




Product Sheet


# Porcine respiratory coronavirus (ATCC® VR-2384™)

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: Porcine respiratory coronavirus (ATCC® VR-2384™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

Strain: AR310

Classification: *Coronaviridae*, *Alphacoronavirus*, *Alphacoronavirus 1*

Original Source: Culture of a novel TGEV-related Porcine respiratory coronavirus

Depositor: Iowa State University Research Foundation

## Batch-Specific Information

Refer to the Certificate of Analysis for batch-specific test results.

## Propagation

### Propagation Host:

ST cells (ATCC® CRL-1746™)

### Effect on Host:

CPE, fused and rounded cells with sloughing

### Medium:

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

### Growth Conditions

Temperature: 37°C

**Recommendations for Infection:** For best results, infection should be performed on a 80-90% confluent, 18-48 hour old cellular monolayer. Prepare dilution of virus in minimum amount of volume (e.g. 1 mL per 25 cm<sup>2</sup>). Wash monolayer with PBS or serum free medium prior to inoculation. Adsorb virus dilution for 1-2 hours at 37°C in a humidified 5% CO<sub>2</sub> atmosphere, rocking every 20-30 minutes to redistribute inoculum. End adsorption by adding virus growth medium.

**Incubation:** 2-3 days at 37°C in a humidified 5% CO<sub>2</sub> atmosphere, until CPE is progressed through 80% of the monolayer.

## Comments

This strain provides a biological pure culture of a novel pathogenic porcine respiratory coronavirus (PRCV) and a vaccine derived therefrom effective against PRCV infection and Transmissible gastroenteritis virus (TGEV) infection. The virus produces a moderate pneumonia in pigs. There is no indication of human health hazard.

This material is cited in U.S. and/or other patent # 5,419,907 May 30, 1995.

## References

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

## Key Abbreviations

°C, degrees Celsius

CO<sub>2</sub>, carbon dioxide

CPE, cytopathic effect

EMEM, Earle's minimum essential medium

FBS, fetal bovine serum

PBS, phosphate buffered saline

PRCV, Porcine respiratory coronavirus

ST, swine testicular cells (fibroblasts)

TGEV, Transmissible gastroenteritis virus

## 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



Product Sheet


## Porcine respiratory coronavirus (ATCC® VR-2384™)

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: Porcine respiratory coronavirus (ATCC® VR-2384™)

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](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

© ATCC 2015. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [03/12]

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor