



Product Sheet

# Vaccinia virus ts mutant (ATCC® VR-3131™)

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: Vaccinia virus ts mutant (ATCC® VR-3131™)

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:** IHD-W Dts9  
**Classification:** Poxviridae, Orthopoxvirus  
**Depositor:** S Dales, R. Condit

## Batch-Specific Information

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

## Propagation

### Propagation Host:

Production Host: BSC-40 (ATCC CRL-2761)

**Recommended Host:** BSC-40 (ATCC CRL-2761)

Alternate Host(s): MRC-5, BS-C-1, HeLa, LLC-MK2

### Effect on Host:

Cytopathic effects in culture include enlargement and rounding of cells, followed by death and sloughing  
CPE: enlargement, plaques with rounding and eventual sloughing

### Medium:

Virus growth medium: EMEM + 2% FBS

### Growth Conditions

1-3 days at 31 C with 5% CO2

## Comments

Selected after mutagenesis with nitrosoguanidine. The non-permissive incubation temperature is 39.5°C. This mutant was assigned to Dales EM category E, inducing foci of viroplasm, aberrant membranes without spicules, and DNA paracrystals in infected cells. The mutation was assigned by complementation analysis (Lackner, et al, 2003) to vaccinia map location D13, which encodes a 65-kDa protein thought to function as a scaffold protein for the formation of viral crescents and immature virions.

## References

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

## Key Abbreviations

(define all abbreviations used on master product sheet and batch product sheet)

BSC-40 cells, African green monkey kidney cells

CPE, cytopathic effect

EMEM, Eagle's Minimum Essential Medium

FBS, fetal bovine serum

ts, temperature sensitive

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 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



Product Sheet


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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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