

**Kilbourne F68:
A/WSN/1933 (H1N1), Wild Type (ts+) Clone**

Catalog No. NR-3688

Derived from NIAID Catalog No. V-331-OTC451

For research use only. Not for human use.

Contributor:

National Institutes of Allergy and Infectious Diseases (NIAID),
National Institutes of Health (NIH)

Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Orthomyxoviridae, Influenzavirus A*

Species: Influenza A virus

Strain: A/WSN/1933 (H1N1) wild type (ts+) clone (Kilbourne F68)¹⁻⁴

Comments: Kilbourne F68 is a heat stable (ts+) clone of the WSN strain of influenza A virus derived by three successive rounds of plaque purification on Madin-Darby Bovine Kidney cells propagated at 39.5°C.⁴ The cloned virus was used to generate a series of temperature-sensitive influenza mutants including Kilbourne F66 (*ts51*), a well-characterized matrix gene mutation that causes nuclear retention of the M1 protein. Kilbourne F66 is available as BEI Resources NR-3687.^{5,6}

Sequence information is available for influenza A virus, A/WSN/1933 (H1N1) at the [Influenza Research Database](#).

Removal of contaminating mycoplasma from NR-3688 required six additional virus passages at BEI Resources.

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from Madin-Darby Canine Kidney (MDCK) cells (ATCC[®] CCL-34) infected with influenza A virus, A/WSN/1933 (H1N1), wild type (ts+) clone.

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

Packaging/Storage:

NR-3688 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: MDCK cells (ATCC[®] CCL-34TM)

Growth Medium: Eagle's Minimum Essential Medium

supplemented with 0.125% bovine serum albumin and 1 µg/mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin

Infection: Cells should be 90% to 100% confluent

Incubation: 1 to 7 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and detachment

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Kilbourne F68: A/WSN/1933 Wild Type (ts+) Clone, NR-3688."

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.

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References:

1. <https://www.beiresources.org/Portals/2/Flu-archiveDocs/F68.doc>
2. <https://www.beiresources.org/Flu-archive.aspx>
3. <https://www.beiresources.org/FluVirusCatalog.aspx>
4. Sugiura, A., K. Tobita, and E. D. Kilbourne. "Isolation and Preliminary Characterization of Temperature-Sensitive Mutants of Influenza Virus." *J. Virol.* 10 (1972): 639-647. PubMed: 4673486.
5. Rey, O., and D. P. Nayak. "Nuclear Retention of M1 Protein in a Temperature-Sensitive Mutant of Influenza (AWSN/33) Virus Does Not Affect Nuclear Export of Viral Ribonucleoproteins." *J. Virol.* 66 (1992): 5815-5824. PubMed: 1527844.
6. <https://www.beiresources.org/Portals/2/Flu-archiveDocs/F66.doc>

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