



# Human herpesvirus 5

VR-1590™

## Description

Human herpesvirus 5 strain Merlin is propagated in MRC-5 cells (ATCC CCL-171). This strain was isolated from the urine of a congenitally infected infant and was deposited by the Cardiff Public Health Laboratory. It has applications in infectious disease and sexually transmitted disease research.

**Strain designation:** Merlin

**Common name:** Cytomegalovirus

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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 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:** MRC-5 (ATCC CCL-171)

**Effects:** CPE; cell enlargement; cell rounding; cytoplasmic inclusions; nuclear inclusions

**Complete medium:**

EMEM (ATCC 30-2003) + 2% FBS (ATCC 30-2020)

**Temperature:** 37°C

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

**Recommendations for infection:** For best results, infection should be performed on a 80-90% confluent, 18-48 hour old cellular monolayer. Prepare dilution of virus in minimum amount of volume (e.g. 1 mL per 25 cm<sup>2</sup>). Wash monolayer with PBS or serum free medium prior to inoculation. Adsorb virus dilution for 1-2 hours at 37°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.

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**Incubation:** 2-10 days at 37°C in a humidified 5% CO<sub>2</sub> atmosphere until CPE is progressed through 80% of the monolayer.

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### Handling Procedures

**Mycoplasma contamination:** Not detected

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### Notes

Low MOI applications, such as titration, may require incubation for as long as 3 weeks. This is a low passage strain of Human herpesvirus 5, deposited at ATCC 4 passages from isolation. At deposit, it retained the wild type complement of 165 genes, and contained no obvious mutations other than a single nucleotide substitution that truncates gene UL128. To retain genetic integrity, further passage should be limited.

**Key Abbreviations:** °C, Degrees Celsius; CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; EMEM, Eagle's Minimum Essential Medium; FBS, Fetal bovine serum; MOI, Multiplicity of infection

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### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Human herpesvirus 5 (ATCC VR-1590)

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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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### Revision

This information on this document was last updated on 2024-05-03

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