

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

**Catalog No. NR-43284**

Derived from BEI Resources NR-444

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Coronaviridae, Coronavirinae, Gammacoronavirus*

Species: Avian coronavirus (formerly avian infectious bronchitis virus (IBV))<sup>1</sup>

Strain: Massachusetts

Original Source: Avian IBV, Massachusetts was isolated in 1941 from the respiratory tract of a 19-day-old chicken with mild respiratory disease.<sup>2,3</sup>

Comments: The complete genome of the Massachusetts strain has been sequenced (GenBank: [GQ504724](https://www.ncbi.nlm.nih.gov/nuccore/GQ504724)).<sup>4</sup>

NR-43284 was derived from BEI Resources NR-444 by removal of contaminating bacteria and fungi. NR-444 is no longer available.

**Material Provided:**

Each vial contains approximately 1 mL of pooled allantoic fluid from specific pathogen free (SPF) embryonated chicken eggs infected with the Massachusetts strain of avian coronavirus.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-43284 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

Host: 9- to 11-day-old SPF embryonated chicken eggs

Infection: Embryonated chicken eggs must be candled for viability prior to inoculation

Incubation: 3 days at 37°C in a humidified chamber

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Avian Coronavirus, Massachusetts, NR-43284."

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. [ICTV Taxonomy History for Avian Infectious Bronchitis Virus](#)
2. Cunningham, C. H. "Symposium on Immunization against Infectious Bronchitis Virus. I. Some Basic

- Properties of Infectious Bronchitis Virus." Am. J. Vet. Res. 18 (1957): 648-654. PubMed: 13444588.
3. Wertheim, J. O., et al. "A Case for the Ancient Origin of the Coronaviruses." J. Virol. 87 (2012): 7039-7045. PubMed: 23596293.
  4. Phillips, J. E., et al. "Changes in Nonstructural Protein 3 are Associated with Attenuation in Avian Coronavirus Infectious Bronchitis Virus." Virus Genes 44 (2012): 63-74. PubMed: 21909766.

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