**Yersinia enterocolitica** subsp. **enterocolitica**, Strain WA-C

**Catalog No. NR-211**  
(Derived from ATCC® 51872™)

**For research only. Not for use in humans.**

**Contributor:**  
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**Manufacturer:**  
BEI Resources

**Product Description:**  
Bacteria Classification: Enterobacteriaceae, Yersinia  
Species: Yersinia enterocolitica subsp. enterocolitica  
Strain: WA-C  
Biotype: 1B  
Serotype: O:8  
Original Source: Yersinia enterocolitica (Y. enterocolitica) subsp. enterocolitica, strain WA-C is a plasmidless derivative of Y. enterocolitica subsp. enterocolitica, strain WA-314 (BEI Resources NR-210).  
Comments: Y. enterocolitica subsp. enterocolitica, strain WA-C was deposited at ATCC® by Dr. Alexander V. Rakin, Max von Pettenkofer-Institute of Hygiene and Medical Microbiology, University of Munich, Munich, Germany. Strain WA-C is a spontaneous nalidixic acid-resistant, pesticin-sensitive mutant. The complete genome of the parental strain, Y. enterocolitica subsp. enterocolitica, strain WA-314, is available (GenBank: NZ_AKKR0000000_1).

Y. enterocolitica subsp. enterocolitica is a significant foodborne 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. It is of particular concern to the food industry because it is a psychrotrophic pathogen able to proliferate at temperatures approaching 0°C.

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. This plasmid encodes a type III secretion system involved in the delivery of virulence proteins that contribute to internalization into host cells.

**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-211 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 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 WA-C, NR-211."

**Biosafety Level: 2**


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References:

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