



# Dengue virus type 2

VR-1584™

## Description

Dengue virus type 2 strain New Guinea C is propagated in LLC-MK2 Derivative cells (ATCC CCL-7.1). This strain was isolated from the serum of a febrile patient in 1944 and was deposited by the University of Maryland School of Medicine, the Yale Arbovirus Research Unit, and the National Institute of Allergy and Infectious Diseases (NIAID). It has applications in vector-borne research.

**Strain designation:** New Guinea C

**Serotype:** type 2

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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

## Dengue virus type 2

VR-1584

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:** LLC-MK2 Derivative (ATCC CCL-7.1)

**Effects:** CPE; cell aggregation; cell death; cell sloughing

**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:** Plate cells 24-48 hours prior to infection and infect when cultures are 70-80% 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 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.

**Incubation:** 6-8 days

## Dengue virus type 2

VR-1584

### Handling Procedures

**Mycoplasma contamination:** Not detected

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### Notes

ATCC VR-1584 was TC-adapted from ATCC VR-1255 by passage in LLC-MK<sub>2</sub> (ATCC CCL-7.1).

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

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### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Dengue virus type 2 (ATCC VR-1584)

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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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## Dengue virus type 2

VR-1584

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# Dengue virus type 2

VR-1584

Product Sheet

use of this product. The MTA is available at [www.atcc.org](http://www.atcc.org).

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## Revision

This information on this document was last updated on 2023-02-18

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