

**Influenza A Virus, A/Brisbane/59/2007 (H1N1) (Mink Cell Adapted)**

**Catalog No. NR-49064**

**For research use only. Not for human use.**

**Contributor and Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Orthomyxoviridae, Influenzavirus A*

Species: Influenza A virus

Strain/Isolate: A/Brisbane/59/2007 (mink cell adapted)

History: NR-49064 was derived through adaptation of BEI Resources NR-31657 to growth in *Neovison vison* lung epithelial cells (Mv 1 Lu; ATCC® CCL-64™). NR-31657 was in turn derived through adaptation of BEI Resources NR-12282 to growth in Madin-Darby canine kidney cells (MDCK; ATCC® CCL-34™). Influenza A virus, A/Brisbane/59/2007 (H1N1) was originally isolated from a 47-year-old female in Brisbane, Queensland, Australia on July 1, 2007, and was passaged in embryonated chicken eggs at the isolating laboratory, the Center for Disease Control and Prevention, and the Baylor College of Medicine prior to deposit to BEI Resources.

Comments: Sequence information is available for influenza A virus, A/Brisbane/59/2007 (H1N1) at the [Influenza Research Database](#). The World Health Organization recommended influenza A/Brisbane/59/2007 (H1N1)-like viruses for use as vaccines during the 2008-2009 and 2009-2010 Northern Hemisphere influenza seasons and during the 2009 Southern Hemisphere influenza season.<sup>1,2</sup>

Note: Mink lung epithelial cells have been shown to support the replication of influenza A and B viruses to high titer.<sup>3</sup> Virus yields of many low passage influenza A strains are higher in Mv 1 Lu than in MDCK cells.<sup>4</sup>

**Material Provided:**

Each vial contains approximately 1 mL of cell lysate and supernatant from *Neovison vison* lung epithelial cells (Mv 1 Lu; ATCC® CCL-64™) infected with mink cell adapted influenza A virus, A/Brisbane/59/2007 (H1N1).

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-49064 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

Host: Mv 1 Lu cells (ATCC® CCL-64™)

Growth Medium: Eagle's Minimal Essential Medium containing Earle's Balanced Salt Solution, 2 mM L-glutamine, 1 mM sodium pyruvate, and 1500 mg per mL sodium bicarbonate, supplemented with 0.5 µg per mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin and 0.125% bovine serum albumin, or equivalent.

Infection: Cells should be 95% to 100% confluent

Incubation: 2 to 10 days at 35°C and 5% CO<sub>2</sub>

Cytopathic Effect: Cell enlargement, granularity, and detachment

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Influenza A Virus, A/Brisbane/59/2007 (H1N1) (Mink Cell Adapted), NR-49064."

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. <http://www.who.int/influenza/vaccines/vaccinerecommendations1/en/index1.html>.
2. Fiore, A. E., et al. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2010." *MMWR Recomm. Rep.* 59 (2010): 1-62. PubMed: 20689501.
3. Shultz-Cherry, S., et al. "Mink Lung Epithelial Cells: Unique Cell Line that Supports Replication of Influenza A and B Virus Replication." *J. Clin. Microbiol.* 36 (1998): 3718-3720. PubMed: 9817906.
4. Hamilton, S. B., et al. "Higher Titers of some H5N1 and Recent Human H1N1 and H3N2 Influenza Viruses in Mv 1 Lu vs. MDCK Cells." *Virology* 8 (2011): 66. PubMed: 21314955.

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