NELSON LABORATORIES

Viral Filtration Efficiency (VFE) Final Report

Test Article: AntiVirus
Purchase Order: NTPO-2012-024
Laboratory Number: 666318
Study Received Date: 05 Dec 2012
Test Procedure(s): Standard Test Protocol (STP) Number: STP0007 Rev 07

Summary: The VFE test is performed to determine the filtration efficiency by comparing the viral control counts to test article effluent counts. A suspension of bacteriophage ΦX174 was aerosolized using a nebulizer and delivered to the test article at a constant flow rate. The aerosol droplets were drawn through a six-stage, viable particle, Andersen sampler for collection. This method allows a reproducible challenge to be delivered to the test articles. The VFE test procedure was adapted from ASTM F2101. All test method acceptance criteria were met.

Area Tested: ~45.6 cm^2
VFE Flow Rate: 28.3 Liters per minute (L/min)

Results:

Test Article Number	Percent VFE (%)
1	99.9
2	99.9
3	99.9
4	>99.9[a]
5	99.9

Note: Plate count totals for each stage are available upon request.
[a] There were no detected plaques on any of the Andersen sampler plates for this test article.

Mean Positive Control Count: 1,826 plaque forming units (PFU)
Negative Control Count: <1 PFU
Mean Particle Size (MPS): 2.8 µm

Sarah Smit
Study Director — Sarah Smit, B.S.

17 Dec 2012
Study Completion Date

P.O. Box 571830 | Murray, UT 84157-1830 U.S.A. · 6280 South Redwood Road | Salt Lake City, UT 84123-6600 U.S.A.
www.nelsonlabs.com · Telephone 801 290 7500 · Fax 801 290 7998 · sales@nelsonlabs.com