

**Genomic DNA from *Yersinia pestis*, Strain KIM10+**

**Catalog No. NR-2645**

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**Contributor:**

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

**Manufacturer:**

BEI Resources

**Product Description:**

NR-2645 contains genomic DNA extracted from a preparation of *Yersinia pestis* (*Y. pestis*), strain KIM10+, biovar Medievalis. Strain KIM10+ was deposited as sensitive to chloramphenicol, ciprofloxacin, gentamicin, tetracycline, trimethoprim/sulfamethoxazole and streptomycin.<sup>1</sup>

*Y. pestis* KIM10+ is an irreversibly attenuated strain that was derived from the KIM strain.<sup>2</sup> KIM10+ lacks the pCD1 plasmid that is essential for virulence as well as the pPCP1 plasmid. It contains the pMT1 plasmid and the chromosomal virulence-associated locus *pgm*.<sup>2</sup> The complete sequence of the chromosome (GenBank: [NC\\_004088](#)) and pMT1 (GenBank: [NC\\_004838](#)) from *Y. pestis* strain KIM10+ have been determined.

The presence of the pMT1 plasmid in NR-2645 has been confirmed by PCR amplification of plasmid specific virulence markers. NR-2645 has been qualified for PCR applications by amplification of approximately 1500 base pairs of the 16S ribosomal RNA gene.

**Material Provided:**

Each vial of NR-2645 contains 0.7 µg to 1.5 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl and 1 mM EDTA, pH ~ 8). Each vial of NR-2645 lot 5107311 contains approximately 5 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH ~ 7.4). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

NR-2645 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen 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 KIM10+, NR-2645."

**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/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. CDC, Personal Communication.
2. Deng, W., et al. "Genome Sequence of *Yersinia pestis* KIM." [J. Bacteriol.](#) 184 (2002): 4601–4611. PubMed: 12142430. GenBank: NC\_004088.

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