**Yersinia enterocolitica subsp. enterocolitica**, Strain 33114

**Catalog No. NR-803**  
(Derived from ATCC® 9610™)

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

**Contributor:**  
ATCC®

**Product Description:**

**Bacteria Classification:** Enterobacteriaceae, Yersinia

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

**Biotype:** 1

**Serotype:** O:8

**Phagovar:** X

**Type Strain:** 33114

**Original Source:** Isolated from facial abscesses of an adult human with a chronic, glanders-like infection of the face in New York, 1934.

**Comments:** Yersinia enterocolitica subsp. enterocolitica (Y. enterocolitica subsp. enterocolitica), strain 33114 was deposited at ATCC® in 1944 by Julia M. Coffee, Associate Bacteriologist, New York Department of Health, Division of Laboratories and Research, Albany, New York.

Y. enterocolitica subsp. enterocolitica is a significant food-borne enteropathogen which causes gastroenteritis. 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.  

Y. enterocolitica subsp. enterocolitica is a non-sporing, gram-negative, rod-shaped coccobacillus. Virulence-associated genes are located on the chromosome and on the pYV (64 to 75 kb) plasmid found in typical virulent strains of Y. enterocolitica subsp. enterocolitica. This plasmid encodes a type III secretion system involved in the delivery of virulence proteins that contribute to internalization into host cells.

The presence of the pYV plasmid in NR-803 has been confirmed by gel electrophoresis of extracted DNA.

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Tryptic Soy Broth supplemented with 10% glycerol.

**Packaging/Storage:**

NR-803 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:**  
Brain Heart Infusion Broth or Tryptic Soy Broth  
Tryptic Soy Agar or Sheep Blood Agar

**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 24–48 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Yersinia enterocolitica subsp. enterocolitica, Strain 33114, NR-803.”

**Biosafety Level:** 2


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References:

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