

***Lactobacillus reuteri*, Strain CF48-3A**

**Catalog No. HM-102**

**Product Description:** *Lactobacillus reuteri* (*L. reuteri*), strain CF48-3A was isolated from the feces of a healthy Finnish child.

**Lot<sup>1</sup>: 58730614**

**Manufacturing Date: 12AUG2009**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis<sup>2</sup></b> Cellular morphology <sup>3</sup> Colony morphology <sup>3</sup>  Viability (10°C) Viability (45°C) Viability (50°C) Aerobic growth Motility Biochemical Characterization <sup>4</sup> Catalase activity Nitrate reduction Aesculin hydrolysis Dextran synthesis from sucrose Growth in the presence of 15% ethanol Glycosidic Fermentation: Cellobiose Salicin Sucrose Raffinose <sup>4,5</sup> Lactose Maltose D-Fructose D-Glucose D-Mannitol D-Melezitose L-Rhamnose D-Xylose L-Arabinose <sup>4,5</sup> Glucose to CO <sub>2</sub> Gluconate to CO <sub>2</sub>	Gram-positive rod Report results  Report results Report results Report results Report results Non-motile  Negative Negative Report results Report results Report results  Negative Negative Report results Report results Report results  Negative Negative Report results ≥ 80% of strains are negative <sup>5,6</sup> Positive Report results Report results Positive Positive Negative Negative Negative Report results ≥ 80% of strains are positive <sup>5,6</sup> CO <sub>2</sub> produced Report results	Gram-positive rod Circular, low convex, entire, opaque and white (Figure 1)  No growth No growth No growth Growth Non-motile  Negative Negative Negative Positive Growth  Negative Negative Negative Positive Positive Positive Positive Negative Negative Negative Negative Negative Negative Negative CO <sub>2</sub> produced CO <sub>2</sub> produced
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1340 bp) RiboPrinter <sup>®</sup> Microbial Characterization System	Consistent with <i>L. reuteri</i> Consistent with <i>L. reuteri</i>	Consistent with <i>L. reuteri</i> Consistent with <i>L. reuteri</i>
<b>PCR Assay of Extracted DNA</b> 16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon
<b>Viability (post-freeze)<sup>3</sup></b>	Growth	Growth

<sup>1</sup>HM-102 was produced by inoculation of the deposited material into Lactobacilli MRS Broth (BD 288130) and incubated for 24 hours at 37°C in an aerobic atmosphere.

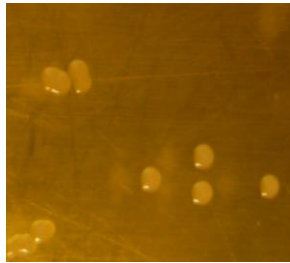
<sup>2</sup>The phenotypic characterization of HM-102 was completed after incubation for 48 hours at 37°C in an aerobic atmosphere without CO<sub>2</sub> (characterization assays cannot be completed in the presence of CO<sub>2</sub>). If no result was observed after 14 days incubation then the test was considered negative.

<sup>3</sup>48 hours at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Lactobacilli MRS Agar

<sup>4</sup>Nair, P. S. and P. K. Surendran. "Biochemical Characterization of Lactic Acid Bacteria Isolated from Fish and Prawn." *J. of Culture Coll.* 4 (2004-2005): 48-52.

<sup>5</sup>Raffinose and L-arabinose are known to be fermented by a few strains of *L. reuteri*

Figure 1



**Date:** 07JUN2010

**Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication or designee

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