

### Avian Infectious Bronchitis Virus (IBV), Massachusetts, Chemically Inactivated

#### Catalog No. NR-450

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

#### Contributor:

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#### Product Description:

Virus Classification: *Nidovirales*, *Coronaviridae*,  
*Coronavirus*, Group 3

Agent: Avian infectious bronchitis virus (IBV), chemically inactivated

Strain: Massachusetts

Original Source: Respiratory tract of 19-day-old chickens with mild respiratory disease<sup>1</sup>

Comment: Avian IBV is the type species for the *Coronavirus* genus

#### Material Provided:

Each vial contains approximately 1 mL of allantoic fluid from chicken embryos infected with the Massachusetts strain of avian IBV. The allantoic fluid was treated with binary ethyleneimine to inactivate the virus.

#### Packaging/Storage:

NR-450 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. Freeze-thaw cycles should be avoided.

#### Growth Conditions Prior to Inactivation:<sup>2</sup>

Host: 10-day-old specific-pathogen free chicken embryos

Inoculation: Chorioallantoic sac

Incubation: 2 to 4 days

Effect: Curling, stunting, and possible death of embryo

Note: Avian IBV cross reacts serologically with turkey coronavirus antibodies.

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Avian Infectious Bronchitis Virus (IBV), Massachusetts, Chemically Inactivated, NR-450."

#### 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. 4th ed. Washington, DC: U.S. Government Printing Office, 1999. HHS Publication No. (CDC) 93-8395. This text is available online at [www.cdc.gov/od/ohs/biosfty/bmb14/bmb14toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb14/bmb14toc.htm).

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#### References:

1. 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.
2. Ismail, M. M., et al. "Antigenic and Genomic Relatedness of Turkey-Origin Coronaviruses, Bovine Coronaviruses, and Infectious Bronchitis Virus of Chickens." Avian Dis. 45 (2001): 978-984. PubMed: 11785902.
3. Loa, C. C., et al. "Differential Detection of Turkey Coronavirus, Infectious Bronchitis Virus, and Bovine Coronavirus by a Multiplex Polymerase Chain Reaction." J. Virol. Methods 131 (2006): 8691. PubMed: 16137773.

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