

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

**Catalog No. NR-49096**

**For research use only. Not for use in humans.**

**Contributor:**

Linda J. Saif, Ph.D., Food Animal Health Research Program, Ohio Agricultural Research and Development Center, Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University, Wooster, Ohio, USA

**Manufacturer:**

BEI Resources

**Product Description:**

Genomic RNA was extracted from the preparation of pooled allantoic fluid from specific pathogen-free (SPF) embryonated chicken eggs infected with the Massachusetts strain of avian coronavirus [formerly avian infectious bronchitis virus (IBV)].<sup>1</sup> 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> The complete genome of avian IBV, Massachusetts has been sequenced (GenBank: [GQ504724](https://www.ncbi.nlm.nih.gov/nuccore/GQ504724)).<sup>4</sup>

NR-49096 has been qualified for PCR applications by amplification of approximately 1020 base pairs of the envelope gene. Recommended dilutions for successful RT-PCR amplification are indicated on the Certificate of Analysis for each lot.

**Material Provided:**

Each vial contains approximately 100 µL of viral genomic RNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA). The viral genomic RNA is in the background of cellular nucleic acid and carrier RNA. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

NR-49096 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic RNA from Avian Coronavirus, Massachusetts (formerly Avian Infectious Bronchitis Virus), NR-49096."

**Biosafety Level: 1**

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](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmb15/index.htm](https://www.cdc.gov/biosafety/publications/bmb15/index.htm).

**Disclaimers:**

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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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