



# Influenza A virus (H1N1)

VR-1683™

## Description

**Strain designation:** A/Swine/Iowa/15/30 (TC-adapted)

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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 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)

Alternate Hosts: Chicken embryo, MDCK and Monkey kidney cells (MkK)

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

**Complete medium:**

E MEM (ATCC<sup>®</sup> 30-2003™) + BSA (Invitrogen 15260-037) + HEPES (Gibco 15630-106) + Trypsin [TPCK Treated] (USB 22725)

**Temperature:** 33.5°C

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

**Recommendations for infection:** For best results, plate cells 24-48 hours in advance. Infect at 80%-90% confluent (not 100% confluent) using a multiplicity of infection (MOI) of 0.01 to 1.0. Incubate at 33.5°C in a humidified, 5% CO<sub>2</sub> atmosphere for 2-4 days, until CPE are well advanced in 100% of the culture. In TC, ATCC<sup>®</sup> VR-1683<sup>?</sup> should be grown in serum free media that contains 1 mg/mL TPCK-treated trypsin, 0.125% BSA and 1% HEPES (1 molar stock).

**Incubation:** 2 to 4 days at 33.5°C, a 5%CO<sub>2</sub> in air atmosphere is recommended.

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## Handling Procedures

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**Mycoplasma contamination:** Not detected

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## Notes

Derived by adaptation of egg-passage A/Swine/Iowa/15/30 (ATCC<sup>®</sup> VR-333) to MDCK (ATCC<sup>®</sup> CCL-34) cells. (Note: ATCC<sup>®</sup> VR-333 and ATCC<sup>®</sup> VR-1683 have not been compared with respect to sequence or infectivity in chick embryo and tissue culture).

**Key Abbreviations:** BSA, Bovine serum albumin; CE, Chicken embryo; CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; EMEM, Eagle's Minimum Essential Medium; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid); MDCK, Madin Darby canine kidney cells; µg, Microgram; mg, Milligram; Mkk, Monkey kidney; mL, Milliliter; RBC, Red blood cell; TC, Tissue culture; TPCK, L-1-tosylamido-2-phenylethyl chloromethyl ketone; 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-1683)

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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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