

***Salmonella enterica* subsp. *enterica*, Strain CIP 60.62**

Catalog No. NR-169

(Derived from ATCC® 43971™)

For research use only. Not for human use.

Contributor:

ATCC®

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Salmonella*

Species: *Salmonella enterica*

Subspecies: *Salmonella enterica* subsp. *enterica*^{1,2} (formerly *Salmonella typhimurium*, *Salmonella choleraesuis* subsp. *choleraesuis* subtype Typhimurium)

Serotype: B

Serovar: Typhimurium

Type Strain: CIP 60.62

Original Source: *Salmonella enterica* (*S. enterica*) subsp. *enterica*, strain CIP 60.62 was derived from the wild strain LT2 (H₂S producing) and deposited in the Collection of the Institut Pasteur by M. Demerec in 1960.³

Comments: *S. enterica* subsp. *enterica*, strain CIP 60.62 was deposited at ATCC® in 1988 by Y. Cerisier from the Institut Pasteur, Paris, France.

S. enterica are a Gram-negative, rod-shaped, flagellated bacterial species that are divided into six subspecies (I, II, IIIa, IIIb, IV, VI). Only subspecies I, subsp. *enterica*, is considered of clinical relevance and may result in (non-typhoidal) salmonellosis, one of the most common food-borne diseases with an estimated 2 million cases that occur in the United States every year.⁴ Pathogenicity results from a variety of virulence factors found in plasmids, prophages, and five pathogenicity islands which allow these organisms to colonize and infect host organisms.^{5,6}

S. enterica subsp. *enterica* serovar Typhimurium (formerly *Salmonella typhimurium*) is a major cause of gastroenteritis. Septic shock resulting in part from lipopolysaccharide (LPS) is a primary complication associated with serovar Typhimurium infection.⁷

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).⁸

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Tryptic Soy Broth supplemented with 10% glycerol.

Note: If homogeneity is required for your intended use,

please purify prior to initiating work.

Packaging/Storage:

NR-169 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:

Tryptic Soy Broth or equivalent

Tryptic Soy Agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic

Propagation:

1. Keep vial frozen until ready for use, then thaw.
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 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Salmonella enterica* subsp. *enterica*, Strain CIP 60.62, NR-169."

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.

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References:

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3. Minor, L. L. and M. Y. Popoff. "Designation of *Salmonella enterica* sp. nov., nom. rev., as the Type and Only Species of the Genus *Salmonella*." Int. J. Syst. Bacteriol. 37 (1987): 465-468.
4. Altekruze, S. F., M. L. Cohen, and D. L. Swerdlow. "Emerging Foodborne Diseases." Emerg. Infect. Dis. 3 (1997): 285-293. PubMed: 9284372.
5. Lavigne, J. P. and A. B. Blanc-Potard. "Molecular Evolution of *Salmonella enterica* Serovar Typhimurium and Pathogenic *Escherichia coli*: From Pathogenesis to Therapeutics." Infect. Genet. Evol. 8 (2008): 217-226. PubMed: 18226587.
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