

**Genomic RNA from Avian Coronavirus, Massachusetts (formerly Avian Infectious Bronchitis Virus)**

**Catalog No. NR-49096**

**Product Description:**

Genomic RNA was extracted from a preparation of pooled allantoic fluid from specific pathogen-free (SPF) embryonated chicken eggs (9- to 11-days old; Charles River, Norwich, Connecticut, USA) infected with avian coronavirus, Massachusetts [formerly avian infectious bronchitis virus (IBV)] (BEI Resources lot 70022141) using QIAamp® Viral RNA Mini Kit (Qiagen® 52906). The viral genomic RNA is in the background of cellular nucleic acid and carrier RNA.

**Lot: 70051032**

**Manufacturing Date: 24MAR2022**

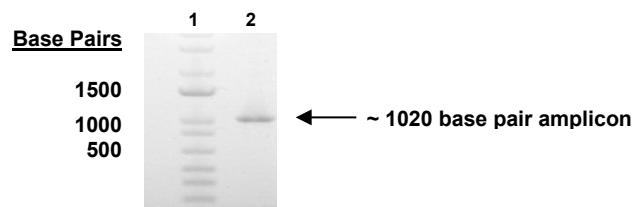
TEST	SPECIFICATIONS	RESULTS
<b>Genotypic Analysis</b> Sequencing of species-specific region (~ 930 nucleotides)	≥ 98% identity with IBV, Massachusetts (GenBank: GQ504724.1)	99.9% identity with IBV, Massachusetts (GenBank: GQ504724.1)
<b>Functional Activity by RT-PCR Amplification<sup>1</sup></b> Envelope gene	~ 1020 base pair amplicon	~ 1020 base pair amplicon (Figure 1)
<b>Estimated Concentration (post-dilution) by RiboGreen® Measurement (Viral, Cellular, and Carrier)<sup>2</sup></b>	Report results	52 ng per 100 µL (0.516 ng per µL)
<b>Estimated Amount per Vial<sup>2</sup></b>	Report results	52 ng
<b>Virus Inactivation</b> 10% of the total yield inoculated on SPF embryonated chicken eggs and evaluated for viral RNA expression by RT-PCR <sup>3</sup>	No viable virus detected	No viable virus detected

<sup>1</sup>Reverse transcription was performed using an iScript™ cDNA Synthesis Kit (Bio-Rad 170-8891) with 10 µL of NR-49096 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.

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

<sup>3</sup>Use of the QIAamp® Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of avian or animal coronaviruses as shown by the absence of cytopathic effect (CPE) and viral RNA expression by RT-PCR after plating the entire extract in virus-susceptible culture for two passages.

**Figure 1: Functional Activity of NR-49096 by RT-PCR Amplification of Envelope Gene**



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder  
Lane 2: PCR product from 1 µL of NR-49096

/Sonia Bjorum Brower/

Sonia Bjorum Brower

02 JUN 2022

Lead Technical Writer or designee, ATCC Federal Solutions

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