Product Information Sheet for NR-36435

Lachnospiraceae bacterium, Strain 14-2

Catalog No. NR-36435

For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Lachnospiraceae*; unclassified *Lachnospiraceae*
Strain: 14-2
Original Source: *Lachnospiraceae* bacterium, strain 14-2 was isolated from mouse intestine in the United States.[1,2]
Comment: *Lachnospiraceae* bacterium, strain 14-2 has three flagellin genes that have been identified and sequenced, *fla1* (DQ789131), *fla2* (DQ789132) and *fla3* (DQ789130).[1]

Lachnospiraceae are a robust group of organisms that commonly occur in the digestive tract of humans and other animals.[3,4] *Lachnospiraceae* species are usually strictly anaerobic, non-spore-forming, non-motile, rod-shaped bacteria. *Lachnospiraceae* species have a Gram-positive cell wall but some strains have been reported to stain Gram-variable or Gram-negative depending on the duration of growth.[5]

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in M2GSC broth supplemented with 10% glycerol.

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

Packaging/Storage:
NR-36435 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:
Modified Reinforced Clostridial broth or M2GSC broth[6] or equivalent
Tryptic Soy agar with 5% defibrinated sheep blood or Brucella agar or equivalent
Note: BEI Resources observed no growth of NR-36435 on agar
Incubation:
Temperature: 37°C
Atmosphere: Anaerobic

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 3 to 4 days.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Lachnospiraceae* bacterium, Strain 14-2, NR-36435."

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/bmbl5/index.htm.

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References:

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2. Elson, C. O. III, Personal Communication.
3. Nava, G. M. and T. S. Stappenbeck. "Diversity of the Autochthonous Colonic Microbiota." Gut Microbes 2 (2011): 99-104. PubMed: 21694499.
4. McLellan, S. L., et al. "Sewage Reflects the Distribution of Human Faecal *Lachnospiraceae*." Environ. Microbiol. 15 (2013): 2213-2227. PubMed: 23438335.
5. Lawson, P. A., et al. "Anaerobes: A Piece in the Puzzle for Alternative Biofuels." Anaerobe 17 (2011): 206-210. PubMed: 21699990.
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