

***Burkholderia pseudomallei*, Strain Bp82 ($\Delta purM$)**

Catalog No. NR-49094

Product Description: *Burkholderia pseudomallei* (*B. pseudomallei*), strain Bp82 is an attenuated strain of *B. pseudomallei*, strain 1026b. Strain Bp82 was attenuated via a partial deletion of the *purM* gene, resulting in adenine and thiamine auxotrophy.

Lot¹: 63419676

Manufacturing Date: 03JUN2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Colony morphology ² Motility ³ Growth on Ashdown's selective agar (ASA) ^{4,5} Growth on <i>B. pseudomallei</i> selective agar (BPSA) ^{4,6} Analytical profile index (API 20 NE) Arabinose metabolism Oxidase (cytochrome oxidase)	Report results Motile Positive Positive >80% <i>B. pseudomallei</i> Negative Positive	Circular, low convex, entire, opaque smooth and cream Motile Positive Positive 87.5% <i>B. pseudomallei</i> Negative Positive
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	Consistent with <i>B. pseudomallei</i>	Consistent with <i>B. pseudomallei</i> (C at position 75) ⁷
Confirmation of Deletion Next-Generation Sequencing (illumina [®] MiSeq)	$\Delta purM$	$\Delta purM$ ⁸
Purity (post-freeze)⁹	Growth consistent with <i>B. pseudomallei</i>	Growth consistent with <i>B. pseudomallei</i>
Viability (post-freeze)²	Growth	Growth

¹NR-49094 was produced by inoculation of the deposited material onto Tryptic Soy agar kolle and grown 2 days at 30°C in an aerobic atmosphere. Tryptic Soy broth was used to harvest the material vialled for this lot.

²3 days at 30°C in an aerobic atmosphere on Tryptic Soy agar

³Motility test performed on Remel[™] Motility Test Medium w/TTC indicator for 4 days at 30°C in an aerobic atmosphere.

⁴2 days at 30°C in an aerobic atmosphere

⁵ASA is a gentamicin-containing medium that results in selective growth of *B. pseudomallei* (Ashdown, L. R. "An Improved Screening Technique for Isolation of *Pseudomonas pseudomallei* from Clinical Specimens." *Pathology* 11 (1979): 293-297. PubMed: 460953).

⁶BPSA is a gentamicin-containing medium that results in selective growth of *B. pseudomallei* and has improved recovery of more easily inhibited strains of *B. pseudomallei* (Howard, K. and T. J. Inglis. "Novel Selective Medium for Isolation of *Burkholderia pseudomallei*." *J. Clin. Microbiol.* 41 (2003): 3312-3316. PubMed: 12843080).

⁷Gee, J. E., et al. "Use of 16S rRNA Gene Sequencing for Rapid Identification and Differentiation of *Burkholderia pseudomallei* and *B. mallei*." *J. Clin. Microbiol.* 10 (2003): 4647-4654. PubMed: 14532197.

⁸Alignment of the NR-49094 DNA sequence to the strain 1026b sequence illustrates the 109 base pair deletion/replacement described by the depositor (Propst, K. L., et al. "A *Burkholderia pseudomallei* $\Delta purM$ Mutant is Avirulent in Immunocompetent and Immunodeficient Animals: Candidate Strain for Exclusion from Select-Agent Lists." *Infect. Immun.* 78 (2010): 3136-3143. PubMed: 20404077.).

⁹Purity of this lot was assessed for 7 days at 30°C in an aerobic atmosphere on Tryptic Soy agar.

Date: 29 MAR 2016

Signature:

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