

***Bordetella holmesii*, Strain 30539**

Catalog No. NR-43497

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Alcaligenaceae*, *Bordetella*

Species: *Bordetella holmesii*

Strain: 30539

Original Source: *Bordetella holmesii* (*B. holmesii*), strain 30539 was isolated in 2009 from a human bloodstream sample in the USA.¹

Comments: Strain 30539 was deposited as a brown pigment producing strain. The complete genome of *B. holmesii*, strain 30539 has been sequenced (GenBank: [NZ_JDFP00000000](#)).

B. holmesii is a Gram-negative, fastidious, non-motile coccobacilli that produces a brown soluble pigment and is closely related to *Bordetella pertussis*.^{2,3} 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.^{3,4,5}

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-43497 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% CO₂

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 30539, NR-43497."

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 (BMBL). Current Edition. Washington, DC: U.S. Government Printing Office.

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References:

1. Ranter, A., 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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