Product Information Sheet for NR-44164

Bordetella bronchiseptica, Strain E014

Catalog No. NR-44164

For research use only. Not for human use.

Contributor:

Eric T. Harvill, Ph.D., Professor of Microbiology and Infectious Disease, Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park, Pennsylvania, USA

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Alcaligenaceae, Bordetella*
Species: *Bordetella bronchiseptica*
Strain: E014 (also referred to as D6262)[1]
Original Source: *Bordetella bronchiseptica* (*B. bronchiseptica*), strain E014 was isolated in 1976 from a human sample in California, USA.[1,2]
Comments: The complete genome sequence of *B. bronchiseptica*, strain E014 has been sequenced (GenBank: JGWZ00000000).[2]

B. bronchiseptica is a Gram-negative motile coccobacillus that is known to colonize the respiratory tract of a large number of animals. It is an emerging opportunistic pathogen that has been linked to invasive infections among immunocompromised patients. The severity of a *B. bronchiseptica* infection can range from long-term asymptomatic carriage in the upper respiratory tract to fatal pneumonia.[3-5]

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Brain Heart Infusion broth supplemented with 10% glycerol.

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

Packaging/Storage:

NR-44164 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 bronchiseptica*, Strain E014, NR-44164."

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.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Harvill, E. T., Personal Communication.
2. Register, K. B., et al. "Draft Genome Sequences of 53 Genetically Distinct Isolates of *Bordetella bronchiseptica* Representing 11 Terrestrial and Aquatic Hosts." Genome Announc. 23 (2015): e00152-15. PubMed: 25908122.
3. Garcia-de-la-Fuente, C., et al. "Microbiology and Clinical Aspects of Respiratory Infections Associated with *Bordetella bronchiseptica*." Diagn. Microbiol. Infect. Dis. 82 (2015): 20-25. PubMed: 25703895.
4. Yacoub, A. T., et al. "*Bordetella bronchiseptica* in the Immunosuppressed Population – a Case Series and Review." Mediterr. J. Hematol. Infect. Dis. 6 (2014): e2014031. PubMed: 24804004.
5. Buboltz, A. M., et al. "Role of the Type III Secretion System in a Hypervirulent Lineage of *Bordetella bronchiseptica*." Infect. Immun. 77 (2013): 3969-3977. PubMed: 19596779.

Support Provided by NIAID

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898