

Genomic DNA from *Mycobacterium pinnipedii*, Strain NLA000601757

Catalog No. NR-49667

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Genomic DNA was extracted from a preparation of *Mycobacterium pinnipedii* (*M. pinnipedii*), strain NLA000601757.

M. pinnipedii, strain NLA000601757 was isolated in 2006 from a sea lion in a zoo.¹ Early isolates of *M. pinnipedii* were initially identified as *M. bovis* based on a characteristic insertion sequence 6110 restriction fragment length polymorphism (RFLP) pattern.²⁻⁴ Two genomic deletions that differentiate *M. pinnipedii* from the *M. tuberculosis* complex have been identified: PiD1, which removes Rv3531c, which encodes a hypothetical protein, and Rv3530c, which encodes a possible oxidoreductase involved in cellular metabolism, and PiD2 (also referred to as RD2^{seal})⁵, encompassing genes Rv1977 and Rv1978.^{6,7}

NR-49667 has been qualified for PCR applications by amplification of approximately 1500 base pairs of the 16S ribosomal RNA gene.

Material Provided:

Each vial contains bacterial genomic DNA in buffer. The amount per vial, concentration and buffer composition are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-49667 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic DNA from *Mycobacterium pinnipedii*, Strain NLA000601757, NR-49667."

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, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. van Soolingen, D., Personal Communication.
2. Cousins, D. V., et al. "Tuberculosis in Seals Caused by a Novel Member of the *Mycobacterium tuberculosis* Complex: *Mycobacterium pinnipedii* sp. nov." Int. J. Syst. Evol. Microbiol. 53 (2003): 1305-1314. PubMed: 1130011.
3. van Soolingen, D., et al. "Use of Various Genetic Markers in Differentiation of *Mycobacterium bovis* Strains from Animals and Humans and for Studying Epidemiology of Bovine Tuberculosis." J. Clin. Microbiol. 32 (1994): 2425-2433. PubMed: 7814478.
4. Forshaw, D. and G. R. Phelps. "Tuberculosis in a Captive Colony of Pinnipeds." J. Wildl. Dis. 27 (1991): 288-295. PubMed: 2067051.

5. Marmiesse, M., et al. "Macro-Array and Bioinformatic Analyses Reveal Mycobacterial "Core" Genes, Variation in the EAST-6 Gene Family and New Phylogenetic Markers for the *Mycobacterium tuberculosis* Complex." Microbiology 150 (2004): 483-496. PubMed: 14766927.
6. Warren, R. M., et al. "Differentiation of *Mycobacterium tuberculosis* Complex by PCR Amplification of Genomic Regions of Difference." Int. J. Tuberc. Lung Dis. 10 (2006): 818-822.
7. Bigi, F., et al. "Identification of Genetic Markers for *Mycobacterium pinnipedii* through Genome Analysis." FEMS Microbiol. Lett. 248 (2005): 147-152. PubMed: 15979818.

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