

***Borrelia burgdorferi*, Strain B31 (Clone 5A1)**

**Catalog No. NR-13251**

**Product Description:** *Borrelia burgdorferi* (*B. burgdorferi*), strain B31 (clone 5A1) was derived from the original B31 strain. Clone 5A1 lacks linear plasmids lp5 and lp56 of the parent B31 strain.

**Lot<sup>1</sup>: 70021457**

**Manufacturing Date: 17DEC2018**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology <sup>2</sup> Motility (wet mount)	Spirochete Report results	Spirochete Motile
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 690 base pairs)	≥ 99% sequence identity to <i>B. burgdorferi</i> , strain B31 (GenBank: AE000783)	100% sequence identity to <i>B. burgdorferi</i> , strain B31 (GenBank: AE000783) <sup>3</sup>
<b>Purity (post-freeze)</b> Tryptic Soy agar with 5% defibrinated sheep blood <sup>4</sup>	Growth consistent with expected colony morphology or no growth	No growth
<b>Viability (post-freeze)</b> Visual observation LIVE/DEAD <sup>®</sup> BacLight™ Bacterial Viability	Growth Green fluorescence visible	Non-turbid growth <sup>2</sup> Green fluorescence visible (Figure 1) <sup>5</sup>

<sup>1</sup>NR-13251 lot 70021457 was produced by inoculation of BEI Resources NRS-13251 lot 59535353 into Revised Barbour-Stoenner-Kelly broth and grown for 5 days at 32°C in a microaerophilic atmosphere to produce this lot.

<sup>2</sup>7 days at 32°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly broth

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

<sup>4</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with and without 5% CO<sub>2</sub>.

<sup>5</sup>Determined after 7 days incubation at 32°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly medium with LIVE/DEAD<sup>®</sup> BacLight™ Bacterial Viability Kit, 100x magnification (Invitrogen™ 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: LIVE/DEAD<sup>®</sup> BacLight™ Bacterial Viability**



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03 JUL 2019

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