

Genomic RNA from SARS-Related Coronavirus 2, Isolate USA-WA1/2020

Catalog No. NR-52285

Product Description:

Genomic RNA was extracted from a preparation of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial (Vero E6, ATCC® CRL-1586™) cells infected with SARS-related coronavirus 2 (SARS-CoV-2), isolate USA-WA1/2020, using QIAamp® Viral RNA Mini Kit (Qiagen 52904). The viral genomic RNA is in a background of cellular nucleic acid and carrier RNA.

Lot: 70033320

Manufacturing Date: 11FEB2020

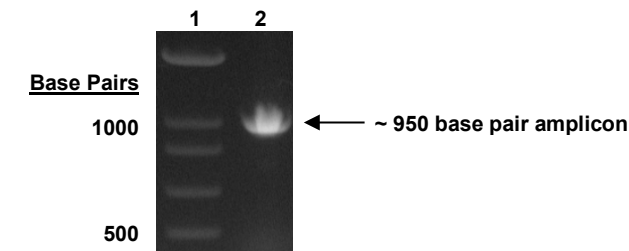
TEST	SPECIFICATIONS	RESULTS
Sequencing of Species-Specific Region (~ 870 nucleotides) (~ 870 nucleotides)	≥ 98% identity with SARS-CoV-2, isolate USA-WA1/2020 (GenBank: MN985325.1) ≥ 98% identity with SARS-CoV-2, strain FDAARGOS_983 isolate USA-WA1/2020 (GenBank: MT246667.1)	100% identity with SARS-CoV-2, isolate USA-WA1/2020 (GenBank: MN985325.1) 100% identity with SARS-CoV-2, strain FDAARGOS_983 isolate USA-WA1/2020 (GenBank: MT246667.1)
Functional Activity by RT-PCR Amplification¹	~ 950 base pair amplicon	~ 950 base pair amplicon (Figure 1)
Pre-Vial Concentration by RiboGreen® Measurement (Viral, Cellular and Carrier)²	Report results	5.1 ng per 50 µL (0.1 µg/mL)
Estimated Amount per Vial²	Report Results	5.1 ng
Genome Copy Number Using BioRad QX200 Droplet Digital PCR (ddPCR™) System (Post vial; 6 replicates)	Report results	4.8 × 10 ⁷ genome equivalents/mL
Virus Inactivation (14 Days, 2 Passages) 10% of total yield inoculated on Vero E6 cells and evaluated for cytopathic effect ³ Passage 1 Passage 2	No viable virus detected No viable virus detected	No viable virus detected No viable virus detected
Virus Inactivation (14 Days, 2 Passages) 100% of total yield inoculated on Vero E6 cells and evaluated for cytopathic effect ³ Passage 1 Passage 2	No viable virus detected No viable virus detected	No viable virus detected No viable virus detected

¹Amplified using iTaq™ Universal SYBR Green One-step Kit (Bio-Rad 172-5151) with 5 µL of NR-52285 in a 50 µL reaction

²Measurement is determined pre-vial prior to dilution due to the limit of detection of the quantification method

³Supernatant was tested by qPCR and to confirm absence of CPE to confirm there is no evidence of replicative RNA was detected. Samples for both passages were tested by qPCR at the end of day 14 of Passage 2.

Figure 1: Functional Activity of NR-52285 by RT-PCR Amplification



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
 Lane 2: PCR product from 1 μL of NR-52285

/Heather Couch/
 Heather Couch

02 APR 2020

Program Manager or designee, ATCC Federal Solutions

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