

***Leptospira interrogans*, Strain M933, *lipL32* Mutant (Serovar Manilae)**

**Catalog No. NR-19817**

**Product Description:** *Leptospira interrogans* (*L. interrogans*), strain M933 (serovar Manilae) is a transposon mutant of wild-type strain L495 created by disruption of the *lipL32* gene, which encodes the leptospiral major outer membrane protein, LipL32 (32-kDa lipoprotein), in strain L495.

**Lot<sup>1</sup>: 59581724**

**Manufacturing Date: 04JAN2011**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Colony morphology	Growth below the soft agar surface (Dinger's disk)	Growth below the soft agar surface (Dinger's disk) <sup>2</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1360 base pairs)	Consistent with <i>L. interrogans</i>	Consistent with <i>L. interrogans</i> <sup>3</sup>
<b>Viability (post-vialing)</b> Visual observation LIVE/DEAD <sup>®</sup> BacLight <sup>™</sup> Bacterial Viability	Growth Green fluorescence visible	Growth <sup>2</sup> Green fluorescence visible <sup>4</sup>

<sup>1</sup>*L. interrogans*, strain M933 (serovar Manilae) was deposited by Ben Adler, Professor of Microbiology, Monash University, Clayton, Victoria, Australia. The deposited material was inoculated into EMJH semisolid agar (0.15%) and incubated for 10 days at 30°C in an aerobic atmosphere. The material from the initial growth was passaged twice in EMJH semisolid agar (0.15%) for 18 days and 15 days, respectively, at 30°C in an aerobic atmosphere to produce this lot.

<sup>2</sup>Disk of dense growth below the soft agar surface (Dinger's disk) (Czekalowski, J. W., J. W. McLeod and J. Rodican. "The Growth and Respiration of *Leptospira* in Solid or Semi-Solid Media with Special Reference to Dinger's Phenomenon." *Br. J. Exp. Pathol.* 34 (1953): 588-595.) was evident after 15 days at 30°C in EMJH semisolid agar (0.15%).

<sup>3</sup>Also consistent with other *Leptospira* species

<sup>4</sup>Determined after 15 days incubation under cultivation conditions with LIVE/DEAD<sup>®</sup> BacLight<sup>™</sup> Bacterial Viability Kit, 100x magnification (Invitrogen<sup>™</sup> L34856). Cells with a compromised membrane that are dead or dying will stain red, while cells with an intact membrane will stain green.

**Date:** 31 JAN 2013

**Signature:** 

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

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