

***Shigella flexneri*, Strain 24570**

Catalog No. NR-517

(Derived from ATCC® 29903™)

For research only. Not for human use.

Contributor:

ATCC®

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Shigella*

Species: *Shigella flexneri* (*S. flexneri*)

Type Strain: 24570

Serotype: 2a

Shigellae are Gram-negative, nonsporulating, facultative, anaerobic bacilli that are the causative agent of shigellosis. Four species of *Shigella* (*S. dysenteriae*, *S. flexneri*, *S. sonnei* and *S. boydii*) are able to cause the disease. Shigellosis is most commonly associated with children of developing countries where it causes more than one million deaths every year. Transmission generally occurs through contaminated food and water or by person-to-person contact.^{1,2}

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 colony-purify prior to initiating work.

Packaging/Storage:

NR-517 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:

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 Tryptic Soy Broth.
3. Use several drops of the suspension to inoculate a Tryptic Soy 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: *Shigella flexneri*, Strain 24570, NR-517."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government make any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Sansonetti, P. J. "Microbes and Microbial Toxins: Paradigms for Microbial-Mucosal Interactions III. Shigellosis: from Symptoms to Molecular Pathogenesis."

- Am. J. Physiol. Gastrointest. Liver Physiol. 280 (2001): G319–G323. PubMed: 11171613.
2. Niyogi, S. K. "Shigellosis." J. Microbiol. 43 (2005): 133–143. PubMed: 15880088.
 3. Ming-Shan, Q., H. Yoshikura, and H. Watanabe. "Virulence Phenotypes of *Shigella flexneri* 2a Avirulent Mutant 24570 Can Be Complemented by the Plasmid-coded Positive Regulator *virF* Gene." FEMS Microbiol. Lett. 92 (1992): 217–221. PubMed: 1624118.

ATCC® is a trademark of the American Type Culture Collection.