

### Kilbourne F15: A/swine/115 (H1N1) Mutant, Low (L) Yield

#### Catalog No. NR-3482

Derived from NIAID Catalog No. V-331-0E4509

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#### Contributor:

National Institutes of Allergy and Infectious Diseases, National Institutes of Health

#### Product Description:

Virus Classification: *Orthomyxoviridae, Influenzavirus A*

Species: Influenza A virus

Mutant: A/swine/115 (H1N1) (Kilbourne F15)<sup>1-3</sup>

Comments: The low (L) yield HA mutant of A/swine/115 (H1N1) was selected with anti-high (H) yield HA antibody from a mixture of L and H forms which characterize natural swine influenza A virus isolates. NR-3482 and its companion H mutant (BEI Resources NR-3557) were isolated sequentially from the same pig inoculated with the human chick embryo-adapted and cloned H mutant of A/NJ/11/76 (H1N1) virus. The H mutant was largely replaced after several days of replication by the L mutant, which is apparently favored in swine.<sup>4,5</sup>

#### Material Provided:

Each vial contains approximately 1 mL of pooled allantoic fluid from specific-pathogen free (SPF) embryonated chicken eggs infected with the L mutant of influenza A virus, A/swine/115 (H1N1) (Kilbourne F15).

#### Packaging/Storage:

NR-3482 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -70°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: 9 to 11-day-old SPF embryonated chicken eggs

Infection: Embryonated chicken eggs must be candled for viability prior to inoculation

Incubation: 1 to 3 days at 35°C in a humidified chamber

Effect: Hemagglutination activity using chicken red blood cells and allantoic fluid from infected embryonated chicken eggs

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Kilbourne F15: A/swine/115 (H1N1) Mutant, Low (L) Yield, NR-3482."

#### 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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

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#### References:

1. [http://www.flu-archive.org/data\\_sheets/F15.doc](http://www.flu-archive.org/data_sheets/F15.doc)
2. <http://www.flu-archive.org/>
3. [http://www.flu-archive.org/search/results.pl?search\\_string=&join\\_type=and](http://www.flu-archive.org/search/results.pl?search_string=&join_type=and)
4. Kilbourne, E. D., et al. "Hemagglutinin Polymorphism as the Basis for Low- and High-Yield Phenotypes of Swine Influenza Virus." *Proc. Natl. Acad. Sci. U. S. A.* 85 (1988): 7782-7785. PubMed: 3174662.
5. Kilbourne, E. D., B. C. Easterday and S. McGregor. "Evolution to Predominance of Swine Influenza Virus Hemagglutinin Mutants of Predictable Phenotype during Single Infections of the Natural Host." *Proc. Natl. Acad. Sci. U. S. A.* 85 (1988): 8098-8101. PubMed: 3186713.

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