

***Francisella tularensis* subsp. *tularensis*,  
Strain NIH B-38**

**Catalog No. NR-50**

(Derived from ATCC® 6223™)

**For research use only. Not for human use.**

**Contributor:**

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**Product Description:**

Bacteria Classification: *Francisellaceae*, *Francisella*

Species: *Francisella tularensis* subsp. *tularensis*

Biotype: Type A<sup>1</sup>

Type Strain: NIH B-38 (FSC230)

Original Source: Human lymph node, Utah (1920)<sup>2</sup>

Comments: This strain does not pose a threat to human or animal health since it has lost virulence through laboratory passage.<sup>1</sup>

*F. tularensis* subsp. *tularensis*, strain NIH B-38 (ATCC® 6223™) is excluded from Select Agent status. Please see <http://www.cdc.gov/od/sap/sap/exclusion.htm#background>.

*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 environmental reservoir of the bacterium is unknown, although most human cases result from the bite of a blood-feeding arthropod vector.<sup>3</sup>

*F. tularensis* subsp. *tularensis* is a small, non-motile, aerobic, pleomorphic, Gram-negative coccobacillus which displays the highest degree of human virulence among *F. tularensis* subspecies. Very little is known about the virulence mechanisms of *F. tularensis*, but growth in macrophages is central to the bacterium's ability to cause disease.<sup>2</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Cystine Heart Broth with 5% defibrinated rabbit blood supplemented with 10% glycerol.

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

**Packaging/Storage:**

NR-50 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:

Cystine Heart Broth with 5% defibrinated rabbit blood

Cystine Heart Agar with 5% defibrinated rabbit blood

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO<sub>2</sub>

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. *tularensis*, Strain NIH B-38, NR-50."

**Biosafety Level: 2**

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](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

**Disclaimers:**

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**References:**

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