**Salmonella enterica** subsp. enterica, Strain A36

**Catalog No. NR-13555**

For research use only. Not for human use.

**Contributor:**
Professor Michael McClelland, Ph.D., Sidney Kimmel Cancer Center, San Diego, California

**Product Description:**

**Bacteria Classification:** Enterobacteriaceae, Salmonella

**Species:** Salmonella enterica

**Subspecies:** Salmonella enterica subsp. enterica

**Serogroup:** B

**Serovar:** Typhimurium

**Strain:** A36

*S. enterica* are Gram-negative, rod-shaped, flagellated bacteria. The species is divided into six subspecies (I, II, IIIa, IIIb, IV, VI) where only subspecies I, subsp. enterica, is considered of clinical relevance. *Salmonellosis* (non-typhoidal), due to the greater than 1500 serovars of *S. enterica* subsp. enterica, is one of the most common food-borne diseases with an estimated 2 million cases that occur in the United States every year. 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.

*S. enterica* subsp. *enterica* serovar Typhimurium (formerly *Salmonella typhimurium*) is a major cause of gastroenteritis. These bacteria are host generalists that occur in humans and many other mammals. Septic shock resulting in part from lipopolysaccharide (LPS) is a primary complication associated with serovar *Typhimurium* infection. Due to its similarity to the clinical and pathological effects in humans, calves are currently used as an animal model for human enterocolitis caused by this serotype. Additionally, this serovar causes typhoid-like disease in mice and is used as a mouse model of human typhoid fever.

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).

**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-13555 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 LB Broth
- 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 A36, NR-13555.”

**Biosafety Level:** 2


**Disclaimers:**

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at [www.beiresources.org](http://www.beiresources.org).

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government make any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any...
damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

ATCC® is a trademark of the American Type Culture Collection.