**ATCC Product Sheet**

**Betacoronavirus 1 (ATCC® VR-1558™)**

**Please read this FIRST**

**Storage Temp.**
-70°C or colder

**Biosafety Level**
2

**Intended Use**
This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

**Citation of Strain**
If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: Betacoronavirus 1 (ATCC® VR-1558™)

**Propagation**

**Propagation Host:**
HCT-8 (ATCC® CCL-244™)

**Effect on Host:**
CPE, vacuolization of cytoplasm and sloughing

**Medium:**
RPMI-1640 (ATCC® 30-2001™) + 2% HS (ATCC® 30-2040™)

**Growth Conditions**

**Temperature:** 33°C

**Recommendations for Infection:**
For best results, infection should be performed on an 80-90% confluent, 18-48 hour old cellular monolayer. Prepare dilution of virus in minimum amount of volume (e.g. 1 mL per 25 cm²), optimized for propagation (e.g. MOI 0.01-0.1 recommended). Wash monolayer two times with PBS or serum free medium prior to inoculation. Adsorb virus dilution for 1-2 hours at 33°C in a humidified 5% CO₂ atmosphere, while rocking continuously. End adsorption by adding virus growth medium.

**Incubation:**
4-6 days at 33°C in a humidified 5% CO₂ atmosphere, rocking continuously, until CPE is progressed through 80% of the monolayer.

VR-1558™ is a TC-adapted item derived from virus passaged in mice (ATCC® VR-759™). Cleaned of mycoplasma with MRA. No antigenic cross reaction with Human coronavirus 229E (ATCC® VR-740™).

**References**

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).

**Key Abbreviations**

CPE, cytopathic effect
HCT-8, adult human colon epithelial cells
HS, horse serum
MOI, multiple of infection
MRA, mycoplasma removal agent
PBS, Phosphate buffered saline
RPMI, Roswell Park Memorial Institute
TC, tissue culture

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

**ATCC Warranty**

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC
lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org.

Additional information on this culture is available on the ATCC web site at www.atcc.org.

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