

## ***Chryseobacterium bernardetii*, Strain G0229**

### **Catalog No. NR-51489**

This reagent is the tangible property of the U.S. Government.

**For research use only. Not for use in humans.**

#### **Contributor:**

Ainsley Nicholson, Health Scientist, Special Bacteriology Reference Laboratory, Centers for Disease Control and Prevention, Atlanta, Georgia, USA

#### **Manufacturer:**

BEI Resources

#### **Product Description:**

Bacteria Classification: *Flavobacteriaceae*; *Chryseobacterium*  
Species: *Chryseobacterium bernardetii*

Strain: G0229

Original Source: *Chryseobacterium bernardetii* (*C. bernardetii*), strain G0229 was isolated in 1982 from sputum of a human in Doncaster, England.<sup>1,2</sup>

Comments: *C. bernardetii*, strain G0229 was deposited to BEI Resources as the type strain of the species. The complete genome of *C. bernardetii*, strain G0229 has been sequenced (GenBank: [CP033932.1](#)).<sup>1,2</sup>

*Chryseobacterium* are Gram-negative, aerobic, non-motile, non-spore forming bacilli which have been isolated from environmental samples, such as soil, water and plants.<sup>2,3,4,5</sup> Most species are considered non-pathogenic; however, *Chryseobacterium indologenes* has been reported as a causative agent in bacteraemia, peritonitis, pneumonia, empyema, pyelonephritis, cystitis, meningitis and central venous catheter-associated infections.<sup>5,6</sup>

#### **Material Provided:**

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

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

#### **Packaging/Storage:**

NR-51489 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 Nutrient broth or equivalent  
Tryptic Soy agar or Nutrient agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic

#### **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 1 to 2 days.

#### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Chryseobacterium bernardetii*, Strain G0229, NR-51489."

#### **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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.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](http://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. This material may be subject to third party patent rights.

# References:

1. Nicholson, A., Personal Communication.
2. Nicholson, A. C., et al. "Division of the Genus *Chryseobacterium*: Observation of Discontinuities in Amino Acid Identity Values, a Possible Consequence of Major Extinction Events, Guides Transfer of Nine Species to the Genus *Epilithonimonas*, Eleven Species to the Genus *Kaistella*, and Three Species to the Genus *Halpernia* gen. nov., with Description of *Kaistella daneshvariae* sp. nov. and *Epilithonimonas vandammei* sp. nov. Derived from Clinical Specimens." Int. J. Syst. Evol. Microbiol. (2020). PubMed: 32735208.
3. Holmes, B., A. G. Steigerwalt and A. C. Nicholson. "DNA-DNA Hybridization Study of Strains of *Chryseobacterium*, *Elizabethkingia* and *Empedobacter* and of Other Usually Indole-Producing Non-Fermenters of CDC Groups IIc, IIe, IIh and III, Mostly from Human Clinical Sources, and Proposals of *Chryseobacterium bernardetii* sp. nov., *Chryseobacterium carnis* sp. nov., *Chryseobacterium lactis* sp. nov., *Chryseobacterium nakagawai* sp. nov. and *Chryseobacterium taklimakanense* comb. nov." Int. J. Syst. Evol. Microbiol. 63 (2013): 4639-4662. PubMed: 23934253.
4. Kim, T. R., et al. "*Chryseobacterium frigidum* sp. nov., Isolated from High-Arctic Tundra Soil, and Emended Descriptions of *Chryseobacterium bernardetii* and *Chryseobacterium taklimakanense*." Int. J. Syst. Evol. Microbiol. 66 (2016): 609-615. PubMed: 26558703.
5. Lin, J. -N., et al. "Comparison of the Vitek MS and Bruker Matrix-Assisted Laser Desorption Ionization-Time of Flight Mass Spectrometry Systems for Identification of *Chryseobacterium* Isolates from Clinical Specimens and Report of Uncommon *Chryseobacterium* Infections in Humans." J. Clin. Microbiol. 56 (2018): e00712-18. PubMed: 30135228.
6. Mukerji, R., et al. "*Chryseobacterium indologenes*: An Emerging Infection in the USA." BMJ Case Rep. (2016): bcr2016214486. PubMed: 27053540.

ATCC® is a trademark of the American Type Culture Collection.

