

**Genomic DNA from *Salmonella enterica* subsp. *enterica*, Strain LS1001**

**Catalog No. NR-4622**

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

**Contributor:**

National Institute of Allergy and Infectious Diseases, National Institutes of Health

**Product Description:**

Genomic DNA was obtained from a preparation of *Salmonella enterica* (*S. enterica*) subsp. *enterica*, strain LS1001, a derivative of strain 14028 which was isolated from chickens.<sup>1</sup> *S. enterica* subsp. *enterica*, strain LS1001 contains pKD46, a temperature sensitive plasmid expressing  $\lambda$  Red recombinase, and is ampicillin resistant.<sup>2,3</sup> Additional information is available at the [Resource Center for Biodefense Proteomics Research \(BPRC\)](#).

The complete genome sequence of several strains of *S. enterica* subsp. *enterica* serovar Typhimurium are in progress [strain DT104 (Definitive Type 104; a multidrug resistant strain), strain SL1344 (a genetically marked subline of a calf-virulent isolate), and strain TR7095 (a wild-type strain)] and strain LT2 has been completed (GenBank: AE006468).<sup>4</sup>

NR-4622 has been qualified for PCR applications by amplification of approximately 1500 bp of the 16S ribosomal RNA.

**Material Provided:**

Each vial contains 4 to 6  $\mu$ g of bacterial genomic DNA in TE buffer (10 mM Tris-HCl and 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-4622 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 the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Genomic DNA from *Salmonella enterica* subsp. *enterica*, Strain LS1001, NR-4622."

**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, 2007; see

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

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**References:**

1. Shi, L., et al. "Proteomic Analysis of the *Salmonella enterica* serovar Typhimurium Isolated from RAW 264.7 Macrophages: Identification of a Novel Protein that Contributes to the Replication of Serovar Typhimurium inside Macrophages." *J. Biol. Chem.* 281 (2006): 29131-29140. PubMed: 16893888.
2. Datsenko, K. A. and B. L. Wanner. "One-Step Inactivation of Chromosomal Genes in *Escherichia coli* K-12 using PCR Products." *Proc. Natl. Acad. Sci. U. S. A.* 97 (2000): 6640-6645. PubMed: 10829079.
3. Sha, J., et al. "The Two Murein Lipoproteins of *Salmonella enterica* Serovar Typhimurium Contribute to the Virulence of the Organism." *Infect. Immun.* 72 (2004): 3987-4003. PubMed: 15213144.
4. McClelland, M., et al. "Complete Genome Sequence of *Salmonella enterica* Serovar Typhimurium LT2." *Nature* 413 (2001): 852-856. PubMed: 11677609. GenBank: AE006468.

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