

Leucobacter sp., Strain Ag1

Catalog No. NR-50119

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Microbacteriaceae, Leucobacter*

Genus: *Leucobacter* sp.

Strain: Ag1

Original Source: *Leucobacter* sp., strain Ag1 was isolated in 2014 from the midgut of a mosquito (*Anopheles gambiae*, strain G3) in Las Cruces, New Mexico, USA.¹

Leucobacter species are Gram-positive bacilli, known to be non-motile, non-sporulating aerobic organisms. Additionally, *Leucobacter* species contain: MK-11 as the major menaquinone, mainly branched cellular fatty acids and γ -aminobutyric acid as part of the B-type peptidoglycan in the cell wall.² They have been isolated from a wide-array of conditions, including soil and chromium-contaminated wastewater.^{3,4}

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-50119 was packaged aseptically, in screw-capped plastic 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:

Nutrient broth or Brain Heart Infusion broth or equivalent Nutrient agar or Brain Heart Infusion agar or equivalent

Incubation:

Temperature: 30°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 2 to 3 days.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Leucobacter* sp., Strain Ag1, NR-50119.”

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/biosafety/publications/bmb15/index.htm.

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References:

1. Xu, J., Personal Communication.
2. Somvanshi, V. S., et al. “*Leucobacter iarius* sp. nov., in the Family *Microbacteriaceae*.” Int. J. Syst. Evol.

- Microbiol. 57 (2007): 682-686. PubMed: 17392186.
3. Lin, Y. C., et al. "*Zimmermannella helvola* gen. nov., sp. nov., *Zimmermannella alba* sp. nov., *Zimmermannella bifida* sp. nov., *Zimmermannella faecalis* sp. nov. and *Leucobacter albus* sp. nov., Novel Members of the Family *Microbacteriaceae*." Int. J. Syst. Evol. Microbiol. 54 (2004): 1669-1676. PubMed: 15388726.
 4. Takeuchi, M., et al. "*Leucobacter komagatae* gen. nov., sp. nov., A New Aerobic Gram-Positive, Nonsporulating Rod with 2,4-Diaminobutyric Acid in the Cell Wall." Int. J. Syst. Bacteriol. 46 (1996): 967-971. PubMed: 8863425.

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