

***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. NR-13251 was produced by the inoculation of BEI Resources seed lot 59535353 into Revised Barbour-Stoenner-Kelly broth and grown for 5 days at 32°C in a microaerophilic atmosphere (6 to 16% O<sub>2</sub> and 2 to 10% CO<sub>2</sub>; BD GasPak™ EZ Campy) to produce this lot.

**Lot: 70056126**

**Manufacturing Date: 17OCT2022**

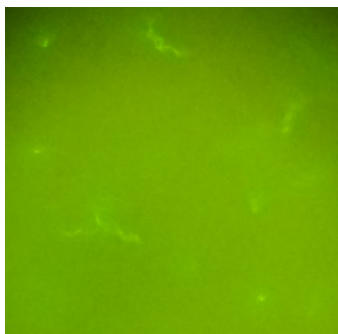
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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology 9 days at 32°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly broth Motility (wet mount)	Spirochete  Report results	Spirochete  Motile
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1370 base pairs)	≥ 99% sequence identity to <i>B. burgdorferi</i> type strain (GenBank: AE000783)	99.9% sequence identity to <i>B. burgdorferi</i> type strain (GenBank: AE000783) <sup>1</sup>
<b>Purity</b> 9 days at 32°C in a microaerophilic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood 9 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology or no growth  Growth consistent with expected colony morphology or no growth	No growth  No growth
<b>Viability</b> Visual observation LIVE/DEAD® BacLight™ Bacterial Viability	Growth Green fluorescence visible	Growth Green fluorescence visible (Figure 1) <sup>2</sup>

<sup>1</sup>Also consistent with other *Borrelia* species

<sup>2</sup>Determined after 9 days at 32°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly medium with LIVE/DEAD® BacLight™ Bacterial Viability Kit, 1000x 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® BacLight™ Bacterial Viability**



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