

## Genomic DNA from *Yersinia pestis*, Strain A1122

### Catalog No. NR-3040

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

#### Contributor:

Centers for Disease Control and Prevention, Division of Vector-Borne Infectious Diseases, Fort Collins, Colorado, USA

#### Manufacturer:

BEI Resources

#### Product Description:

Genomic DNA was isolated from a preparation of *Yersinia pestis* (*Y. pestis*), strain A1122.

*Y. pestis* A1122 was isolated from a California ground squirrel (*Spermophilus beecheyi*) in California in 1939.<sup>1</sup> It contains the pMT1/pFra and the pPCP1/pPla plasmids, but lacks the pCD1/pYV plasmid that is essential for virulence as well as the unstable *pgm* locus.<sup>2-4</sup> The complete genome and plasmid sequences are available (GenBank: [CP002956](#), [CP002957](#) and [CP002958](#)).

The presence of the pMT1/pFra and the pPCP1/pPla plasmids and the absence of the pCD1/pYV plasmid and the *pgm* locus in NR-3040 have been confirmed by Next Generation Sequencing. NR-3040 has been qualified for PCR applications by amplification of approximately 1500 base pairs of the 16S ribosomal RNA gene.

#### Material Provided:

Each vial of lot 63815634 contains approximately 0.7 µg to 1.5 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH ~ 8.0). Each vial of lot 7513127 contains approximately 5 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH ~ 7.4). The concentration, expressed as µg per µL, is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

#### Packaging/Storage:

NR-3040 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 *Yersinia pestis*, Strain A1122, NR-3040."

#### 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/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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#### References:

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3. Ferber, D. M. and R. R. Brubaker. "Plasmids in *Yersinia pestis*." Infect. Immun. 31 (1981): 839-841. PubMed: 7216478.
4. Chu, M. C., X. Q. Dong, X. Zhou, and C. F. Garon. "A Cryptic 19-Kilobase Plasmid Associated with U.S. Isolates of *Yersinia pestis*: A Dimer of the 9.5-Kilobase Plasmid." Am. J. Trop. Med. Hyg. 59 (1998): 679-686. PubMed: 9840581.
5. Parkhill, J., et al. "Genome Sequence of *Yersinia pestis*, the Causative Agent of Plague." Nature 413 (2001): 523-527. PubMed: 11586360.
6. Chu, M. C. Laboratory Manual of Plague Diagnostic Tests. Centers for Disease Control and Prevention, Atlanta, 2000.

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