



# Influenza A virus (H1N1)pdm09

VR-1988™

## Description

Influenza A virus (H1N1)pdm09 strain A/Washington/29/2009 is propagated in MDCK (NBL-2) cells (ATCC CCL-34). This culture was isolated from a human in Washington, United States, in 2009.

**Strain designation:** A/Washington/29/2009

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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

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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 rounding; cell degeneration; cell sloughing; cell detachment

**Complete medium:** EMEM (ATCC 30-2003) + 10 mM HEPES (Gibco 15630-080) + 0.125% BSA Fraction V (Gibco 15260-037) + 10 BAEE/mL Trypsin, TPCK Treated (MilliporeSigma T1426)

**Temperature:** 35°C

**Recommendations for infection:** Plate cells 24-48 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. 0.001). Adsorb 1-2 hours at 35°C in a humidified 5% CO<sub>2</sub> atmosphere. 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 80-99% of the monolayer.

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## Notes

This virus is an Antiviral Resistance (AVR)- Reference Virus that contains an asparagine at position 31 in the matrix 2 (M2) protein (M2:S31N), a known marker of resistance to adamantanes (amantadine and rimantadine).

The neuraminidase (NA) protein contains a tyrosine at position 275 (NA: H275Y), a known marker of resistance to the neuraminidase inhibitor, oseltamivir.

**Key Abbreviations:** °C, Degrees Celsius; CO<sub>2</sub>, Carbon dioxide; EMEM, Eagle's Minimum Essential Medium; MOI, Multiplicity of infection

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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-1988)

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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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## Revision

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