



Product Sheet

## Murine hepatitis virus (ATCC® VR-764™)

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: Murine hepatitis virus (ATCC® VR-764™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
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Or contact your local distributor

### Description

**Strain:** MHV-A59

**Classification:** Nidovirales, Coronaviridae, Coronavirus, Group 2

**Common Name:** Murine hepatitis virus

**Original Source:**

Pool of liver and spleen suspension of BALB/c mice exhibiting rough coats and hunched position

**Depositor:** MJ Collins

### Batch-Specific Information

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

### Propagation

**Propagation Host:**

NCTC clone 1469 cells (ATCC CCL-9.1)

**Recommended Host:** NCTC 1469 (ATCC CCL-9.1)

**Effect on Host:**

Yes, in vitro effects: Cytopathic effects in tissue culture

CPE, rounding and sloughing, attached and floating syncytial debris

**Medium:**

NCTC 135 + 10% Horse Serum (ATCC 30-2040)

**Growth Conditions**

**Incubation:** 18 to 24 hours at 37°C, a 5%CO<sub>2</sub> in air atmosphere is recommended

**Recommendations for Infection:** For best results cells should be 24 to 48 hours old and 80% - 90% confluent (not 100% confluent).

**Temperature:** 37°C

### Comments

The MHV-A59 was isolated from BALB/c mice in which Moloney murine leukemia had been serially passaged by i.p. injection of homogenates of liver, spleen, thymus and lymph node. It is possible that the preparation still contains murine leukemia virus.

### References

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

### Key Abbreviations

AB, antibody

BALB/c, albino: A,b,c strain of inbred mouse

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

CPE, cytopathic effect

FA, fluorescent antibody

FITC, fluorescein isothiocyanate

IgG, Immunoglobulin type G

i.p., intra-peritoneal

MHV, murine hepatitis virus

mL, milliliter

Ms, mouse

NCTC, media developed by National Cancer Institute tissue culture section

NCTC 721, mouse cell line derived from normal liver tissue of a 48-hour-old C3H/AN mouse

NCTC 135, synthetic media that can be used without protein supplement, lacking L-Cysteine HCL

NCTC 1469, clone 1469 derived from original mouse liver strain NCTC 721

PBS, phosphate buffered saline

TC, tissue culture

TCID<sub>50</sub> (TCID<sub>50</sub>), The Tissue Culture Infectious Dose


50% endpoint is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, just as a Lethal Dose 50% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the



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TCID<sub>50</sub> provides a measure of the titer (or infectivity) of a virus preparation.

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### 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

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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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