Vaccinia virus
VR-1508™

Description
Vaccinia virus strain Modified vaccinia virus Ankara (MVA) is propagated in BHK-21 [C-13] cells (ATCC CCL-10). This strain was derived from the CVA (Ankara) strain via serial passage in chicken embryo fibroblasts followed by plaque purification 3 times.

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: Modified vaccinia virus Ankara (MVA)
Deposited As: Vaccinia virus

Storage Conditions
Product format: Frozen
Storage conditions: -70°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.

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: BHK-21 [C-13] (ATCC CCL-10)
Effects: cell rounding; cell sloughing; CPE
Complete medium:
EMEM (ATCC 30-2003) + 2% FBS (ATCC 30-2020)
Temperature: 37°C
Atmosphere: 95% Air, 5% CO₂
Recommendations for infection: Plate cells 24-48 hours prior to infection and infect when cultures are 80-90% confluent. Remove medium and inoculate with a small volume of virus (e.g. 1 mL per 25 cm²) diluted to provide an optimal MOI (e.g. 0.1).
**Vaccinia virus**
VR-1508

Adsorb 1-2 hours at 37°C in a humidified 5% CO₂ atmosphere, rocking every 20-30 minutes to redistribute inoculum. End adsorption by adding virus growth medium.

**Incubation:** 3-7 days

---

**Handling Procedures**

**Mycoplasma contamination:** Not detected

---

**Notes**

Does not replicate in human cells or the majority of mammalian cells. This is a highly attenuated strain that some experts feel can be handled safely by trained personnel without the need for vaccination.

**Key Abbreviations:** FBS, Fetal bovine serum; MOI, Multiplicity of infection; °C, Degrees Celsius; CO₂, Carbon dioxide; CPE, Cytopathic effect; CVA, Chorioallantoic vaccinia Ankara; EMEM, Eagle’s Minimum Essential Medium

---

**Material Citation**

If use of this material results in a scientific publication, please cite the material in the following manner: Vaccinia virus (ATCC VR-1508)

---

**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® 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
change in the ATCC and/or depositor-recommended protocols may affect the
recovery, growth, and/or function of the product. If an alternative medium
formulation or reagent is used, the ATCC warranty for viability is no longer valid.
Except as expressly set forth herein, no other warranties of any kind are provided,
express or implied, including, but not limited to, any implied warranties of
merchantability, fitness for a particular purpose, manufacture according to cGMP
standards, typicality, safety, accuracy, and/or noninfringement.

---

Disclaimers

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. Any proposed commercial use is prohibited without a license from
ATCC.

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 or complete and the customer bears the sole responsibility
of confirming the accuracy and completeness of any such information.

This product is sent on the condition that the customer is responsible for and
assumes all risk and responsibility in connection with the receipt, handling, storage,
disposal, and use of the ATCC product including without limitation taking all
appropriate safety and handling precautions to minimize health or environmental
risk. As a condition of receiving the material, the customer agrees that any activity
undertaken with the ATCC product and any progeny or modifications will be
conducted in compliance with all applicable laws, regulations, and guidelines. This
product is provided 'AS IS' with no representations or warranties whatsoever except
as expressly set forth herein and in no event shall ATCC, its parents, subsidiaries, directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer’s use of the product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

Please see the material transfer agreement (MTA) for further details regarding the use of this product. The MTA is available at www.atcc.org.

---

**Copyright and Trademark Information**

© ATCC 2023. All rights reserved.

ATCC is a registered trademark of the American Type Culture Collection.

---

**Revision**

This information on this document was last updated on 2022-10-22

---

**Contact Information**

ATCC
10801 University Boulevard
Manassas, VA 20110-2209
USA

US telephone: 800-638-6597
Worldwide telephone: +1-703-365-2700
Email: tech@atcc.org or contact your local distributor