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SUPPORTING INFECTIOUS DISEASE RESEARCH

# Certificate of Analysis for NR-22685

## *Borrelia burgdorferi*, Signature-Tagged Mutagenesis Library Clone T04TC102 (Gene BB_0841)

## Catalog No. NR-22685

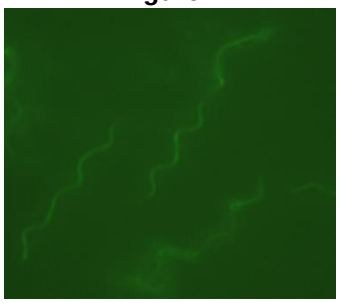
**Product Description:** *Borrelia burgdorferi* (*B. burgdorferi*), strain B31 5A18NP1 STM library clone T04TC102 was produced by signature-tagged mutagenesis (STM) of the BB_0841 gene.

**Lot[1]: 63447993** **Manufacturing Date: 05MAY2015**

| TEST | SPECIFICATIONS | RESULTS |
|---|---|---|
| **Phenotypic Analysis**<br>Cellular morphology[2]<br>Motility (wet mount) | <br>Spirochete<br>Report results | <br>Spirochete<br>Motile |
| **Genotypic Analysis**<br>Sequencing of 16S ribosomal RNA gene (~ 1440 base pairs) | Consistent with *B. burgdorferi* | Consistent with *B. burgdorferi*[3] |
| **Purity (post-freeze)**[4] | No growth observed | No growth observed |
| **Viability (post-freeze)**<br>Visual observation<br>LIVE/DEAD® *Bac*Light™ Bacterial Viability[5] | <br>Growth<br>Green fluorescence visible | <br>Growth[2]<br>Green fluorescence visible (Figure 1)[5] |

[1]NR-22685 was produced by inoculation of the deposited material into Revised Barbour-Stoenner-Kelly medium supplemented with 200 µg/mL kanamycin and 40 µg/mL gentamicin and grown 14 days at 32°C in a microaerophilic atmosphere to produce this lot.
[2]7 days at 32°C in a microaerophilic atmosphere in Revised Barbour-Stoenner-Kelly medium supplemented with 200 µg/mL kanamycin and 40 µg/mL gentamicin
[3]≥ 99.9% identical to GenBank: AE000783 (*B. burgdorferi*, strain B31)
[4]7 days at 37°C in an aerobic atmosphere with 5% $CO_2$ on Tryptic Soy agar with 5% defibrinated sheep blood
[5]Determined after 7-day incubation under cultivation conditions with LIVE/DEAD® *Bac*Light™ 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**



**Date:** 11 AUG 2015 **Signature:**

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