

### ***Francisella tularensis* subsp. *novicida*, “Two-Allele” Transposon Mutant Library, Plates 1-33**

**Catalog No. NR-8034**

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

#### **Contributor:**

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#### **Product Description:**

A comprehensive 16508-member transposon mutant library<sup>1</sup> of sequence-defined transposon insertion mutants of *Francisella tularensis* subsp. *novicida*, strain U112 was prepared to allow the systematic identification of virulence determinants and other factors associated with *Francisella* pathogenesis. Genes refractory to insertional inactivation helped define the genes essential for viability of the organism.

To facilitate genome-scale screening using the mutant collection, a “two-allele” single-colony purified sublibrary, made up of approximately two purified mutants per gene, was assembled.

NR-8034 consists of Plates 1-33 (BEI Resources NR-8035 through NR-8066 and NR-10484) of the “two-allele” 3050-member sublibrary. Plate 33 contains 18 strains which were not previously available on Plates 1-32. Eleven strains remain unavailable. Detailed information is available on the Product Information Sheet and Certificate of Analysis for each individual plate. Information about specific clones may also be accessed through the [Francisella Tularensis Genome Research](#) homepage.

*Francisella tularensis* subsp. *novicida*, strain U112 is excluded from Select Agent status. Please see [CDC Select Agent Program, Notification of Exclusion](#).

#### **Material Provided:**

Each well of each 96-well plate contains approximately 0.25 mL of bacterial culture in 0.7X Tryptic Soy Broth containing 0.1% L-cysteine and supplemented with 5% glycerol. The broth also contains kanamycin (10 µg/mL) except for the strains in wells A04, A05 and A06 of Plate 33 (BEI Resources NR-10484). These 3 strains are erythromycin-resistant and were grown without antibiotic.

**Note:** Production in the 96-well format has a potential for cross-contamination. Individual mutants should be checked by the recipient prior to use.

#### **Packaging/Storage:**

NR-8034 was packaged aseptically in 96-well plates. 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 containing 0.1% L-cysteine and 10 µg/mL kanamycin

##### Incubation:

Temperature: 37°C

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

##### Propagation:

1. Scrape top of frozen well with a pipette tip and streak onto agar plate.
2. Incubate the 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*, “Two-Allele” Transposon Mutant Library, Plates 1-33, NR-8034.”

#### **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:

1. Gallagher, L. A., et al. "A Comprehensive Transposon Mutant Library of *Francisella novicida*, A Bioweapon Surrogate." Proc. Natl. Acad. Sci. USA 104 (2007): 1009-1014. PubMed: 17215359.

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