

Genomic RNA from SARS-Related Coronavirus 2, Isolate USA/CA_CDC_5574/2020 (Lineage B.1.1.7)

Catalog No. NR-55244

Product Description:

Genomic RNA was extracted from a preparation of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) infected with severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), isolate USA/CA_CDC_5574/2020, using QIAamp® Viral RNA Mini Kit (Qiagen 52904). The viral genomic RNA is in a background of cellular nucleic acid and carrier RNA.

Lot: 70042560

Manufacturing Date: 27JAN2021

TEST	SPECIFICATIONS	RESULTS
Sequencing of Species-Specific Region (~ 840 nucleotides)	≥ 98% identity with SARS-CoV-2, USA/CA_CDC_5574/2020 (GISAID: EPI_ISL_751801)	100% identity with SARS-CoV-2, USA/CA_CDC_5574/2020 (GISAID: EPI_ISL_751801)
Functional Activity by RT-PCR Amplification¹	~ 950 base pair amplicon	~ 950 base pair amplicon (Figure 1)
Genome Copy Number Using BioRad QX200 Droplet Digital PCR (ddPCR™) System²	Report results	1.08 × 10 ⁷ genome copies per mL ³
Virus Inactivation (14 Days, 2 Passages) 10% of total yield inoculated on Vero E6 cells and evaluated for cytopathic effect ⁴ 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 ⁴ Passage 1 Passage 2	No viable virus detected No viable virus detected	No viable virus detected No viable virus detected

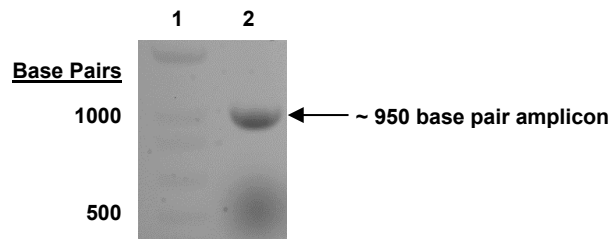
¹Amplified using iTaq™ Universal SYBR Green One-step Kit (Bio-Rad 172-5151) with 5 µL of NR-55244 in a 50 µL reaction

²The genome copy number reported is obtained using Qiagen RNA extraction kit (Cat 52904).

³Four vials were used for RNA extraction and ddPCR. Average of the results obtained from nine replicates from two vials and eight replicates from two vials is reported.

⁴Supernatant was tested by qPCR to confirm absence of CPE and no evidence of replicative RNA was detected. Samples from both passages were tested by qPCR at the end of day 14 of the passages.

Figure 1: Functional Activity of NR-55244 by RT-PCR Amplification



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: PCR product from 1 µL of NR-55244

/Heather Couch/
Heather Couch

24 MAY 2021

Program Manager or designee, ATCC Federal Solutions

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