Product Information Sheet for HM-299

Citrobacter portucalensis, Strain 4_7_47CFAA (Deposited as *Citrobacter freundii*)

Catalog No. HM-299

For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Enterobacteriaceae, Citrobacter*
Species: *Citrobacter portucalensis* [HM-299 was deposited to BEI Resources as *Citrobacter freundii*; however, digital DNA-DNA hybridization (dDDH) analysis performed at BEI Resources resulted in reclassification to *Citrobacter portucalensis*.]
Strain: 4_7_47CFAA
Original Source: *Citrobacter portucalensis (C. portucalensis)*, strain 4_7_47CFAA was isolated in 2007 from inflamed biopsy tissue taken from the sigmoid colon of a 25-year-old female patient with Crohn's disease in Calgary, Alberta, Canada.[1,2]
Comments: *C. portucalensis*, strain 4_7_47CFAA (HMP ID 9428) is a reference genome for The Human Microbiome Project (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *C. portucalensis*, strain 4_7_47CFAA was sequenced at the Genome Institute at Broad Institute (GenBank: ADLG00000000).
Note: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

C. portucalensis is a facultatively anaerobic, typically motile, Gram-negative bacillus. *Citrobacter* species are members of human and animal intestinal flora and have isolated from environmental sources, such as soil, water, sewage and food. Some species are also causative agents of opportunistic infections and have been found to have chromosomal antibiotic resistance genes, including *qrn*B (conferring resistance to fluoroquinolones) and bla_{CMY-2} (conferring resistance to cephalosporins).[1]

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:
HM-299 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:
Nutrient broth or equivalent
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 day. Broth cultures should include shaking.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Citrobacter portucalensis,* Strain 4_7_47CFAA (Deposited as *Citrobacter freundii*), HM-299."

Biosafety Level: 1
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 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.

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References:

1. Allen-Vercoe, E., Personal communication.
2. HMP ID 9428 (*Citrobacter portucalensis*, strain 4_7_47CFAA)
3. Ribeiro, T. G., et al. "*Citrobacter portucalensis* sp. nov., Isolated from an Aquatic Sample." Int. J. Syst. Evol. Microbiol. 67 (2017): 3513-3517. PubMed: 28857032.

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