**Product Sheet** 

# Influenza A virus (H1N1)

VR-1469<sup>™</sup>

# Description

Influenza A virus (H1N1) strain A/PR/8/34 is propagated in MDCK (NBL-2) cells (ATCC CCL-34). This strain was isolated in 1934 from a human patient in Puerto Rico and was deposited by the Centers for Disease Control and Prevention. Use this strain in your respiratory disease research. **Strain designation:** A/PR/8/34 **Deposited As:** Influenza A virus

Storage Conditions Product format: Frozen Storage conditions: -70°C or colder

#### Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

# BSL 2

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

VR-1469

**Product Sheet** 

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

#### **Certificate of Analysis**

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

#### **Growth Conditions**

#### Host: MDCK (NBL-2) (ATCC CCL-34)

Effects: CPE; cell degeneration; cell rounding; cell sloughing

#### Complete medium:

EMEM (ATCC 30-2003) + 1 mM HEPES (Gibco<sup>®</sup> 15630-080) + 0.125% BSA Fraction V (Gibco<sup>®</sup> 15260-037) + 1  $\mu$ g/mL TPCK-treated Trypsin (USB<sup>®</sup> 22725)

#### Temperature: 35°C

#### Atmosphere: 95% Air, 5% CO<sub>2</sub>

**Recommendations for infection:** For best results, infection should be performed on an 80-90% confluent, 18-48 hour old cellular monolayer. Prepare dilution of virus in minimum amount of volume (e.g. 1 mL per 25 cm<sup>2</sup>), optimized for propagation (e.g. MOI 0.01-0.1 recommended). Wash monolayer two times with PBS or serum free medium prior to inoculation. Adsorb virus dilution for 1-2 hours at 35°C in a humidified 5% CO<sub>2</sub> atmosphere, rocking every 20-30 minutes to redistribute



VR-1469

inoculum. End adsorption by adding virus growth medium. **Incubation:** 2-4 days at 35°C in a humidified 5% CO<sub>2</sub> atmosphere, until CPE is progressed through 80% of the monolayer.

Handling Procedures

Mycoplasma contamination: Not detected

#### Notes

ATCC VR-1469 is a TC-adapted item derived from virus passaged in eggs (ATCC VR-95). **Key Abbreviations:** BSA, Bovine serum albumin; CPE, Cytopathic effect; EMEM, Eagle's Minimum Essential Medium; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2ethanesulfonic acid); MDCK, Madin Darby canine kidney cells; MOI, Multiplicity of infection; PBS, Phosphate-buffered saline; TPCK, L-1-tosylamido-2-phenylethyl chloromethyl ketone

# **Material Citation**

If use of this material results in a scientific publication, please cite the material in the following manner: Influenza A virus (H1N1) (ATCC VR-1469)

#### References

References and other information relating to this material are available at www.atcc.org.

#### Warranty

The product is provided 'AS IS' and the viability of  $ATCC^{\circ}$  products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled

VR-1469

the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a change in the ATCC and/or depositor-recommended protocols may affect the recovery, growth, and/or function of the product. If an alternative medium formulation or reagent is used, the ATCC warranty for viability is no longer valid. Except as expressly set forth herein, no other warranties of any kind are provided, express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose, manufacture according to cGMP standards, typicality, safety, accuracy, and/or noninfringement.

#### Disclaimers

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use. Any proposed commercial use is prohibited without a license from ATCC.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate or complete and the customer bears the sole responsibility of confirming the accuracy and completeness of any such information.

This product is sent on the condition that the customer is responsible for and assumes all risk and responsibility in connection with the receipt, handling, storage, disposal, and use of the ATCC product including without limitation taking all appropriate safety and handling precautions to minimize health or environmental risk. As a condition of receiving the material, the customer agrees that any activity undertaken with the ATCC product and any progeny or modifications will be conducted in compliance with all applicable laws, regulations, and guidelines. This product is provided 'AS IS' with no representations or warranties whatsoever except as expressly set forth herein and in no event shall ATCC, its parents, subsidiaries,



Product Sheet

VR-1469

directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer's use of the product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

Please see the material transfer agreement (MTA) for further details regarding the use of this product. The MTA is available at www.atcc.org.

#### Copyright and Trademark Information

© ATCC 2023. All rights reserved.

ATCC is a registered trademark of the American Type Culture Collection.

#### Revision

This information on this document was last updated on 2025-02-14

#### **Contact Information**

ATCC 10801 University Boulevard Manassas, VA 20110-2209 USA US telephone: 800-638-6597 Worldwide telephone: +1-703-365-2700 Email: tech@atcc.org or contact your local distributor

