



Product Sheet

## Vaccinia virus ts mutant (ATCC® VR-3178™)

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-3178™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
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800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
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Or contact your local distributor

### Description

**Strain:** IHD-W Dts93 (Dales isolate 9281)  
**Classification:** Poxviridae, Orthopoxvirus  
**Original Source:**  
derived from existing strain  
**Depositor:** S Dales, RC Condit, S Dales

### Batch-Specific Information

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

### Propagation

**Propagation Host:**  
**Recommended Host:** BSC-40 (ATCC CRL-2761)  
**Effect on Host:**  
Yes, Cytopathic effect: Rounding and sloughing of infected cells  
CPE: enlargement, plaques with rounding and eventual sloughing

**Medium:**  
Virus growth medium: EMEM + 2% FBS

### Growth Conditions

**Temperature:** 31.0°C  
Duration: 1-3 days; For best results, cells should be 24 to 48 hours old and 80-90% confluent at time of infection [not 100% confluent].

### Comments

Non-permissive incubation temperature is 39.5°C. This mutant was not assigned to a Dales EM category. It is also assigned the Condit map location U5. This subtype is distinguishable from the parent IHD-J strain by its ability to elicit polykaryocytosis in all mammalian and avian cells tested and by its inability to induce an active hemagglutinin at the plasma membrane

### 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, Eagles minimum essential medium  
ts, temperature sensitive  
TCID<sub>50</sub>(TCID[50]), 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



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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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