**Salmonella enterica subsp. enterica**, 2004 Pennsylvania Tomato Outbreak, Serovar Anatum, Isolate 5

**Catalog No. NR-4295**

For research use only. Not for human use.

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**Product Description:**

**Bacteria Classification:** Enterobacteriaceae, Salmonella

**Species:** Salmonella enterica

**Subspecies:** Salmonella enterica subsp. enterica1,2

**Serogroup:** E1

**Serovar:** Anatum

**Isolate:** 5

**Original Source:** Human stool from a patient with diarrhea during the 2004 Salmonella outbreak in Pennsylvania

**Comments:** The 2004 *Salmonella* outbreak was linked to the consumption of Roma tomatoes from deli counters of a chain of 302 gas station convenience stores in Pennsylvania and four nearby states. Multiple serotypes of *Salmonella enterica* were implicated.3,4

*Salmonella enterica* (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.5 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.6

*S. enterica* subsp. *enterica* serovar Anatum (formerly *Salmonella anatum*) is found in domestic and wild animals and is generally spread to humans via consumption of contaminated water or food resulting in gastroenteritis.

**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-4295 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -70°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*, 2004 Pennsylvania Tomato Outbreak, Serovar Anatum, Isolate 5, NR-4295."

**Biosafety Level:** 2


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