## Kilbourne F123: A/Victoria/3/75 (HA, NA) x A/Puerto Rico/8/34 (H3N2), Reassortant X-47

## Catalog No. NR-3663

Product Description: Pooled allantoic fluid from specific-pathogen free (SPF) embryonated chicken eggs ${ }^{1}$ infected with reassortant influenza A virus, A/Victoria/3/75 (HA, NA) x A/Puerto Rico/8/34 (H3N2) (Kilbourne F123; X-47).

Lot ${ }^{2,3}$ : 58479745
Manufacturing Date: 23JAN2009

| TEST | SPECIFICATIONS | RESULTS |
| :---: | :---: | :---: |
| Identification by Infectivity Using Embryonated Chicken Eggs ${ }^{1}$ Hemagglutination activity using allantoic fluid from infected eggs and $0.5 \%$ chicken red blood cells | Positive | Positive |
| Sequencing of Species-Specific Region Hemagglutinin gene ( $\sim 460$ nucleotides) | Influenza A virus (H3) | Influenza A virus (H3) |
| Titer by CEID ${ }_{50}$ Assay ${ }^{4,5}$ in Embryonated Chicken Eggs ${ }^{1}$ | Report results | $2.8 \times 10^{8} \mathrm{CEID}_{50} / \mathrm{mL}$ |
| RT-PCR Assay of Extracted RNA ${ }^{6}$ | ~ 720 bp amplicon | ~ 720 bp amplicon |
| Sterility (21-day incubation) <br> Harpo's HTYE broth ${ }^{7}, 37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic Trypticase soy broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic Sabouraud broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic Sheep blood agar, $37^{\circ} \mathrm{C}$, aerobic Sheep blood agar, $37^{\circ} \mathrm{C}$, anaerobic Thioglycollate broth, $37^{\circ} \mathrm{C}$, anaerobic DMEM with $10 \% \mathrm{FBS}, 37^{\circ} \mathrm{C}$ and $5 \% \mathrm{CO}_{2}$ | No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth | No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth |
| Mycoplasma Contamination <br> Agar and broth culture (14-day incubation at $37^{\circ} \mathrm{C}$ ) <br> DNA detection by PCR of extracted Test Article nucleic acid | None detected None detected | None detected None detected |

${ }^{1} 10$ to 11-day-old SPF Fertile Chicken Eggs acquired from B\&E Eggs, York Springs, Pennsylvania
${ }^{2}$ Derived from NIAID Catalog No. V-331-0E5551
${ }^{3}$ Grown in the allantoic cavity of embryonated chicken eggs ${ }^{1}$ for 2 days at $35^{\circ} \mathrm{C}$ in a humidified chamber
${ }^{4}$ The Chicken Embryo Infectious Dose $50 \%\left(\right.$ CEID $\left._{50}\right)$ is the dilution of virus that under the conditions of the assay can be expected to infect $50 \%$ of the inoculated embryonated chicken eggs, just as a Lethal Dose $50 \%\left(L_{50}\right)$ is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the CEID $_{50}$ provides a measure of the infectious titer (or infectivity) of a virus preparation.
${ }^{5} 2$ days at $35^{\circ} \mathrm{C}$ in a humidified chamber
${ }^{6}$ The H3 gene primers are described in Lee, M.-S., et al. "Identification and Subtyping of Avian Influenza Viruses by Reverse Transcription-PCR." J. Virol. Methods 97 (2001): 13-22. PubMed: 11483213.
${ }^{7}$ Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.
Date: 27 MAR 2009
Signature: Signature on File

## Title: Technical Manager, BEI Authentication or designee

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