

***Bifidobacterium breve*, Strain HPH0326**

**Catalog No. HM-856**

**Product Description:** *Bifidobacterium breve* (*B. breve*), strain HPH0326 was isolated from a biopsy of ileo-anal pouch mucosa of a human subject in the United States.

**Lot<sup>1,2</sup>: 70009960**

**Manufacturing Date: 26OCT2017**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>3</sup>  Motility (wet mount)	Gram-positive rods Report results  Report results	Gram-positive rods Circular, low convex, entire, smooth, translucent and gray (Figure 1) Non-motile
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (770 base pairs)	≥ 99% sequence identity to <i>B. breve</i> , strain HPH0326 (GenBank: ATCB01000001)	100% sequence identity to <i>B. breve</i> , strain HPH0326 (GenBank: ATCB01000001)
<b>Purity (post-freeze)</b> Anaerobic growth <sup>4</sup>  Aerobic growth <sup>5,6</sup>	Growth consistent with expected colony morphology Report results	Growth consistent with expected colony morphology Growth consistent with expected colony morphology
<b>Viability (post-freeze)<sup>3</sup></b>	Growth	Growth

<sup>1</sup>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.

<sup>2</sup>*B. breve*, strain HPH0326 was deposited by Thomas M. Schmidt, Professor, Department of Microbiology and Molecular Genetics, Michigan State University, East Lansing, Michigan, USA. HM-856 lot 70009960 was produced by inoculation of BEI Resources HMS-856 lot 62264524 into Modified Reinforced Clostridial broth and incubated for 3 days at 37°C in an anaerobic atmosphere (< 0.5% O<sub>2</sub>; Remel™ AnaeroPack™). The material from the initial growth was passaged once in Modified Reinforced Clostridial broth for 3 days at 37°C in an anaerobic atmosphere to produce this lot.

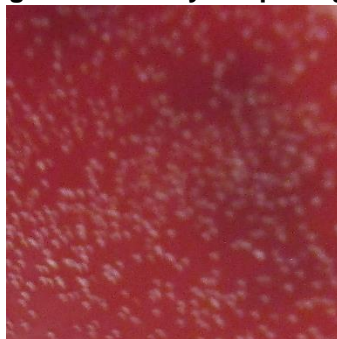
<sup>3</sup>3 days at 37°C in an anaerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

<sup>4</sup>Purity of this lot was assessed for 7 days at 37°C in an anaerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood.

<sup>5</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood.

<sup>6</sup>Growth was observed on plates grown in an aerobic atmosphere with 5% CO<sub>2</sub>. Colonies from each growth condition had the 16S ribosomal RNA gene sequenced and found to have 100% sequence identity to the colonies from the other growth condition and to *B. breve*, strain HPH0326 (GenBank: ATCB01000001). While *Bifidobacteria* are considered to be obligate anaerobes, *B. breve* has been reported to grow in low levels of oxygen. For more information, please refer to Shimamura, S., et al. "Relationship Between Oxygen Sensitivity and Oxygen Metabolism of *Bifidobacterium* Species." *J. Dairy Sci.* 75 (1992): 3296-306. PubMed: 1474198.

**Figure 1: Colony Morphology**



**Date:** 26 JAN 2018

**Signature:**



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