

Peptide Array, Influenza Virus A/teal/Hong Kong/W312/1997 (H6N1) Hemagglutinin Protein

Catalog No. NR-18966

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Product Description: The 93-peptide array spans the hemagglutinin (HA) protein of the A/teal/Hong Kong/W312/1997 (H6N1) strain of influenza virus (GenPept: AAF87507.1). Peptides are 14- to 18-mers, with 8 to 12 amino acid overlaps.

Lot: 585683-1

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 MALDI or Electrospray
- 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 | Peptide Content |
| 01 of 93 | 2093-4/9 | 7/12/2010 | 18 | 1-MIAIIVIAILAAAGKSDK-18 | 1798 | Crude | 61.63% |
| 02 of 93 | LS1485 | 7/9/2010 | 16 | 9-ILAAAGKSDKICIGYH-24 | 1660 | 97.73% | 73.30% |
| 03 of 93 | LS1484 | 6/29/2010 | 17 | 13-AGKSDKICIGYHANNST-29 | 1779 | 97.17% | 75.29% |
| 04 of 93 | LS1483 | 8/10/2010 | 17 | 19-ICIGYHANNSTTQVDTI-35 | 1850 | 94.31% | 79.42% |
| 05 of 93 | LS1482 | 8/10/2010 | 17 | 25-ANNSTTQVDTILEKNVT-41 | 1848 | 85.60% | 76.32% |
| 06 of 93 | LS1481 | 6/29/2010 | 16 | 32-VDTILEKNVTVTHSIE-47 | 1798 | 90.63% | 72.38% |
| 07 of 93 | LS1480 | 7/14/2010 | 17 | 37-EKNVTVTHSIELLENQK-53 | 1982 | 92.05% | 78.21% |
| 08 of 93 | LS1476 | 7/2/2010 | 17 | 43-THSIELLENQKEERFK-59 | 2104 | 97.45% | 84.03% |
| 09 of 93 | LS1479 | 7/12/2010 | 18 | 49-LENQKEERFCKILNKAPL-66 | 2174 | 100.00% | 75.44% |
| 10 of 93 | LS1478 | 7/21/2010 | 17 | 55-ERFCKILNKAPLDLREC-71 | 2048 | 86.32% | 78.03% |
| 11 of 93 | LS1475 | 7/2/2010 | 17 | 61-LNKAPLDLRECTIEGWI-77 | 1971 | 92.92% | 70.89% |
| 12 of 93 | LS1474 | 7/14/2010 | 17 | 67-DLRECTIEGWILGNPQC-83 | 1947 | 94.04% | 75.09% |
| 13 of 93 | LS1473 | 6/29/2010 | 17 | 73-IEGWILGNPQC DLLLGD-89 | 1856 | 96.62% | 77.98% |
| 14 of 93 | LS1472 | 6/25/2010 | 17 | 79-GNPQC DLLLGDQSWSYI-95 | 1909 | 87.56% | 79.76% |
| 15 of 93 | LS1477 | 7/14/2010 | 15 | 86-LLGDQSWSYIVERPT-100 | 1764 | 94.77% | 79.88% |
| 16 of 93 | LS1471 | 8/10/2010 | 17 | 91-SWSYIVERPTAQNGICY-107 | 1987 | 89.30% | 80.49% |
| 17 of 93 | LS1470 | 7/6/2010 | 17 | 97-ERPTAQNGICY PGLNE-113 | 1863 | 97.69% | 68.86% |
| 18 of 93 | LS1466 | 6/28/2010 | 17 | 103-NGICY PGLNEVEELRA-119 | 1878 | 100.00% | 79.79% |
| 19 of 93 | LS1465 | 7/12/2010 | 17 | 109-GTLNEVEELRALIGSGE-125 | 1787 | 99.12% | 76.31% |
| 20 of 93 | LS1464 | 7/12/2010 | 17 | 115-EELRALIGSGERVERFE-131 | 1990 | 99.73% | 81.93% |
| 21 of 93 | LS1463 | 6/25/2010 | 17 | 121-IGSGERVERFEMFPQST-137 | 1970 | 100.00% | 78.83% |
| 22 of 93 | LS1462 | 6/29/2010 | 17 | 127-VERFEMFPQSTWQGVDT-143 | 2057 | 99.18% | 77.57% |
| 23 of 93 | LS1460 | 7/12/2010 | 17 | 133-FPQSTWQGVDTNSGTR-149 | 1882 | 98.83% | 80.14% |
| 24 of 93 | LS1459 | 7/9/2010 | 16 | 140-GVDTNSGTRRSCPYST-155 | 1646 | 98.63% | 78.37% |

| Table 1 | | | | | | | |
|----------|--------|--------------|--------|-----------------------------|------------------------|----------------|-----------------|
| Peptide | Lot # | Date of Mfg. | Length | Sequence | Molecular Weight (amu) | Purity by HPLC | Peptide Content |
| 25 of 93 | LS1458 | 7/2/2010 | 17 | 145-SGTRSCPYSTGASFYR-161 | 1841 | 99.02% | 74.66% |
| 26 of 93 | LS1469 | 6/29/2010 | 17 | 151-CPYSTGASFYRNLLWII-167 | 2004 | 98.19% | 77.82% |
| 27 of 93 | LS1468 | 8/13/2010 | 17 | 157-ASFYRNLLWIIKTKTAE-173 | 2054 | 86.77% | 74.28% |
| 28 of 93 | LS1467 | 7/6/2010 | 17 | 163-LLWIIKTKTAEYPIKIG-179 | 1973 | 99.82% | 76.57% |
| 29 of 93 | LS1456 | 6/25/2010 | 17 | 169-TKTAEYPIKGIYNNNTG-185 | 1869 | 99.59% | 73.79% |
| 30 of 93 | LS1457 | 7/9/2010 | 17 | 175-PVIKGIYNNNTGTQPILY-191 | 1891 | 87.79% | 81.38% |
| 31 of 93 | LS1455 | 7/9/2010 | 17 | 181-YNNTGTQPILYFWGVVHH-197 | 2047 | 94.82% | 70.95% |
| 32 of 93 | LS1454 | 7/2/2010 | 16 | 188-PILYFWGVVHPPNTDE-203 | 1922 | 99.07% | 69.15% |
| 33 of 93 | LS1453 | 7/6/2010 | 17 | 193-WGVVHPPNTDEQDTLYG-209 | 1966 | 98.43% | 78.69% |
| 34 of 93 | LS1452 | 7/14/2010 | 17 | 199-PNTDEQDTLYGSGDRYV-215 | 1930 | 99.94% | 81.95% |
| 35 of 93 | LS1451 | 7/6/2010 | 17 | 205-DTLYGSGDRYVRMGTES-221 | 1907 | 99.40% | 80.79% |
| 36 of 93 | LS1450 | 7/9/2010 | 17 | 211-GDRYVRMGTESMNFASKS-227 | 1949 | 99.14% | 68.44% |
| 37 of 93 | LS1449 | 7/2/2010 | 17 | 217-MGTESMNFASKSPEIAR-233 | 1840 | 93.77% | 71.35% |
| 38 of 93 | LS1448 | 7/2/2010 | 17 | 223-NFASKSPEIARPAVNGQ-239 | 1770 | 97.37% | 70.96% |
| 39 of 93 | LS1447 | 7/6/2010 | 17 | 229-EIARPAVNGQRGRIDY-245 | 1886 | 98.24% | 73.34% |
| 40 of 93 | LS1461 | 7/9/2010 | 17 | 235-AVNGQRGRIDYYWSVLK-251 | 2025 | 94.46% | 73.13% |
| 41 of 93 | LS1446 | 7/2/2010 | 17 | 241-GRIDYYWSVLKPGETLN-257 | 2011 | 99.78% | 72.96% |
| 42 of 93 | LS1441 | 8/13/2010 | 17 | 247-WSVLKPGETLNVESNGN-263 | 1844 | 98.35% | 68.75% |
| 43 of 93 | LS1440 | 8/10/2010 | 17 | 253-GETLNVESNGNLIAPWY-269 | 1877 | 90.82% | 81.64% |
| 44 of 93 | LS1439 | 8/10/2010 | 17 | 259-ESNGNLIAPWYAYKFVN-275 | 1986 | 96.13% | 79.93% |
| 45 of 93 | LS1438 | 7/14/2010 | 17 | 265-IAPWYAYKFVNTNSKGA-281 | 1930 | 92.69% | 77.89% |
| 46 of 93 | LS1437 | 6/29/2010 | 17 | 271-YKFVNTNSKGAVFRSDL-287 | 1946 | 100.00% | 70.50% |
| 47 of 93 | LS1436 | 7/6/2010 | 17 | 277-NSKGAVFRSDLPICND-293 | 1865 | 100.00% | 81.59% |
| 48 of 93 | LS1435 | 7/14/2010 | 17 | 283-FRSDLPICNDATCQTI-299 | 1926 | 90.92% | 78.58% |
| 49 of 93 | LS1434 | 9/20/2010 | 17 | 289-IENC DATCQTIAGVLR-305 | 1808 | 98.04% | 77.41% |
| 50 of 93 | LS1431 | 8/10/2010 | 17 | 295-TCQTIAGVLRNTKTFQN-311 | 1895 | 81.91% | 79.16% |
| 51 of 93 | LS1430 | 6/29/2010 | 17 | 301-GVLRNTKTFQNV SPLWI-317 | 1973 | 99.09% | 79.08% |
| 52 of 93 | LS1429 | 7/2/2010 | 17 | 307-KTFQNV SPLWIG ECPKY-323 | 2010 | 95.78% | 72.19% |
| 53 of 93 | LS1428 | 7/2/2010 | 17 | 313-SPLWIG ECPKYVKSESL-329 | 1936 | 96.22% | 79.41% |
| 54 of 93 | LS1427 | 6/25/2010 | 17 | 319-ECPKYVKSESLRLATGL-335 | 1894 | 97.91% | 68.11% |
| 55 of 93 | LS1426 | 7/2/2010 | 17 | 325-KSESLRLATGLRNV PQI-341 | 1882 | 100.00% | 79.57% |
| 56 of 93 | LS1421 | 7/9/2010 | 17 | 331-LATGLRNV PQIETRGLF-347 | 1885 | 99.57% | 78.33% |
| 57 of 93 | LS1420 | 7/2/2010 | 17 | 337-NVPQIETRGLFGAIAGF-353 | 1790 | 97.94% | 81.32% |
| 58 of 93 | LS1425 | 8/16/2010 | 17 | 343-TRGLFGAIAGFIEGGWT-359 | 1753 | 99.36% | 69.83% |
| 59 of 93 | PR3476 | 9/28/2010 | 17 | 349-AIAGFIEGGWTGMIDGW-365 | 1781 | Crude | 75.36% |
| 60 of 93 | LS1419 | 8/10/2010 | 17 | 355-EGGW TGMIDGWYGYHHE-371 | 1995 | 82.46% | 79.80% |
| 61 of 93 | LS1423 | 7/2/2010 | 17 | 361-MIDGWYGYHHENSQGS-377 | 1938 | 98.95% | 67.52% |
| 62 of 93 | LS1422 | 7/12/2010 | 17 | 367-GYHHENSQGSYAADRE-383 | 1878 | 90.82% | 63.28% |
| 63 of 93 | LS1418 | 7/12/2010 | 17 | 373-SQGSYAADRESTQKAV-389 | 1755 | 98.91% | 77.76% |
| 64 of 93 | LS1417 | 6/28/2010 | 17 | 379-AADRESTQKAVNRITNK-395 | 1902 | 100.00% | 62.11% |
| 65 of 93 | LS1416 | 9/7/2010 | 17 | 385-TQKAVNRITNKVNSIIN-401 | 1913 | 90.24% | 76.49% |
| 66 of 93 | LS1415 | 7/14/2010 | 17 | 391-RITNKVNSIINKMNTQF-407 | 2021 | 98.97% | 73.76% |
| 67 of 93 | LS1414 | 8/10/2010 | 17 | 397-NSIINKMNTQFEAVDHE-413 | 1990 | 93.22% | 66.27% |

Table 1

| Peptide | Lot # | Date of Mfg. | Length | Sequence | Molecular Weight (amu) | Purity by HPLC | Peptide Content |
|----------|--------|--------------|--------|----------------------------|------------------------|----------------|-----------------|
| 68 of 93 | LS1413 | 7/6/2010 | 17 | 403-MNTQFEAVDHEFSNLER-419 | 2067 | 99.73% | 76.85% |
| 69 of 93 | LS1412 | 6/25/2010 | 17 | 409-AVDHEFSNLERRIDNLN-425 | 2042 | 100.00% | 63.30% |
| 70 of 93 | LS1408 | 7/6/2010 | 16 | 415-SNLERRIDNLNKRMQD-430 | 2002 | 100.00% | 70.13% |
| 71 of 93 | LS1407 | 6/25/2010 | 17 | 421-IDNLNKRMQDGFGLDVWT-437 | 2065 | 100.00% | 76.90% |
| 72 of 93 | LS1406 | 7/12/2010 | 17 | 427-RMQDGFGLDVWTYNAELL-443 | 2071 | 92.27% | 79.26% |
| 73 of 93 | LS1405 | 9/7/2010 | 17 | 433-LDVWTYNAELLVLENE-449 | 2034 | 90.64% | 75.82% |
| 74 of 93 | LS1404 | 9/7/2010 | 17 | 439-NAELLVLENERLDMH-455 | 2010 | 94.26% | 71.62% |
| 75 of 93 | LS1411 | 7/21/2010 | 17 | 445-LLENERLDMHDANVKN-461 | 2012 | 82.65% | 77.71% |
| 76 of 93 | LS1410 | 7/9/2010 | 17 | 451-TLDMHDANVKNLHEKVK-467 | 1992 | 97.36% | 68.70% |
| 77 of 93 | LS1409 | 6/29/2010 | 17 | 457-ANVKNLHEKVKSQLRDN-473 | 1993 | 99.20% | 66.31% |
| 78 of 93 | LS1403 | 7/14/2010 | 17 | 463-HEKVKSQLRDNATILGN-479 | 1923 | 84.81% | 74.81% |
| 79 of 93 | LS1402 | 8/10/2010 | 16 | 470-LRDNATILGNGCFEFW-485 | 1856 | 91.07% | 80.38% |
| 80 of 93 | LS1401 | 7/12/2010 | 17 | 475-TILGNGCFEFWHKCDNE-491 | 2013 | 97.71% | 72.44% |
| 81 of 93 | LS1433 | 7/14/2010 | 17 | 481-CFEFWHKCDNECIESVK-497 | 2117 | 88.66% | 75.42% |
| 82 of 93 | LS1432 | 8/13/2010 | 17 | 487-KCDNECIESVKNQTYDY-503 | 1981 | 94.08% | 70.17% |
| 83 of 93 | LS1398 | 6/29/2010 | 17 | 493-IESVKNQTYDYPKYQTE-509 | 2035 | 99.91% | 76.47% |
| 84 of 93 | LS1397 | 6/25/2010 | 17 | 499-GTYDYPKYQTESKLNRL-515 | 2076 | 99.70% | 80.33% |
| 85 of 93 | LS1400 | 6/25/2010 | 17 | 505-KYQTESKLNRLKIESVK-521 | 2064 | 97.01% | 60.80% |
| 86 of 93 | LS1399 | 7/12/2010 | 17 | 511-KLNRLKIESVKLENLGV-527 | 1953 | 94.62% | 63.19% |
| 87 of 93 | LS1393 | 7/14/2010 | 17 | 517-IESVKLENLGVYQILAI-533 | 1902 | 87.22% | 82.89% |
| 88 of 93 | LS1392 | 9/13/2010 | 17 | 523-ENLGVYQILAIYSTVSS-539 | 1857 | 81.61% | 58.19% |
| 89 of 93 | A4766 | 9/17/2010 | 16 | 530-ILAIYSTVSSSLVLVG-545 | 1622 | Crude | 45.10% |
| 90 of 93 | LH2181 | 9/29/2010 | 16 | 535-STVSSSLVLVGLIMAM-550 | 1608 | Crude | 76.87% |
| 91 of 93 | LH2180 | 9/29/2010 | 15 | 543-LVGLIMAMGLWMCSN-557 | 1639 | Crude | 73.66% |
| 92 of 93 | LS1388 | 9/13/2010 | 15 | 549-AMGLWMCSNGSMQCR-563 | 1675 | 87.44% | 71.73% |
| 93 of 93 | LS1387 | 9/7/2010 | 14 | 553-WMCSNGSMQCRICI-566 | 1632 | 89.52% | 66.42% |

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) |
|----------|----------|---------|---------|-----------|-------------------|-----------|---------|---------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| 01 of 93 | Expected | 5.00 | | 1.00 | | | 1.00 | | 5.00 | 1.00 | 2.00 | 1.00 | | | 1.00 | | | | 1.00 |
| | Actual | 5.00 | | 1.67 | | | 1.62 | | 0.94 ^b | 0.55 | 3.44 | 0.62 | | | 1.81 | | | | 0.12 ^b |
| 02 of 93 | Expected | 3.00 | | 1.00 | 1.00 | | 2.00 | 1.00 | 3.00 | 1.00 | 2.00 | | | | 1.00 | | | | 1.00 |
| | Actual | 2.99 | | 1.01 | 0.00 ^c | | 1.93 | 0.98 | 2.88 | 1.01 | 2.07 | | | | 1.07 | | | | 1.07 |
| 03 of 93 | Expected | 2.00 | | 3.00 | 1.00 | | 2.00 | 1.00 | 2.00 | | 2.00 | | | | 2.00 | 1.00 | | | 1.00 |
| | Actual | 2.06 | | 3.12 | 0.00 ^c | | 2.05 | 1.00 | 1.74 | | 2.06 | | | | 1.98 | 1.02 | | | 1.05 |
| 04 of 93 | Expected | 1.00 | | 3.00 | 1.00 | 1.00 | 1.00 | 1.00 | 3.00 | | | | | | 1.00 | 3.00 | | | 1.00 |
| | Actual | 1.05 | | 3.15 | 0.00 ^c | 0.96 | 1.01 | 1.00 | 2.83 | | | | | | 0.95 | 3.12 | | | 1.08 |
| 05 of 93 | Expected | 1.00 | | 4.00 | | 2.00 | | | 1.00 | 1.00 | 1.00 | | | | 1.00 | 4.00 | | | 2.00 |
| | Actual | 0.97 | | 3.80 | | 2.03 | | | 1.02 | 1.06 | 1.01 | | | | 0.86 | 4.00 | | | 2.06 |
| 06 of 93 | Expected | | | 2.00 | | 2.00 | | 1.00 | 2.00 | 1.00 | 1.00 | | | | 1.00 | 3.00 | | | 3.00 |
| | Actual | | | 1.99 | | 2.07 | | 1.03 | 2.00 | 1.05 | 1.03 | | | | 0.98 | 2.98 | | | 3.05 |

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) |
|----------|----------|---------|---------|-----------|-------------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|---------|---------|
| 63 of 93 | Expected | 3.00 | 1.00 | 1.00 | | 3.00 | 2.00 | | | | 1.00 | | | | 3.00 | 1.00 | | 1.00 | 1.00 |
| | Actual | 2.96 | 1.01 | 1.05 | | 2.79 | 2.02 | | | | 1.05 | | | | 2.97 | 0.99 | | 1.05 | 1.06 |
| 64 of 93 | Expected | 3.00 | 2.00 | 3.00 | | 2.00 | | | 1.00 | | 2.00 | | | | 1.00 | 2.00 | | | 1.00 |
| | Actual | 2.91 | 1.92 | 3.06 | | 2.03 | | | 1.06 | | 2.14 | | | | 0.97 | 2.01 | | | 1.08 |
| 65 of 93 | Expected | 1.00 | 1.00 | 4.00 | | 1.00 | | | 3.00 | | 2.00 | | | | 1.00 | 2.00 | | | 2.00 |
| | Actual | 0.99 | 1.06 | 4.15 | | 1.01 | | | 2.84 | | 2.00 | | | | 1.04 | 2.01 | | | 2.11 |
| 66 of 93 | Expected | | 1.00 | 4.00 | | 1.00 | | | 3.00 | | 2.00 | 1.00 | 1.00 | | 1.00 | 2.00 | | | 1.00 |
| | Actual | | 0.94 | 4.10 | | 1.02 | | | 2.85 | | 2.00 | 1.02 | 1.09 | | 1.06 | 1.95 | | | 1.04 |
| 67 of 93 | Expected | 1.00 | | 4.00 | | 3.00 | | 1.00 | 2.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 |
| | Actual | 1.04 | | 4.21 | | 3.06 | | 0.95 | 1.75 | | 0.99 | 1.07 | 1.01 | | 1.01 | 1.07 | | | 1.06 |
| 68 of 93 | Expected | 1.00 | 1.00 | 3.00 | | 4.00 | | 1.00 | | 1.00 | | 1.00 | 2.00 | | 1.00 | 1.00 | | | 1.00 |
| | Actual | 1.05 | 1.00 | 3.05 | | 3.97 | | 1.00 | | 1.05 | | 0.98 | 2.11 | | 0.95 | 1.00 | | | 1.04 |
| 69 of 93 | Expected | 1.00 | 2.00 | 5.00 | | 2.00 | | 1.00 | 1.00 | 2.00 | | | 1.00 | | 1.00 | | | | 1.00 |
| | Actual | 0.96 | 1.97 | 5.00 | | 2.04 | | 0.99 | 1.03 | 2.08 | | | 1.09 | | 0.98 | | | | 1.00 |
| 70 of 93 | Expected | | 3.00 | 5.00 | | 2.00 | | | 1.00 | 2.00 | 1.00 | 1.00 | | | 1.00 | | | | |
| | Actual | | 2.93 | 4.96 | | 2.00 | | | 1.00 | 2.08 | 0.98 | 1.01 | | | 0.90 | | | | |
| 71 of 93 | Expected | | 1.00 | 5.00 | | 1.00 | 1.00 | | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | | 1.00 |
| | Actual | | 0.97 | 4.96 | | 0.96 | 0.99 | | 0.99 | 2.05 | 0.98 | 1.01 | 1.08 | | | 1.07 | 0.00 ^a | | 0.99 |
| 72 of 93 | Expected | 1.00 | 1.00 | 3.00 | | 2.00 | 1.00 | | | 3.00 | | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 |
| | Actual | 1.03 | 0.96 | 3.01 | | 2.00 | 1.00 | | | 3.11 | | 0.98 | 1.01 | | | 1.04 | 0.00 ^a | 0.99 | 0.99 |
| 73 of 93 | Expected | 1.00 | | 3.00 | | 3.00 | | | | 5.00 | | | | | | 1.00 | 1.00 | 1.00 | 2.00 |
| | Actual | 1.05 | | 2.98 | | 2.94 | | | | 5.27 | | | | | | 0.97 | 0.00 ^a | 1.05 | 1.81 |
| 74 of 93 | Expected | 1.00 | 1.00 | 3.00 | | 3.00 | | 1.00 | | 5.00 | | 1.00 | | | | 1.00 | | | 1.00 |
| | Actual | 0.95 | 1.01 | 3.00 | | 2.87 | | 1.04 | | 5.18 | | 1.00 | | | | 1.07 | | | 0.98 |
| 75 of 93 | Expected | 1.00 | 1.00 | 5.00 | | 2.00 | | 1.00 | | 3.00 | 1.00 | 1.00 | | | | 1.00 | | | 1.00 |
| | Actual | 1.00 | 1.03 | 4.95 | | 2.06 | | 1.00 | | 3.31 | 0.98 | 0.99 | | | | 0.98 | | | 0.93 |
| 76 of 93 | Expected | 1.00 | | 4.00 | | 1.00 | | 2.00 | | 2.00 | 3.00 | 1.00 | | | | 1.00 | | | 2.00 |
| | Actual | 1.00 | | 4.08 | | 0.97 | | 2.01 | | 2.06 | 2.97 | 1.00 | | | | 1.05 | | | 1.96 |
| 77 of 93 | Expected | 1.00 | 1.00 | 4.00 | | 2.00 | | 1.00 | | 2.00 | 3.00 | | | | 1.00 | | | | 2.00 |
| | Actual | 1.00 | 1.00 | 3.84 | | 2.11 | | 1.01 | | 2.14 | 3.08 | | | | 0.94 | | | | 2.05 |
| 78 of 93 | Expected | 1.00 | 1.00 | 3.00 | | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | | | | 1.00 | 1.00 | | | 1.00 |
| | Actual | 1.01 | 0.99 | 3.09 | | 1.96 | 1.02 | 1.02 | 1.02 | 2.11 | 2.03 | | | | 0.99 | 0.98 | | | 1.01 |
| 79 of 93 | Expected | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 2.00 | | 1.00 | 2.00 | | | 2.00 | | | 1.00 | 1.00 | | |
| | Actual | 1.01 | 0.96 | 3.00 | 0.00 ^c | 0.93 | 2.03 | | 1.00 | 2.06 | | | 2.13 | | | 1.01 | 0.00 ^a | | |
| 80 of 93 | Expected | | | 3.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 2.00 | | | 1.00 | 1.00 | | |
| | Actual | | | 3.05 | 0.00 ^c | 1.99 | 2.01 | 0.98 | 0.98 | 1.01 | 1.00 | | 2.10 | | | 1.01 | 0.00 ^a | | |
| 81 of 93 | Expected | | | 2.00 | 3.00 | 3.00 | | 1.00 | 1.00 | | 2.00 | | 2.00 | | 1.00 | | 1.00 | | 1.00 |
| | Actual | | | 2.00 | 0.00 ^c | 2.83 | | 1.04 | 0.94 | | 2.06 | | 2.08 | | 0.92 | | 0.00 ^a | | 1.01 |
| 82 of 93 | Expected | | | 4.00 | 2.00 | 2.00 | 1.00 | | 1.00 | | 2.00 | | | | 1.00 | 1.00 | | 2.00 | 1.00 |
| | Actual | | | 4.05 | 0.00 ^c | 1.94 | 1.04 | | 0.98 | | 2.02 | | | | 0.97 | 1.07 | | 2.08 | 1.04 |
| 83 of 93 | Expected | | | 2.00 | | 3.00 | 1.00 | | 1.00 | | 2.00 | | | 1.00 | 1.00 | 2.00 | | 3.00 | 1.00 |
| | Actual | | | 2.09 | | 2.95 | 1.07 | | 0.98 | | 2.04 | | | 1.01 | 0.96 | 2.03 | | 3.05 | 1.02 |
| 84 of 93 | Expected | | 1.00 | 2.00 | | 2.00 | 1.00 | | | 2.00 | 2.00 | | | 1.00 | 1.00 | 2.00 | | 3.00 | |
| | Actual | | 1.00 | 2.02 | | 2.05 | 0.98 | | | 2.06 | 2.07 | | | 0.96 | 0.92 | 2.00 | | 3.01 | |
| 85 of 93 | Expected | | 1.00 | 1.00 | | 3.00 | | | 1.00 | 2.00 | 4.00 | | | | 2.00 | 1.00 | | 1.00 | 1.00 |
| | Actual | | 1.01 | 1.02 | | 2.92 | | | 1.03 | 2.08 | 4.09 | | | | 1.81 | 0.95 | | 0.99 | 1.01 |
| 86 of 93 | Expected | | 1.00 | 2.00 | | 2.00 | 1.00 | | 1.00 | 4.00 | 3.00 | | | | 1.00 | | | | 2.00 |
| | Actual | | 0.92 | 2.01 | | 2.16 | 1.05 | | 1.00 | 4.17 | 2.99 | | | | 0.95 | | | | 2.09 |
| 87 of 93 | Expected | 1.00 | | 1.00 | | 3.00 | 1.00 | | 3.00 | 3.00 | 1.00 | | | | 1.00 | | | 1.00 | 2.00 |
| | Actual | 0.99 | | 1.02 | | 2.86 | 1.00 | | 2.95 | 3.06 | 1.02 | | | | 0.92 | | | 1.00 | 2.01 |
| 88 of 93 | Expected | 1.00 | | 1.00 | | 2.00 | 1.00 | | 2.00 | 2.00 | | | | | 3.00 | 1.00 | | 2.00 | 2.00 |
| | Actual | 1.07 | | 0.99 | | 1.96 | 0.91 | | 2.02 | 2.03 | | | | | 2.92 | 1.05 | | 1.95 | 2.16 |
| 89 of 93 | Expected | 1.00 | | | | | 1.00 | | 2.00 | 3.00 | | | | | 4.00 | 1.00 | | 1.00 | 3.00 |
| | Actual | 1.02 | | | | | 1.05 | | 1.87 | 3.19 | | | | | 3.91 | 1.01 | | 1.02 | 3.04 |

| 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) |
| 90 of 93 | Expected | 1.00 | | | | | 1.00 | | 1.00 | 3.00 | | 2.00 | | | 4.00 | 1.00 | | | 3.00 |
| | Actual | 0.99 | | | | | 1.00 | | 0.96 | 2.96 | | 1.88 | | | 4.82 | 1.05 | | | 3.10 |
| 91 of 93 | Expected | 1.00 | | 1.00 | 1.00 | | 2.00 | | 1.00 | 3.00 | | 3.00 | | | 1.00 | | 1.00 | | 1.00 |
| | Actual | 1.07 | | 1.00 | 0.00 ^c | | 2.04 | | 0.93 | 3.10 | | 2.92 | | | 1.03 | | 0.00 ^a | | 1.03 |
| 92 of 93 | Expected | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | | | 1.00 | | 3.00 | | | 2.00 | | 1.00 | | |
| | Actual | 1.03 | 0.96 | 1.05 | 0.00 ^c | 1.00 | 2.02 | | | 1.08 | | 2.95 | | | 1.96 | | 0.00 ^a | | |
| 93 of 93 | Expected | | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | | 2.00 | | | 2.00 | | | 2.00 | | 1.00 | | |
| | Actual | | 1.00 | 1.09 | 0.00 ^c | 1.09 | 1.03 | | 1.70 | | | 2.09 | | | 2.06 | | 0.00 ^a | | |
| *Crude peptides may show AAA variability | | | | | | | | | | | | | | | | | | | |
| ^a Trp was completely destroyed during hydrolysis | | | | | | | | | | | | | | | | | | | |
| ^b Val-Ile, Val-Val, Ile-Ile and/or Ile-Val bonds were only partially destroyed during hydrolysis | | | | | | | | | | | | | | | | | | | |
| ^c Cys was completely destroyed during hydrolysis | | | | | | | | | | | | | | | | | | | |

Date: 02 MAR 2011

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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