

***Salmonella enterica* subsp. *enterica*,  
Strain G4639**

**Catalog No. NR-172**

(Derived from ATCC® BAA-710™)

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

**Contributor:**

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**Product Description:**

Bacteria Classification: *Enterobacteriaceae*, *Salmonella*

Species: *Salmonella enterica*

Subspecies: *Salmonella enterica* subsp. *enterica*<sup>1,2</sup>  
(formerly *Salmonella choleraesuis* subsp. *choleraesuis*)

Serovar: Montevideo

Strain: G4639

Original Source: *Salmonella enterica* (*S. enterica*) subsp. *enterica* serovar Montevideo, strain G4639 was isolated in 1993 from a patient with salmonellosis associated with tomatoes.

Comments: *S. enterica* subsp. *enterica* serovar Montevideo, strain G4639 was deposited at ATCC® in 2003 by Professor Larry R. Beuchat, Center for Food Safety, University of Georgia, Griffin, Georgia. This strain is utilized in testing the efficacy of produce sanitizers.<sup>3,4</sup>

*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.<sup>4</sup> 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.<sup>5,6</sup>

Outbreaks of infection caused by *S. enterica* subsp. *enterica* serovar Montevideo are typically associated with eating uncooked tomatoes.<sup>7,8</sup>

**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-172 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 G4639, NR-172."

**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/bmbl5/bmbl5toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm).

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**References:**

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