

***Borrelia afzelii*, Strain Pko**

Catalog No. NR-51676

Product Description:

Borrelia afzelii (*B. afzelii*), strain Pko was isolated in 1984 from the skin of a human with erythema migrans (Lyme borreliosis) in Germany. NR-51676 lot 70027343 was produced by inoculation of the deposited material into Revised Barbour-Stoenner-Kelly broth and grown for 3 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: 70027343

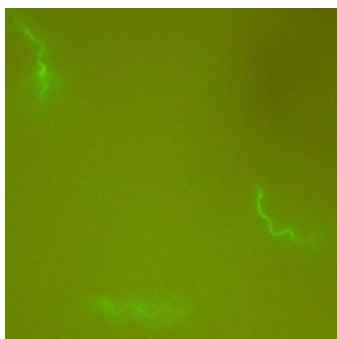
Manufacturing Date: 28OCT2019

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology 6 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. afzelii</i> , strain Pko (GenBank: CP000395.1)	100% sequence identity to <i>B. afzelii</i> , strain Pko (GenBank: CP000395.1) ¹
Purity (post-freeze) 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 6 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.

²Determined after 6 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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