

***Bordetella holmesii*, Strain H620**

**Catalog No. NR-44170**

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

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Alcaligenaceae, Bordetella*

Species: *Bordetella holmesii*

Strain: H620

Original Source: *Bordetella holmesii* (*B. holmesii*), strain H620 was isolated in 2010 from a human sample in Pennsylvania, USA.<sup>1</sup>

Comments: The complete genome of *B. holmesii*, strain H620 has been sequenced (GenBank: [JJNW00000000](http://www.ncbi.nlm.nih.gov/GenBank/JJNW00000000)).

*B. holmesii* is a Gram-negative, fastidious, non-motile coccobacilli that produces a brown soluble pigment and is closely related to *Bordetella pertussis*.<sup>2-4</sup> It is an emerging opportunistic pathogen that has been linked to invasive infections among immunocompromised patients, particularly those lacking splenic function. In healthy individuals, it can cause respiratory disease, including a pertussis-like illness.<sup>3-5</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

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

**Packaging/Storage:**

NR-44170 was packaged aseptically in 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:**

Media:

Tryptic Soy broth or Brain Heart Infusion broth or Bordet Gengou broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or Brain Heart Infusion agar or Bordet Gengou agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with or without 5% CO<sub>2</sub>

Propagation:

1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 2 to 7 days.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Bordetella holmesii*, Strain H620, NR-44170.”

**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/od/ohs/biosfty/bmbl5/bmbl5toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm).

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**References:**

1. Harvill, E. T., Personal Communication.
2. Weyant, R. S., et al. "*Bordetella holmesii* sp. nov., a New Gram-Negative Species Associated with Septicemia." J. Clin. Microbiol. 33 (1995): 1-7. PubMed: 7699023.
3. Planet, P. J., et al. "*Bordetella holmesii*: Initial Genomic Analysis of an Emerging Opportunist." Pathog. Dis. 67 (2013): 132-135. PubMed: 23620158.
4. Zhang, X., et al. "Lack of Cross-Protection Against *Bordetella holmesii* after Pertussis Vaccination." Emerg. Infect. Dis. 18 (2012): 1771-1779. PubMed: 23092514.
5. Mazengia, E., et al. "Recovery of *Bordetella holmesii* from Patients with Pertussis-Like Symptoms: Use of Pulsed-Field Gel Electrophoresis to Characterize Circulating Strains." J. Clin. Microbiol. 38 (2000): 2330-2333. PubMed: 10834997.

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