Product Information Sheet for NR-49259

Mycobacterium caprae, Strain NLA000700039

Catalog No. NR-49259

For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Mycobacteriaceae, Mycobacterium*
Species: *Mycobacterium caprae*
Strain: NLA000700039
Original Source: *Mycobacterium caprae (M. caprae)*, strain NLA000700039 was isolated in December 2006 from human pus.[1]

M. caprae is an acid-fast, Gram-positive, non-motile, rod-shaped bacterium originally classified as a subspecies of *M. tuberculosis,* and later transferred to *M. bovis,* before being classified as its own species within the *M. tuberculosis* complex.[2-4] *M. caprae* is the causative agent of tuberculosis in humans and domestic livestock in Europe and Northern Africa, including goats *(Capra aegagrus hircus)*, sheep *(Ovis aries)*, pigs *(Sus scrofa domestica),* and cattle *(Bos primigenius)*, and in wild boars *(Sus scrofa)*, red deer *(Cervus elaphus)*, gray wolves *(Canus lupus)*, and fox *(Vulpes vulpes)*, as well as a dromedary camel *(Camelus dromedarius),* bison *(Bison bison)* and antelope *(Addax nasomaculatus)* in zoological parks.[5-19]

M. caprae is differentiated from the *M. tuberculosis* complex based on a unique combination of *pncA, oxyR, katG* and *gyrA* gene polymorphisms, specific nucleotide substitutions in the *gyrB* gene, a distinct restriction fragment length polymorphism (RFLP) pattern associated with insertion sequence *6110*, and unique spoligotyping patterns.[3,20]

Material Provided:
Each vial contains approximately 0.7 mL of bacterial culture in Middlebrook 7H9 broth with ADC enrichment supplemented with 10% glycerol.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:
NR-49259 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:
Media:
Middlebrook 7H9 broth with Middlebrook ADC enrichment or equivalent
Middlebrook 7H10 agar with Middlebrook OADC enrichment or equivalent
Incubation:
Temperature: 37°C
Atmosphere: Aerobic (with or without 5% CO_2)
Propagation:
1. Keep vial frozen until ready for use; then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tubes and plate at 37°C for 2 to 6 weeks.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Mycobacterium caprae*, Strain NLA000700039, NR-49259."

Biosafety Level: 3
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.

This publication recommends that practices with this agent include the use of respiratory protection and the implementation of specific procedures and use of specialized equipment to prevent and contain aerosols.

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