

**Avian Coronavirus, Massachusetts (formerly Avian Infectious Bronchitis Virus)**

**Catalog No. NR-43284**

**Product Description:** Avian coronavirus (CoV), Massachusetts was isolated in 1941 from the respiratory tract of a 19-day-old chicken with mild respiratory disease.

**Passage History:** X/CE7 (Prior to deposit at BEI Resources/BEI Resources); X = Unknown; CE = Embryonated chicken eggs<sup>1</sup>

**Lot<sup>2</sup>: 70022141**

**Manufacturing Date: 31JAN2019**

TEST	SPECIFICATIONS	RESULTS
<b>Identification by Infectivity Using Embryonated Chicken Eggs<sup>1</sup></b> Amplification of Avian CoV sequence by RT-PCR using allantoic fluid from infected eggs	~ 1020 base pair amplicon	~ 1020 base pair amplicon
<b>Sequencing of Species-Specific Region</b> (~ 930 nucleotides)	≥ 98% identity with avian CoV, Massachusetts (GenBank: GQ504724.1)	99.9% identity with avian CoV, Massachusetts (GenBank: GQ504724.1)
<b>Titer by CEID<sub>50</sub> Assay<sup>3,4</sup> in Embryonated Chicken Eggs<sup>1</sup></b>	Report results	2.8 × 10 <sup>7</sup> CEID <sub>50</sub> per mL
<b>Amplification of Avian CoV Sequence by RT-PCR</b>	~ 1020 base pair amplicon	~ 1020 base pair amplicon
<b>Sterility (21-day incubation)</b> Harpo's HTYE broth <sup>5</sup> , 37°C and 26°C, aerobic Trypticase Soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Blood agar, 37°C, aerobic Blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO <sub>2</sub>	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
<b>Mycoplasma Contamination</b> Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

<sup>1</sup>9- to 11-day-old SPF embryonated chicken eggs acquired from Charles River, Norwich, Connecticut, USA

<sup>2</sup>NR-43284 lot 70022141 was produced in the allantoic cavity of specific pathogen free (SPF) embryonated chicken eggs<sup>1</sup> infected with BEI Resources NRS-43284 lot 61617366 for 3 days at 37°C in a humidified chamber.

<sup>3</sup>The Chicken Embryo Infectious Dose 50% (CEID<sub>50</sub>) is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the inoculated embryonated chicken eggs, just as a Lethal Dose 50% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the CEID<sub>50</sub> provides a measure of the infectious titer (or infectivity) of a virus preparation.

<sup>4</sup>Infected SPF embryonated chicken eggs were incubated for 3 days at 37°C in a humidified chamber.

<sup>5</sup>Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

/Heather Couch/

Heather Couch

31 MAY 2019

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