

***Bifidobacterium longum* subsp. *longum*, Strain 44B**

Catalog No. HM-845

Product Description:

Bifidobacterium longum subsp. *longum* (*B. longum* subsp. *longum*), strain 44B was isolated from a one-year-old human patient. HM-845 lot 70055112 was produced by the inoculation of BEI Resources seed lot 61773984 into Modified Reinforced Clostridial medium and incubated for 2 days at 37°C in an anaerobic atmosphere (< 5% O₂; Remel™ Pack-Anaero™). The material from the initial growth was passaged once in Modified Reinforced Clostridial medium for 2 days at 37°C in an anaerobic atmosphere to produce this lot. Quality control testing was completed on Tryptic Soy agar with 5% defibrinated sheep blood 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: 70055112

Manufacturing Date: 28OCT2022

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount)	Gram-positive rods Report results Report results	Gram-positive rods Circular, convex, entire, smooth and white Non-motile
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1360 base pairs)	≥ 99% sequence identity to <i>B. longum</i> subsp. <i>longum</i> , strain 44B (GenBank: AJTM01000045.1)	99.9% sequence identity to <i>B. longum</i> subsp. <i>longum</i> , strain 44B (GenBank: AJTM01000045.1) ¹
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	Consistent with expected colony morphology Growth	Consistent with expected colony morphology Growth ²
Viability (post-freeze)	Growth	Growth

¹Also consistent with other *Bifidobacterium* species

²*B. longum* subsp. *longum* is an aerotolerant anaerobe and the growth in an aerobic atmosphere with 5% CO₂ is not unexpected. VITEK® MS (MALDI-TOF) analysis identified this growth as *Bifidobacterium* spp.

/Sonia Bjorum Brower/

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27 JAN 2023

Technical Manager or designee, ATCC Federal Solutions

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