

**Leptospira broomii, Strain 5399T (Serovar Hurstbridge)**

**Catalog No. NR-22253**

**Product Description:** *Leptospira broomii* (*L. broomii*), strain 5399T (serovar Hurstbridge) is an intermediately pathogenic strain isolated from the blood of a human with acute leptospirosis in Denmark.

**Lot<sup>1</sup>: 62359962**

**Manufacturing Date: 20MAR2014**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Motility (wet mount)	Spirochete Growth below the soft agar surface (Dinger's disk) Motile	Spirochete Growth below the soft agar surface (Dinger's disk) <sup>2</sup> (Figure 1) Motile
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1370 base pairs)	Consistent with <i>L. broomii</i>	Consistent with <i>L. broomii</i> <sup>3,4</sup>
<b>Viability (post-vialing)</b> Visual observation LIVE/DEAD <sup>®</sup> BacLight <sup>™</sup> Bacterial Viability <sup>5</sup>	Growth Green fluorescence visible	Growth <sup>2</sup> Green fluorescence visible (Figure 2) <sup>5</sup>

<sup>1</sup>The deposited material was inoculated into Ellinghausen-McCullough-Johnson-Harrison (EMJH) semisolid agar (0.15%) and grown 17 days at 30°C in an aerobic atmosphere, and the resulting growth was viald and frozen. NR-22253 was produced by inoculation of the frozen subculture into EMJH semisolid agar (0.15%) and incubated for 22 days at 30°C in an aerobic atmosphere. The material from the second growth was passaged in EMJH semisolid agar (0.15%) for 8 days at 30°C in an aerobic atmosphere to produce this lot. Purity of this lot was assessed for 22 days on Tryptic Soy agar with 5% defibrinated sheep blood at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub>.

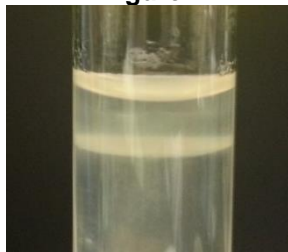
<sup>2</sup>Disk of dense growth below the soft agar surface (Dinger's disk) (Czekalowski, J. W., J. W. McLeod and J. Rodican. "The Growth and Respiration of *Leptospira* in Solid or Semi-Solid Media with Special Reference to Dinger's Phenomenon." *Br. J. Exp. Pathol.* 34 (1953): 588-595.) was evident after 65 days at 30°C in EMJH semisolid agar (0.15%).

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

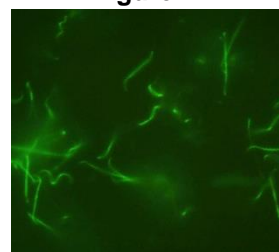
<sup>4</sup>≥ 99% identical to *L. broomii*, strain 5399T (GenBank: AHMO0200008.1)

<sup>5</sup>Determined after 65 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.

**Figure 1**



**Figure 2**



**Date:** 26 JUN 2014

**Signature:**

**Title:**

Technical Manager, BEI Authentication or designee

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