

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 eggs¹ infected with the avian coronavirus, Massachusetts [formerly avian infectious bronchitis virus (IBV)].

Lot²: 70016780

Manufacturing Date: 26JUL2018

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of species-specific region (~ 940 nucleotides)	≥ 98% identity with IBV, Massachusetts (GenBank: GQ504724.1)	99.8% identity with IBV, Massachusetts (GenBank: GQ504724.1)
Functional Activity by RT-PCR Amplification³ Envelope gene	~ 1020 base pair amplicon	~ 1020 base pair amplicon (Figure 1)
Pre-Vial Concentration by RiboGreen[®] Measurement (Viral, Cellular and Carrier)⁴	Report results	13.4 ng per 100 µL (0.134 µg/mL)
Estimated Amount per Vial⁴	Report Results	13.4 ng
Virus Inactivation 10% of total yield inoculated on SPF embryonated chicken eggs ¹ and evaluated for viral RNA expression by RT-PCR ⁵	No viable virus detected	No viable virus detected

¹10-day-old SPF Embryonated Chicken Eggs acquired from Charles River, Norwich, Connecticut, USA

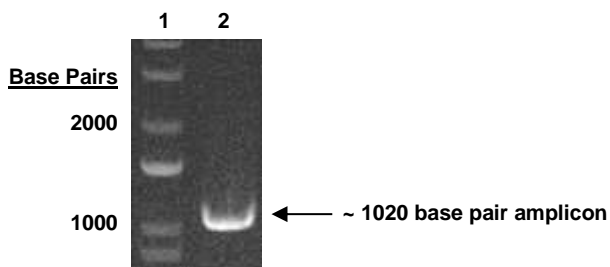
²Nucleic acid was extracted from a preparation of avian IBV, Massachusetts (BEI Resources NR-43284 lot 61617359), using a QIAamp[®] Viral RNA Mini Kit (Qiagen 52906).

³Reverse 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.

⁴Measurement is determined pre-vial prior to dilution due to the limit of detection of the quantification method.

⁵Use of the QIAamp[®] Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of avian IBV.

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 0.5 µL of NR-49096

/Heather Couch/
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06 MAR 2019

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