



# Influenza A virus (H1N1)

VR-1469™

## 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

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -70°C or colder

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## 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.

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## 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.

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.

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## 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 µg/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

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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.

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### Handling Procedures

**Mycoplasma contamination:** Not detected

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### 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'-(2-ethanesulfonic acid); MDCK, Madin Darby canine kidney cells; MOI, Multiplicity of infection; PBS, Phosphate-buffered saline; TPCK, L-1-tosylamido-2-phenylethyl chloromethyl ketone

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### 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)

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### References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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