



# Influenza A virus (H1N1)

VR-1736™

## Description

Influenza A virus (H1N1) strain A/Virginia/ATCC1/2009 is propagated in MDCK (NBL-2) cells (ATCC CCL-34). This strain was isolated in 2009 from a nasopharyngeal specimen from a patient positive for Influenza A in Virginia. It can be used in respiratory disease and influenza research.

**Strain designation:** A/Virginia/ATCC1/2009

**Common name:** Influenza A virus (H1N1)

**Type strain:** No

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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 submerged 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 submerged 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

**Complete medium:**

EMEM (ATCC 30-2003) + 2 µg/mL TPCK treated Trypsin + 0.125% BSA Fraction V + 10 mM HEPES Buffer

**Temperature:** 35°C

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

**Recommendations for infection:** Plate cells 24 hours in advance and infect when cultures are 80-90% confluent. Remove medium and inoculate with a small volume of virus diluted with VGM to provide a MOI 0.1. Adsorb for 1

hour at 35°C in a humidified 5% CO<sub>2</sub> atmosphere. End adsorption by adding virus growth medium.

**Incubation:** Incubate infected culture for 2 to 5 days at 35°C in a humidified 5% CO<sub>2</sub> atmosphere, until CPE are well advanced through 90% of the culture.

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## Handling Procedures

**Mycoplasma contamination:** Not detected

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## Notes

Item analyzed using Real-time RT-PCR to determine strain is of pandemic swine Influenza A origin.

**Key Abbreviations:** °C, Degrees Celsius; CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; MOI, Multiplicity of infection; MDCK, Madin Darby canine kidney cells; EMEM, Eagle's Minimum Essential Medium; TPCK, L-1-tosylamido-2-phenylethyl chloromethyl ketone; BSA, Bovine serum albumin; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid); µg, Microgram; mL, Milliliter; mM, millimolar

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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-1736)

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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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Product Sheet

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