



# Human rhinovirus 16, High titer

VR-283PQ™

## Description

Human rhinovirus 16 strain 11757 is a high-titer purified virus preparation that can be propagated in H1HeLa cells (ATCC CRL-1958). This strain was isolated in 1960 from the throat swab of a healthy 2-year-old human female in Washington, DC. It can be used in a variety of applications, including respiratory disease research, in vitro infectivity assays, antiviral studies, spiking studies, assay development, and vaccine development.

**Strain designation:** 11757

**Common name:** Rhinovirus 16, HRV-16

**Deposited As:** Rhinovirus 16

**Shipping information:**

Titer and genome copy number reported on Certificate of Analysis

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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

## Human rhinovirus 16, High titer

VR-283PQ

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:** H1HeLa (ATCC CRL-1958)

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

**Complete medium:**

EMEM (ATCC 30-2003) + 2% FBS (ATCC 30-2020)

**Temperature:** 33°C

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

**Recommendations for infection:** Plate cells approximately 24 hours prior to infection and infect when cultures are 70-80% 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. 0.01). Adsorb 1-2 hours at 33°C in a humidified 5% CO<sub>2</sub> atmosphere, rocking continuously on slow speed. End adsorption by adding virus growth medium.

**Incubation:** 2-3 days at 33°C in a humidified 5% CO<sub>2</sub> atmosphere, until CPE is progressed through 80-90% of the monolayer.

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## Notes

ATCC VR-283PQ is a high-titer, purified, live virus suspended in 0.01% BSA + 25 mM HEPES + 10 mM NaCl + DPBS. This product was prepared from ATCC VR-283 via purification through sucrose gradient centrifugation, and is devoid of cellular debris and contaminants.

The pH of the medium should be maintained in a range of 7.0-7.3. Rocking of cultures during adsorption may enhance viral replication and CPE. Deposited as Rhinovirus HRV-16. HA is not demonstrated. Not inactivated by ether.

**Key Abbreviations:** °C, Degrees Celsius; BSA, Bovine serum albumin; CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; D-PBS, Dulbecco's Phosphate-buffered saline; EMEM, Eagle's Minimum Essential Medium; FBS, Fetal bovine serum; HA, Hemagglutination; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid); 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: Human rhinovirus 16, High titer (ATCC VR-283PQ)

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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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