



# Influenza A virus (H1N1)pdm09

VR-1805™

Product Sheet

## Description

Influenza A virus (H1N1)pdm09 strain A/California/04/2009 (H1N1)pdm09 is propagated in MDCK (NBL-2) cells (ATCC CCL-34). This strain was isolated from a 10-year-old boy with asthma in San Diego with asthma in 2009 and was deposited by the California Department of Health. It can be used in respiratory disease research.

**Strain designation:** A/California/04/2009 (H1N1)pdm09

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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 rounding; cell sloughing

**Complete medium:** EMEM (ATCC 30-2003) + 2 µg/mL TPCK-treated trypsin + 10 mM HEPES + 0.125% BSA

**Temperature:** 33.5°C

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

**Recommendations for infection:** Plate cells 16-24 hours prior to infection and infect when cultures are 80-90% confluent. Remove medium and inoculate with a small volume of virus (e.g. 1 mL per 25 cm<sup>2</sup>) diluted to provide an optimal MOI (e.g. 0.1 to 1.0). Adsorb 1-2 hours at 33.5°C in a humidified 5% CO<sub>2</sub> atmosphere. End adsorption by adding virus growth medium.

**Incubation:** 2-7 days at 33.5°C in a humidified 5% CO<sub>2</sub> atmosphere, until CPE is progressed through 80% of the monolayer.

## Notes

**Key Abbreviations:** °C, Degrees Celsius; BSA, Bovine serum albumin; CO<sub>2</sub>, Carbon dioxide; EMEM, Eagle's Minimum Essential Medium; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid); MOI, Multiplicity of infection; 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)pdm09 (ATCC VR-1805)

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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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