




Product Sheet


# Human echovirus 4 (ATCC® VR-1734™)

Please read this **FIRST**



Storage Temp.  
**Store at -70°C or colder**

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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: Human echovirus 4 (ATCC® VR-1734™)

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:** Pesascek

**Classification:** *Picornaviridae, Enterovirus, Human enterovirus B*

**Original Source:**

Fecal specimen from case of aseptic meningitis, Connecticut, 1951.

**Depositor:** J.L. Melnick

## Batch-Specific Information

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

## Propagation

**Propagation Host:**

**Production Host:** LLC-Mk2 derivative cells (ATCC CCL-7.1).

**Recommended Host:** LLC-Mk<sub>2</sub> derivative cells (ATCC® CCL-7.1).

**Alternate Hosts:** Mkk, Mk (testis) and HED cells

**Effect on Host:**

Cytopathic effects in tissue culture

CPE in the form of highly refractile, rounded cells throughout monolayer or in loose clusters.

**Medium:**

Virus growth medium: EMEM (ATCC® 30-2003™) + 2%FBS (ATCC® 30-2020™)

**Growth Conditions**

Plant cells 24 hours in advance and infect when cultures are 80-90% confluent. Remove medium and inoculate with a small volume of virus diluted to provide a MOI of about 0.1. Adsorb 1 hour at 37.0°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.

## Comments

This item is a mycoplasma free preparation derived from ATCC® VR-34™ following treatment to remove mycoplasma. VR-34™ will no longer be distributed.

## References

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

## Key Abbreviations

Mkk, monkey kidney

LLC-Mk<sub>2</sub>, rhesus monkey kidney

HED, human excised donor

°C, degrees Celsius

bp, base pair

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

CPE, cytopathic effect

MOI, multiplicity of infection

TC, tissue culture

TCID<sub>50</sub> (TCID<sub>50</sub>), the 50% infectious endpoint in cell culture, i. e. the dilution of virus that, under the conditions of the assay, can be expected to infect 50% of the culture vessels inoculated. Expressed as TCID<sub>50</sub> per volume inoculated per vessel. The reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the titer (or infectivity) of a preparation.

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04/2010, QSS/ MJA

## 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.



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

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

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