Product Information Sheet for NR-43502

Bordetella holmesii, Strain 1058

Catalog No. NR-43502

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: 1058
Original Source: *Bordetella holmesii* (*B. holmesii*), strain 1058 was isolated in January 2012 from a human bloodstream sample in the United States.[1]
Comments: Strain 1058 was deposited as a brown pigment producing strain. The complete genome sequence of *B. holmesii*, strain 1058 has been sequenced (GenBank: NZ_JDTF00000000).

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

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-43502 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_2

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 1058, NR-43502."

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.

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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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