**Product Information Sheet for NR-4291**

**Salmonella enterica subsp. enterica,**
2004 Pennsylvania Tomato Outbreak, Serovar Anatum, Isolate 1

Catalog No. NR-4291

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*¹,²

**Serogroup:** E1

**Serovar:** Anatum

**Isolate:** 1

**Original Source:** Roma tomato slices obtained in July 2004 during the Pennsylvania *Salmonella* outbreak

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-4291 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 1, NR-4291."

**Biosafety Level:** 2


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