

Anaerococcus murdochii, Strain CC31C (Deposited as *Anaerococcus lactolyticus*, Strain JCP7719)

Catalog No. HM-1034

Product Description:

Anaerococcus murdochii (*A. murdochii*), strain CC31C was isolated in 2010 from colonic biopsy tissue of a human subject in Victoria, British Columbia, Canada. **HM-1034 was deposited to BEI Resources as *Anaerococcus lactolyticus*; however, digital DNA-DNA hybridization (dDDH) analysis performed at BEI Resources resulted in reclassification to *Anaerococcus murdochii*.** HM-1034 was produced by inoculation of BEI Resources seed lot 64447401 into Modified Reinforced Clostridial broth and grown for 3 days at 37°C in an anaerobic atmosphere (< 5% O₂; Remel™ Pack-Anaero™). Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles, which were grown for 2 days at 37°C in an anaerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

Note: Quality control of HMP material is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material. It should not be considered a complete characterization of the deposited organism.

Lot: 70065129

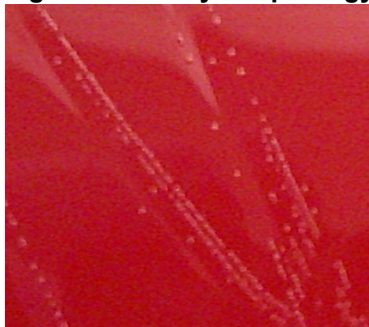
Manufacturing Date: 10JAN2024

BEI Resources is committed to ensuring digital accessibility for people with disabilities. This Certificate of Analysis contains complex tables and may not be fully accessible. Please let us know if you encounter accessibility barriers and a fully accessible document will be provided: E-mail: Contact@BEIResources.org. We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology 2 days at 37°C in Modified Reinforced Clostridial broth Colony morphology 2 days at 37°C on Tryptic Soy agar with 5% defibrinated sheep blood Motility (wet mount)	Gram-positive cocci Report results Report results	Gram-positive cocci Circular, low convex, entire, smooth and cream (Figure 1) Non-motile
Genotypic Analysis Next-Generation Sequencing (NGS) of Complete Genome ¹ Digital DNA-DNA hybridization (dDDH) ^{1,2}	≥ 99% sequence identity to <i>A. murdochii</i> type strain (GenBank: JAIPME010000002.1) ≥ 70% for species identification	99% sequence identity to <i>A. murdochii</i> type strain (GenBank: JAIPME010000002.1) <i>A. murdochii</i> (79.3%)
Purity (post-freeze) Anaerobic 7 days at 37°C on Tryptic Soy agar with 5% defibrinated sheep blood Aerobic with 5% CO ₂ 7 days at 37°C on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology Growth consistent with expected colony morphology or no growth	Growth consistent with expected colony morphology No growth
Viability (post-freeze)	Growth	Growth

¹The whole genome of *A. murdochii*, strain CC31C (~ 2.0 megabase pairs) was sequenced using the Illumina® MiSeq® system and was analyzed and assembled with Kraken version 2.1.3 and Unicycler v0.5.1.

²Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." *Stand. Genomic Sci.* 2 (2010): 117-134. PubMed: 21304684. dDDH analysis was performed using the Type (Strain) Genome Server.

Figure 1: Colony Morphology

/Sonia Bjorum Brower/
Sonia Bjorum Brower

22 SEP 2025

Technical Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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

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

