## Vaccinia virus

## VR-1549 ${ }^{\text {TM }}$

## Description

This product requires a VS 16-6A permit, which can be downloaded at the USDA website here. Please submit the completed permit form to SalesPermits@atcc.org with your ATCC sales order number and/or your purchase number noted in the subject line and body of the email.
Strain designation: Elstree (Lister Vaccine)

Storage Conditions<br>Product format: Frozen<br>Storage conditions: $-70^{\circ} \mathrm{C}$ or colder

## Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

## BSL 2

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of Biosafety in Microbiological and Biomedical Laboratories (BMBL), U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Vaccination recommended for laboratory personnel working with vaccinia, monkeypox, or cowpox viruses

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

## Growth Conditions

Host: Vero (ATCC CCL-81)
Effects: cell rounding; cell sloughing; CPE

## Complete medium:

EMEM (ATCC ${ }^{\oplus} 30-2003^{\text {rM }}$ ) $+2 \%$ FBS (ATCC ${ }^{\oplus} 30-2020^{\text {rM }}$ )
Temperature: $37^{\circ} \mathrm{C}$
Atmosphere: 95\% Air, 5\% CO2
Recommendations for infection: Plant cells 24 hours in advance and infect when cultures are 70-80\% confluent. Remove medium and inoculate with a small volume of virus diluted with VGM to provide a MOI of about 0.1. Adsorb 1 hour at $37^{\circ} \mathrm{C}$ in a humidified $5 \% \mathrm{CO}_{2}$ atmosphere, rocking every 15-20 minutes to redistribute inoculum. End adsorption by adding VGM.
Incubation: Incubate infected Vero cell culture for 2-4 days at $37^{\circ} \mathrm{C}$ in a humidified

5\% CO2 atmosphere, until CPE are well advance through 90\% of the culture. Incubate for 3 days on CAM.

## Handling Procedures

Mycoplasma contamination: Not detected

## Notes

Key Abbreviations: CAM, Chorioallantoic membrane; ${ }^{\circ} \mathrm{C}$, Degrees Celsius; $\mathrm{CO}_{2}$, Carbon dioxide; CPE, Cytopathic effect; MOI, Multiplicity of infection

## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Vaccinia virus (ATCC VR-1549)

## References

References and other information relating to this material are available at www.atcc.org.

## Warranty

The product is provided 'AS IS' and the viability of ATCC ${ }^{\circledR}$ products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a
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## Revision

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