

Genomic RNA from Human Coronavirus (HCoV), NL63

Catalog No. NR-44105

Product Description:

Genomic RNA was isolated from a preparation of cell lysate and supernatant from monkey kidney cells (LLC-MK2; ATCC® CCL-7.1™) infected with human coronavirus (HCoV), NL63. Nucleic acid was extracted from a preparation of HCoV, NL63 (BEI Resources NR-470 lot 70026756), using a QIAamp® Viral RNA Mini Kit (Qiagen 52906).

Lot: 70033868

Manufacturing Date: 12MAR2020

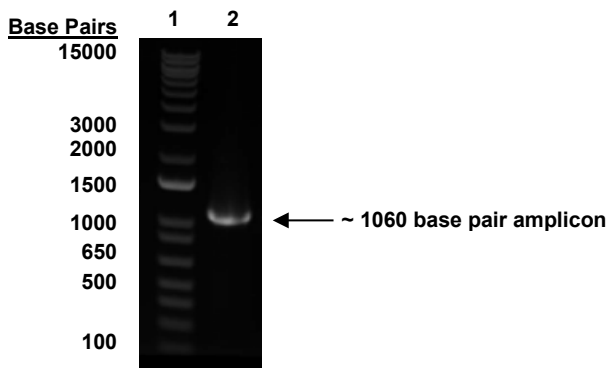
TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of species-specific region (~ 970 nucleotides)	≥ 98% identity with HCoV, NL63 (GenBank: AY567487.2)	99.9% identity with HCoV, NL63 (GenBank: AY567487.2)
Functional Activity by RT-PCR Amplification¹ Nucleoprotein gene	~ 1060 base pair amplicon	~ 1060 base pair amplicon (Figure 1)
Pre-Vial Concentration by RiboGreen® Measurement (Viral, Cellular and Carrier)²	Report results	2 ng per 100 µL (0.02 µg per mL)
Estimated Amount per Vial²	Report results	2 ng
Virus Inactivation 10% of total yield inoculated on LLC-MK2 cells and evaluated for cytopathic effect ³	No viable virus detected	No viable virus detected

¹Reverse transcription was performed using an iScript™ cDNA Synthesis Kit (Bio-Rad 170-8891) with 10 µL of NR-44105 in a 20 µL reaction; PCR was performed using iTaq™ DNA Polymerase (Bio-Rad 170-8870) with 5 µL of cDNA in a 50 µL reaction.

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

³Use of the QIAamp® Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of human coronavirus, as shown by the absence of cytopathic effect (CPE) after plating the entire extract on virus-susceptible cells.

Figure 1: Functional Activity of NR-44105 by RT-PCR Amplification of Nucleoprotein Gene



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: PCR product from 0.5 µL of NR-44105

/Heather Couch/

Heather Couch

30 MAR 2020

Program Manager or designee, ATCC Federal Solutions

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