Heat-inactivated SARS-CoV-2, Omicron variant

VR-3378HK™

Description

This product is a preparation of Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) strain USA/COR-22-063113/2022 (Omicron 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/COR-22-063113/2022
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 infected with SARS-CoV-2 strain USA/COR-22-063113/2022. The vial should be centrifuged prior to opening.

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 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.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Notes

This isolate is lineage BA.5.5 (Pango v.4.1.3 PLEARN-v1.17), Omicron (BA.5-like) (Scorpio), and GISIAD clade GRA using the 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. Previous iterations of PANGO identified this isolate as lineage BA.5.

The complete genome of the clinical isolate of SARS-CoV-2, USA/COR-22-063113/2022 has been sequenced (GISAID: EPI_ISL_13512579). The following mutations are present in the clinical isolate: Spike A27S, Spike D405N, Spike D614G, Spike D796Y, Spike E484A, Spike F486V, Spike G142D, Spike G339D, Spike H69del, Spike H655Y, Spike K417N, Spike L24del, Spike L452R, Spike N440K, Spike N501Y, Spike N679K, Spike N764K, Spike N969K, Spike P25del, Spike P26del, Spike P681H, Spike Q498R, Spike Q954H, Spike R408S, Spike S371F, Spike S373P, Spike S375F, Spike S477N, Spike T19I, Spike T76I, Spike T376A, Spike T478K, Spike V70del, Spike V213G, Spike Y505H, E T9I, M A63T, M D3N, M Q19E, N E31del, N G204R, N P13L, N R32del, N R203K, N S33del, N S413R, NS3 T223I, NSP1 S135R, NSP3 G489S, NSP3 T24I, NSP4 L264F, NSP4 T327I, NSP4 T492I, NSP5 P132H, NSP5 P252L, NSP6 F108del, NSP6 G107del, NSP6 S106del, NSP12 P323L, NSP13 R392C, NSP14 I42V, NSP15 T112I. It was labelled as variant of concern (VOC) Omicron by the World Health Organization (WHO).

This product is a preparation of Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) strain USA/COR-22-063113/2022 that has been inactivated by heating at 65°C 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.

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, Omicron variant (ATCC VR-3378HK)

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.

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Revision

This information on this document was last updated on 2023-05-20

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