

Genomic DNA from *Burkholderia mallei*, Strain GB8 horse 4

Catalog No. NR-8220

For research use only. Not for human use.

Contributor:

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Product Description:

Genomic DNA was isolated from a preparation of *Burkholderia mallei* (*B. mallei*), strain GB8 horse 4.

Burkholderia mallei (formerly *Pseudomonas mallei*)¹ is a non-motile, aerobic, Gram-negative coccobacillus that produces an extracellular capsule, which is an important virulence determinant.² Other important virulence factors are type III secretion systems³, a type VI secretion system⁸ and lipopolysaccharide O antigen.⁴

B. mallei, strain GB8 horse 4 is a single colony isolate from a horse lung inoculated with *B. mallei*, strain ATCC[®] 23344[™] at the National Centre for Foreign Animal Disease in Winnipeg, Manitoba, Canada.⁵ *B. mallei*, strain ATCC[®] 23344[™] was a human isolate obtained in China, 1942.⁶ The draft genome of *B. mallei*, strain GB8 horse 4 has been completed (GenBank: AAHO00000000). The genome sequence of the unpassaged strain, *B. mallei*, strain ATCC[®] 23344[™] has been completed (GenBank: CP000010 and CP000011).⁷

NR-8220 has been qualified for PCR applications by amplification of approximately 1500 bp of the 16S ribosomal RNA gene.

Material Provided:

Each vial contains approximately 4 to 6 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH ~ 7.4). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-8220 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at 4°C or colder immediately upon arrival. For optimal long-term storage, freezing the material at -20°C or colder is recommended. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID,

NIH: Genomic DNA from *Burkholderia mallei*, Strain GB8 horse 4, NR-8220."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm.

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References:

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7. Nierman, W. C., et al. "Structural Flexibility in the *Burkholderia mallei* Genome." Proc. Natl. Acad. Sci. U.S.A. 101 (2004): 14246-14251. PubMed: 15377793. GenBank: CP000010 and CP000011.
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