



# Rubella virus

VR-315™

## Description

Rubella virus strain M33 is propagated in BS-C-1 cells (ATCC CCL-26). This strain was isolated from the throat washings from an Army recruit in New Jersey.

**Strain designation:** M33

**Deposited As:** Rubella virus

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -70°C or colder

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## 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.

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## 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

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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.

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### Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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### Growth Conditions

**Host:** BS-C-1 (ATCC CCL-26)

**Effects:** interference with other viruses (GMK); No CPE; production of CF and HA antigens

**Complete medium:**

EMEM (ATCC 30-2003) + 0.5 µg/mL Trypsin

**Temperature:** 35°C

**Atmosphere:** 95% Air, 5% CO<sub>2</sub>

**Recommendations for infection:** Plate cells 24 hours prior to infection and infect when cultures are 60-70% confluent. Remove medium and inoculate with a small volume of virus (e.g. 1 mL per 25 cm<sup>2</sup>) diluted to provide an optimal MOI (e.g. 0.1). Adsorb 1-2 hours at 35°C in a humidified 5% CO<sub>2</sub> atmosphere, rocking every 20-30 minutes to redistribute inoculum. End adsorption by adding virus growth medium.

**Incubation:** 11-15 days

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### Handling Procedures

**Mycoplasma contamination:** Not detected

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### Notes

Rubella virus is 40-80 nm in diameter, ether sensitive and RNA-containing. Titration held on LLC-MK<sub>2</sub> cells (ATCC CCL-7.1), for viewable CPE not shown on recommended host.

Vials contain total fluid and material from cell culture infected by virus. The vials will contain cellular debris and possibly cells containing cell-associated virus.

**Key Abbreviations:** TCID<sub>50</sub>, Median tissue culture infective dose; AB, Antibody; BHK-21, Hamster kidney cell line; BS-C-1, African green monkey kidney cells; CF, Complement fixation; CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; EMEM, Eagle's Minimum Essential Medium; FBS, Fetal bovine serum; FITC, Fluorescein isothiocyanate conjugate; GMK, Green monkey kidney cells; GP, Guinea pig; HA, Hemagglutination; IgG, Immunoglobulin G; LLC-MK<sub>2</sub>, Rhesus monkey kidney cells; µg, Microgram; MAb, Monoclonal antibody; mL, Milliliter; MkK, Monkey kidney; M (Ms), Mouse; nm, Nanometer; Pen, Penicillin; RK-13, Rabbit kidney cells; RNA, Ribonucleic acid; Strep, Streptomycin; TC, Tissue culture

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### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Rubella virus (ATCC VR-315)

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### References

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

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