

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 inoculation of BEI Resources seed lot 59535353 into Revised Barbour-Stoenner-Kelly (BSK) broth and grown for 8 days at 32°C in a microaerophilic atmosphere (6 to 16% O₂ and 2 to 10% CO₂; BD GasPak™ EZ Campy) to produce this lot.

Lot: 70084982

Manufacturing Date: 20AUG2026

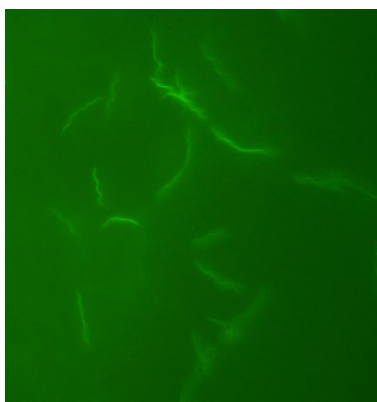
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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology 9 days at 32°C in a microaerophilic atmosphere in Revised BSK broth Motility (wet mount)	Spirochete Motile	Spirochete Motile
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (1430 base pairs)	≥ 99% sequence identity to <i>B. burgdorferi</i> type strain (GenBank: AE000783.1)	100% sequence identity to <i>B. burgdorferi</i> type strain (GenBank: AE000783.1) ¹
Purity 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 ₂ 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
Viability Visual observation LIVE/DEAD® BacLight™ Bacterial Viability	Growth Green fluorescence visible	Growth Green fluorescence visible (Figure 1) ²

¹Also consistent with other *Borrelia* species.

²Determined after 9 days at 32°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly medium with LIVE/DEAD® BacLight™ Bacterial Viability Kit, 1000× magnification (Invitrogen™ L310973). 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



/Sonia Bjorum Brower/

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05 OCT 2026

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