Francisella tularensis subsp. novicida, Strain JL12

Catalog No. NR-583

For research use only. Not for human use.

Contributor:
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Product Description:
Bacteria Classification: Francisellaceae, Francisella
Species: Francisella tularensis subsp. novicida
Strain: JL12
Comments: Francisella tularensis subsp. novicida, strain JL12 is a pdpD mutant of the wild-type strain U112, in which the pdpD gene region has been replaced with an erythromycin resistance cassette. This pdpD mutant produced decreased levels of IgIA, and was defective for intramacrophage growth and virulence in mice.1

Francisella tularensis (F. tularensis) is one of the most infectious bacterial pathogens known and is the causative agent of the febrile zoonotic disease tularemia. The natural reservoir of the bacterium is thought to be rodents, although most human cases result from the bite of a blood-feeding arthropod vector.2

F. tularensis subsp. novicida is a Gram-negative, facultative bacterium, which grows predominantly in macrophages when living in mammalian hosts. It is commonly used for studying F. tularensis pathogenesis since it is highly virulent in mice but has minor effects on humans.2

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Tryptic Soy Broth supplemented with 10% glycerol.

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

Packaging/Storage:
NR-583 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:

Tryptic Soy Agar or Broth with 0.1% cysteine
Cystine Heart Agar with 5% defibrinated rabbit blood
Incubation:
Temperature: 37°C
Atmosphere: Aerobic with 5% CO2
Propagation:
1. Keep vial frozen until ready for use; thaw slowly.
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 24 to 48 hours.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Francisella tularensis subsp. novicida, Strain JL12, NR-583.”

Biosafety Level: 2


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References:

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