



Product Sheet

# H-1 virus (ATCC® VR-356™)

Please read this FIRST

Storage Temp.  
**-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: H-1 virus (ATCC® VR-356™)

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  
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Or contact your local distributor

### Description

**Strain:** Toolan

**Original Source:**

Human embryo lung (4 months operative abortion) from mother with metastatic breast cancer, who had an HAI and neutralizing titer of 1:640 to H-1 virus

**Depositor:** HW Toolan

### Batch-Specific Information

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

### Propagation

**Propagation Host:**

neonatal hamster; Chang Liver cells (ATCC CCL-13)

**Production Host:** Chang L (ATCC® CCL-13), nbHa hamster; human; rhesus monkey; rat

**Effect on Host:**

Yes, in vitro effects: Cytopathic effects (cell death) in tissue culture

CPE and cell death in TC; death or deformity of newborn hamster depending on virus concentration.

Yes, in vivo effects: death or deformity of newborn hamster depending on virus concentration

### Growth Conditions

**Temperature:** 37.0°C

Duration: 5 days

### Comments

Plaque purified on Salk MkHe. Hemagglutinates a variety of RBC, particularly guinea pig, hamster and human, and also has a CF antigen. Produces deformity or death in newborn hamsters and neutralizing antibodies in human, monkeys, hamsters and rats. Virus has been sequenced: GenBank Accession ID X01457.1.

### 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

Chang L, human liver cells

CO<sub>2</sub> (CO2), carbon dioxide

CPE, cytopathic effect

Ha, Hamster

HAI, Hemagglutination inhibition

He, Heart

Mk, Monkey

MOI, multiplicity of infection

nb, newborn

RBC, red blood cells

TC, tissue culture

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09/2011, KY/KKJ/SR

### 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.*



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### 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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