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SUPPORTING INFECTIOUS DISEASE RESEARCH

Influenza A Virus, A/WSN/33 (H1N1) PA-2A-NLuc (PASTN)

Catalog No. NR-49383

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

<u>Virus Classification</u>: *Orthomyxoviridae*, *Influenzavirus A* <u>Species</u>: Influenza A virus

Strain: A/WSN/33 (H1N1) PA-2A-NLuc (PASTN)

<u>Comments</u>: Influenza A virus, A/WSN/33 (H1N1) PA-2A-NLuc (PASTN) is a replication-competent influenza reporter virus that carries the luciferase variant NanoLuc[®] (NLuc) fused to the viral polymerase subunit A (PA). The reporter virus replicates with near-native properties both *in vitro* and *in vivo* and has pathogenicity and lethality in mice that is indistinguishable from the parental virus. It is suitable for use in *in vivo* imaging studies.¹

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from Madin-Darby Canine Kidney (MDCK) cells infected with influenza A virus, A/WSN/33 (H1N1) PA-2A-NLuc (PASTN).

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

Packaging/Storage:

NR-49383 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:

<u>Host</u>: MDCK cells (ATCC[®] CCL-34[™])

<u>Growth Medium</u>: Eagle's Minimum Essential Medium supplemented with 0.125% bovine serum albumin and 1 to 2 µg per mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin

Infection: Cells should be 80% to 100% confluent Incubation: 2 to 7 days at 37°C and 5% CO₂ Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Influenza A Virus, A/WSN/33 (H1N1) PA-2A-NLuc (PASTN), NR-49383."

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. <u>Biosafety in Microbiological and Biomedical Laboratories</u>. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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In addition, users of NR-49383 must (1) use Nano-Glo[®]branded luminescent assay reagents (LARs) manufactured by Promega and sold by ATCC[®] within a complete assay kit or sold by Promega as stand-alone LARs for all determinations of luminescence activity of this product and its derivatives, or (1a) contact Promega to obtain a license for use of the luciferase gene contained in this product and its derivatives.

References:

 Tran, V., et al. "Highly Sensitive Real-Time *in vivo* Imaging of an Influenza Reporter Virus Reveals Dynamics of Replication and Spread." <u>J. Virol.</u> 87 (2001): 13321-13329. PubMed: 24089552.

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