

***Borrelia recurrentis*, Strain PBek**

Catalog No. NR-51672

Product Description:

Borrelia recurrentis (*B. recurrentis*), strain PBek was isolated in 2004 from the blood of a human with louse-borne relapsing fever from a traveler returning from Ethiopia. NR-51672 lot 70027333 was produced by inoculation of the deposited material into Revised Barbour-Stoenner-Kelly broth and grown for 6 days at 33°C in a microaerophilic atmosphere (6-16% O₂ and 2-10% CO₂; BD GasPak™ EZ Campy). Broth inoculum was added to Revised Barbour-Stoenner-Kelly broth and grown for 7 days at 33°C in a microaerophilic atmosphere to produce this lot.

Lot: 70027333

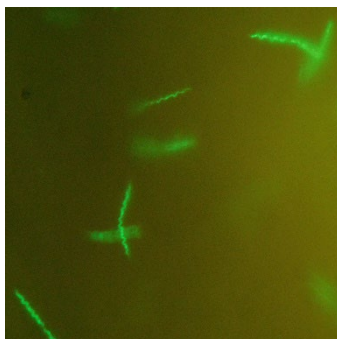
Manufacturing Date: 31OCT2019

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology 7 days at 33°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly broth Motility (wet mount)	Spirochete Report results	Spirochete Motile
Genotypic Analysis Sequencing of 16S ribosomal RNA (rRNA) gene (1350 base pairs)	≥ 99% sequence identity to <i>B. recurrentis</i> , strain A1 (GenBank: CP000993.1)	100% sequence identity to <i>B. recurrentis</i> , strain A1 (GenBank: CP000993.1) ¹
Purity 7 days at 33°C in a microaerophilic atmosphere in Tryptic Soy agar with 5% defibrinated sheep blood 7 days at 37°C in an aerobic atmosphere with 5% CO ₂ in Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with colony morphology or no growth No growth	No growth No growth
Viability (post-freeze) Visual observation 7 days at 33°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly broth LIVE/DEAD® BacLight™ Bacterial Viability	Growth Green fluorescence visible	Growth Green fluorescence visible (Figure 1) ²

¹Also consistent with other *Borrelia* species. *B. recurrentis* and *B. duttonii* cannot be differentiated by sequencing of the 16S rRNA gene (Marosevic, D., et al. "First Insights in the Variability of *Borrelia recurrentis* Genomes." *PLoS Negl. Trop. Dis.* 11 (2017): e0005865. PubMed: 28902847.).

²Determined after 7 days at 33°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly broth with LIVE/DEAD® BacLight™ Bacterial Viability Kit, 1000× 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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