**Yersinia enterocolitica** subsp. *enterocolitica*, Strain 1375

**Catalog No. NR-209**
(Derived from ATCC® 49397™)

For research use only. Not for use in humans.

**Contributor:**
ATCC®

**Manufacturer:**
BEI Resources

**Product Description:**

**Bacteria Classification:** Enterobacteriaceae, *Yersinia*

**Species:** *Yersinia enterocolitica* subsp. *enterocolitica*¹,²

**Strain:** 1375

**Original Source:** *Yersinia enterocolitica* (Y. *enterocolitica*) subsp. *enterocolitica*, strain 1375 was isolated in 1981 from a human clinical specimen.

**Comments:** *Y. enterocolitica* subsp. *enterocolitica*, strain 1375 was deposited at ATCC® by Becton Dickinson Microbiology Systems.

*Y. enterocolitica* subsp. *enterocolitica* is a significant foodborne enteropathogen which causes gastroenteritis.³ *Y. enterocolitica* subsp. *enterocolitica* is an extremely heterogeneous species, encompassing six biotypes and currently more than 50 serogroups, not all of which can cause disease.⁴ It is of particular concern to the food industry because it is a psychrotroph that is able to proliferate at temperatures approaching 0°C.⁵

*Y. enterocolitica* subsp. *enterocolitica* is a non-spore-forming, Gram-negative, rod-shaped coccobacillus. Virulence-associated genes are located on the chromosome and on the pYV (approximately 70 kb) plasmid found in typical virulent strains of *Y. enterocolitica* subsp. *enterocolitica*.⁵ This plasmid encodes a type III secretion system involved in the delivery of virulence proteins that contribute to internalization into host cells.⁶

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in 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-209 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.

**Grow Conditions:**

**Media:**

Brain Heart Infusion broth or Tryptic Soy broth or equivalent
Tryptic Soy agar or Sheep Blood agar or equivalent

**Incubation:**

Temperature: 26°C
Atmosphere: Aerobic

**Propagation:**

1. Keep vial frozen until ready for use; thaw slowly.
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 26°C for 1 to 2 days.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Yersinia enterocolitica* subsp. *enterocolitica*, Strain 1375, NR-209.”

**Biosafety Level:** 2


**Disclaimers:**

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References: