protein of influenza virus A/Wisconsin/67/2005 (H3N2) (GenPept: ABW80978) compared to the HA of influenza virus A/Uruguay/716/2007 (H3N2) (GenPept: ACD47213). Peptides are 17-mers with 11 amino acid overlaps.

Lot: PF0719-1

Note: The lot numbers of the individual peptides are shown on the vial labels and in Table 1 below.

The following information applies to all peptides:

- Appearance White lyophilized powder
- Mass spectral analysis Correct MW by Electro spray Ionization
- Counter Ion Trifluoroacetate

Peptide-specific information is shown in the two tables below.

| Table 1 | | | | | | | |
|----------|-------|--------------|--------|----------------------------|------------------------|-----------------------------|------------------------------|
| Peptide | Lot # | Date of Mfg. | Length | Sequence | Molecular Weight (amu) | Purity by HPLC ^a | Peptide Content ^b |
| 10 of 93 | A0388 | 06/14/2010 | 17 | 55-ATELVQSSSTGGICDSP-71 | 1651.33 | 95.1% | 86.9% |
| 11 of 93 | A0101 | 05/10/2010 | 17 | 61-SSSTGGICDSPHQILDG-77 | 1673.07 | 95.8% | 80.2% |
| 22 of 93 | A0076 | 05/07/2010 | 17 | 127-LVASSGTLEFNDESFNW-143 | 1914.60 | 97.0% | 85.0% |
| 23 of 93 | A0375 | 06/11/2010 | 17 | 133-TLEFNDESFNWGTQTN-149 | 2002.94 | 90.6% | 89.7% |
| 25 of 93 | A0043 | 04/30/2010 | 17 | 145-GVTQNGTSSSCKRRSNN-161 | 1795.27 | 95.7% | 79.6% |
| 26 of 93 | A0044 | 04/29/2010 | 17 | 151-TSSSCKRRSNNNSFFSRL-167 | 1976.54 | 98.8% | 93.7% |
| 32 of 93 | A0080 | 05/07/2010 | 17 | 187-NEKFDKLYIWGVHHPVT-203 | 2084.00 | 98.5% | 74.6% |
| 33 of 93 | A0138 | 05/14/2010 | 17 | 193-LYIWGVHHPVTDNDQIF-209 | 2054.00 | 98.0% | 80.2% |
| 34 of 93 | A0077 | 05/06/2010 | 17 | 199-HHPVTDNDQIFLYAQAS-215 | 1953.80 | 95.6% | 81.4% |
| 35 of 93 | A0238 | 05/27/2010 | 17 | 205-NDQIFLYAQASGRITVS-221 | 1882.33 | pass by MS | 73.3% |
| 38 of 93 | A0104 | 05/12/2010 | 17 | 223-KRSQQTVIPNIGSRPRI-239 | 1949.40 | 98.1% | 75.2% |
| 39 of 93 | A0081 | 05/07/2010 | 17 | 229-VIPNIGSRPRIRNIPSR-245 | 1945.07 | 100.0% | 83.3% |
| 40 of 93 | A0093 | 05/10/2010 | 17 | 235-SRPRIRNIPSRISYWT-251 | 2116.40 | 97.0% | 76.0% |
| 64 of 93 | A0336 | 06/09/2010 | 17 | 379-QAADLKSTQAAINQING-395 | 1742.07 | 86.9% | 71.8% |
| 65 of 93 | A0089 | 05/07/2010 | 17 | 385-STQAAINQINGKLNRLI-401 | 1854.87 | 98.6% | 71.3% |
| 66 of 93 | A0085 | 05/07/2010 | 17 | 391-NQINGKLNRLIGKTNEK-407 | 1940.07 | 96.9% | 79.1% |
| 76 of 93 | A0068 | 05/03/2010 | 17 | 451-HTIDLTDSEMKNLFERT-467 | 2050.66 | 95.1% | 76.6% |
| 77 of 93 | A0094 | 05/10/2010 | 17 | 457-DSEMKNLFERTKKQLRE-473 | 2152.80 | 96.7% | 83.3% |
| 78 of 93 | A0154 | 05/14/2010 | 17 | 463-LFERTKKQLRENAEDMG-479 | 2065.06 | 96.9% | 72.2% |

^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) |
|----------|----------|---------|---------|-----------|-------------------|-----------|---------|---------|-------------------|---------|---------|---------|---------|---------|---------|-------------------|-------------------|---------|-------------------|
| 10 of 93 | Expected | 1.00 | | 1.00 | 1.00 | 2.00 | 2.00 | | 1.00 | 1.00 | | | | 1.00 | 4.00 | 2.00 | | | 1.00 |
| | Actual | 1.02 | | 1.19 | 0.00 ^c | 2.20 | 1.88 | | 0.95 | 1.02 | | | | 1.02 | 3.82 | 1.87 | | | 1.04 |
| 11 of 93 | Expected | | | 2.00 | 1.00 | 1.00 | 3.00 | 1.00 | 2.00 | 1.00 | | | | 1.00 | 4.00 | 1.00 | | | |
| | Actual | | | 2.31 | 0.00 ^c | 1.07 | 2.92 | 0.97 | 2.16 | 1.06 | | | | 1.00 | 3.52 | 1.00 | | | |
| 22 of 93 | Expected | 1.00 | | 3.00 | | 2.00 | 1.00 | | | 2.00 | | | 2.00 | 3.00 | 1.00 | 1.00 | | | 1.00 |
| | Actual | 1.03 | | 3.14 | | 2.17 | 0.93 | | | 2.21 | | | 1.92 | 2.52 | 1.00 | 0.00 ^a | | | 1.08 |
| 23 of 93 | Expected | | | 4.00 | | 3.00 | 1.00 | | | 1.00 | | | 2.00 | 1.00 | 3.00 | 1.00 | | | 1.00 |
| | Actual | | | 4.01 | | 3.48 | 0.81 | | | 1.00 | | | 1.71 | 0.93 | 3.01 | 0.00 ^a | | | 1.04 |
| 25 of 93 | Expected | | 2.00 | 3.00 | 1.00 | 1.00 | 2.00 | | | | 1.00 | | | 4.00 | 2.00 | | | | 1.00 |
| | Actual | | 1.70 | 3.36 | 0.00 ^c | 1.04 | 1.99 | | | | 1.06 | | | 3.62 | 2.14 | | | | 1.09 |
| 26 of 93 | Expected | | 3.00 | 2.00 | 1.00 | | | | | 1.00 | 1.00 | | 2.00 | 6.00 | 1.00 | | | | |
| | Actual | | 2.64 | 2.21 | 0.00 ^c | | | | | 1.08 | 1.00 | | 2.05 | 5.96 | 1.05 | | | | |
| 32 of 93 | Expected | | | 2.00 | | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 2.00 |
| | Actual | | | 2.36 | | 1.11 | 0.91 | 1.73 | 1.00 | 1.06 | 1.91 | | 0.98 | 1.00 | | 0.96 | 0.00 ^a | 0.81 | 2.18 |
| 33 of 93 | Expected | | | 3.00 | | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 2.00 |
| | Actual | | | 3.44 | | 1.16 | 0.83 | 1.70 | 1.79 | 1.18 | | | 0.85 | 0.94 | | 1.18 | 0.00 ^a | 0.92 | 2.00 |
| 34 of 93 | Expected | 2.00 | | 3.00 | | 2.00 | | 2.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | | | 1.00 |
| | Actual | 2.01 | | 3.23 | | 2.15 | | 1.83 | 1.03 | 1.08 | | | 0.97 | 0.97 | 0.86 | 0.96 | | | 0.82 |
| 35 of 93 | Expected | 2.00 | 1.00 | 2.00 | | 2.00 | 1.00 | | 2.00 | 1.00 | | | 1.00 | 2.00 | 1.00 | | | | 1.00 |
| | Actual | 2.04 | 0.83 | 2.09 | | 2.21 | 0.87 | | 1.94 | 1.13 | | | 0.84 | 1.94 | 1.15 | | | | 0.82 |
| 38 of 93 | Expected | | 3.00 | 1.00 | | 2.00 | 1.00 | | 3.00 | | 1.00 | | 2.00 | 2.00 | 1.00 | | | | 1.00 |
| | Actual | | 2.77 | 1.13 | | 2.13 | 0.96 | | 2.97 ^b | | 1.02 | | 2.08 | 1.96 | 0.96 | | | | 1.02 |
| 39 of 93 | Expected | | 4.00 | 2.00 | | | 1.00 | | 4.00 | | | | 3.00 | 2.00 | | | | | 1.00 |
| | Actual | | 3.71 | 2.22 | | | 0.95 | | 4.12 | | | | 3.15 | 1.89 | | | | | 0.96 ^b |
| 40 of 93 | Expected | | 4.00 | 1.00 | | | | | 4.00 | | | | 2.00 | 3.00 | 1.00 | 1.00 | 1.00 | | |
| | Actual | | 3.74 | 1.06 | | | | | 4.32 | | | | 2.13 | 2.85 | 1.03 | 0.00 ^a | 0.87 | | |
| 64 of 93 | Expected | 4.00 | | 3.00 | | 3.00 | 1.00 | | 2.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | | | | |
| | Actual | 3.96 | | 3.40 | | 3.21 | 0.82 | | 1.87 | 1.12 | 0.85 | | | 0.91 | 0.85 | | | | |
| 65 of 93 | Expected | 2.00 | 1.00 | 3.00 | | 2.00 | 1.00 | | 3.00 | 2.00 | 1.00 | | | 1.00 | 1.00 | | | | |
| | Actual | 1.92 | 0.84 | 3.36 | | 2.10 | 0.86 | | 2.88 | 2.09 | 0.91 | | | 1.00 | 1.03 | | | | |
| 66 of 93 | Expected | | 1.00 | 4.00 | | 2.00 | 2.00 | | 2.00 | 2.00 | 3.00 | | | | | 1.00 | | | |
| | Actual | | 0.84 | 4.46 | | 2.10 | 1.73 | | 1.91 | 2.07 | 2.81 | | | | | 1.08 | | | |
| 76 of 93 | Expected | | 1.00 | 3.00 | | 2.00 | | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 3.00 | | | | |
| | Actual | | 0.86 | 3.01 | | 2.26 | | 0.81 | 1.02 | 2.27 | 0.95 | 0.83 | 0.99 | 1.03 | 2.95 | | | | |
| 77 of 93 | Expected | | 2.00 | 2.00 | | 4.00 | | | | 2.00 | 3.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| | Actual | | 1.85 | 2.05 | | 4.01 | | | | 2.29 | 3.07 | 0.83 | 1.02 | 0.92 | 0.96 | | | | |
| 78 of 93 | Expected | 1.00 | 2.00 | 2.00 | | 4.00 | 1.00 | | | 2.00 | 2.00 | 1.00 | 1.00 | | | 1.00 | | | |
| | Actual | 1.03 | 1.75 | 2.26 | | 4.18 | 0.91 | | | 2.17 | 1.92 | 0.84 | 0.95 | | | 0.99 | | | |

^aTrp was completely destroyed during hydrolysis

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

^cCys was completely destroyed during hydrolysis

Date: 08NOV 2010

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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