



# Heat-inactivated SARS-CoV-2, Delta variant

VR-3342HK™

## Description

This product is a preparation of Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) strain USA/MD-HP05285/2021 (Delta variant) that has been inactivated by heating at 65°C for 30 minutes and is therefore unable to replicate. This heat-inactivated preparation is whole-genome sequenced and can be used as a process control in the development of SARS-CoV-2 molecular diagnostic tools and can also be used to make a dilution series to estimate the level of detection.

Due to the dynamic nature of lineage determination using PANGO, it is recommended to confirm the provided GISAID information prior to initiation of work.

**Strain designation:** USA/MD-HP05285/2021

**Common name:** SARS-CoV-2

**Shipping information:** Each vial contains approximately 0.25 mL of heat-inactivated, clarified cell lysate and supernatant from Calu-3 cells (ATCC HTB-55) infected with SARS-CoV-2 strain USA/MD-HP05285/2021. The vial should be centrifuged prior to opening.

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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 1**

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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## **Notes**

Due to high demand, this product is limited to 20 per organization per 60 days.

## Heat-inactivated SARS-CoV-2, Delta variant VR-3342HK

This isolate is lineage AY.24 (Pango v.3.1.14 2021-09-28), Delta (B.1.617.2-like) (Scorpio), and GISAID clade GK using Phylogenetic Assignment of Named Global Outbreak lineages (PANGO) tool. Due to the dynamic nature of lineage determination using PANGO, discrepancies may exist between vial labels and the current lineage assignment.

The complete genome of the clinical isolate of SARS-CoV-2, hCoV-19/USA/MD-HP05285/2021 has been sequenced (GISAID: EPI\_ISL\_2103264). The following mutations are present in the clinical isolate: Spike D614G, Spike D950N, Spike L452R, Spike P681R, Spike T19R, Spike T478K, M (Membrane protein) I82T, N (Nucleocapsid) D63G, N D377Y, NS3 S26L, NSP3 (Non-structural protein 3) P822L, NSP4 (Non-structural protein 4) A446V, NSP6 (Non-structural protein 6) T181I, NSP6 V149A, NSP10 (Non-structural protein 10) L133F, NSP12 (Non-structural protein 12) G671S, NSP12 P323L, NSP13 (Non-structural protein 13) P77L. It was labelled as VOC Delta GK/478K.V1 (B.1.617.2+AY.x), first detected in India by the World Health Organization (WHO).

This product is a preparation of Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) strain USA/MD-HP05285/2021 that has been inactivated by heating at 65° for 30 minutes and is therefore unable to replicate.

The long-term stability of this preparation is not known at this time. It is recommended that users confirm the activity of the product if not used within three months of receipt.

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### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Heat-inactivated SARS-CoV-2, Delta variant (ATCC VR-3342HK)

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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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## 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.

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## Disclaimers

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## Contact Information

ATCC  
10801 University Boulevard  
Manassas, VA 20110-2209  
USA

## Heat-inactivated SARS-CoV-2, Delta variant VR-3342HK

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: [tech@atcc.org](mailto:tech@atcc.org) or contact your local distributor

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