SARS-Related Coronavirus 2, Isolate Hong Kong/VM20001061/2020

Catalog No. NR-52282

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:

Virus Classification: Coronavirusidae, Beta coronavirus
Species: Severe acute respiratory syndrome-related coronavirus 2
Isolate: Hong Kong/VM20001061/2020
Original Source: Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), isolate Hong Kong/VM20001061/2020 was isolated from a nasopharyngeal aspirate and throat swab from an adult male patient January 22, 2020 in Hong Kong.¹

Comments: Under the nomenclature system introduced by GISAID (Global Initiative on Sharing All Influenza Data), SARS-CoV-2, isolate Hong Kong/VM20001061/2020 is assigned lineage A and GISAID clade S using Phylogenetic Assignment of Named Global Outbreak Lineages (PANGOLIN) tool.²,³ The complete genome of the clinical isolate SARS-CoV-2, Hong Kong/VM20001061/2020 has been sequenced (GISAID: EPI_ISL_412028). The SARS-CoV-2, isolate Hong Kong/VM20001061/2020, passage 6 (BEI Resources NR-52282 lot 70034432) sequence (GenBank: MT547814; named Severe acute respiratory syndrome coronavirus 2 isolate SARS-CoV-2/human/HKG/VM20001061/2020) shows 7 sequence variants (6 with single nucleotide polymorphisms and one 27-base pair deletion in the ORF6 region) compared to the clinical isolate of SARS-CoV-2, Hong Kong/VM20001061/2020 (GISAID: EPI_ISL_412028).⁴ The variations were detected by whole genome sequencing completed at BEI Resources. Bioinformatic analysis suggested the presence of a mixed viral population in passage 6 where a minority of viral genomes contain the EPI_ISL_412028 sequence.⁵ Plaque purification is suggested if a homogenous virus population is desired for subsequent work.

In December 2019, an outbreak of a respiratory illness (COVID-19) began in Wuhan, Hubei Province, China. The outbreak is associated with a seafood market and although environmental samples from the market are positive for the novel coronavirus, an association with a particular animal has not been determined.⁶ SARS-CoV-2 has been isolated from patients from several countries and the sequences of some of these isolates have been deposited with GISAID.

Material Provided:
Each vial contains approximately 0.5 mL of cell lysate and supernatant from Cercopithecus aethiops kidney cells infected with SARS-CoV-2, isolate Hong Kong/VM20001061/2020.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:
NR-52282 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:
Host: Cercopithecus aethiops kidney cells (Vero E6; ATCC® CRL-1586™)
Growth Medium: Eagle’s Minimum Essential Medium containing Earle’s Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate supplemented with 2% fetal bovine serum or equivalent
Incubation: Cells should be 70% to 80% confluent
Cytopathic Effect: Cell rounding and sloughing

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: SARS-Related Coronavirus 2, Isolate Hong Kong/VM20001061/2020, NR-52282.”

Biosafety Level: 3

Disclaimers:
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Use Restrictions:
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References:
2. GISAID

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