

**Shigella sp., Strain D9**

**Catalog No. HM-87**

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

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Enterobacteriaceae, Shigella*

Species: *Shigella* sp.

Strain: D9 (also referred to as strain 36\_3\_1A)

Original Source: *Shigella* sp., strain D9 was isolated in 2007 from normal biopsy tissue taken from the cecum of a 59-year-old male patient undergoing a colon cancer screen in Calgary, Alberta, Canada.<sup>1,2</sup>

Comments: *Shigella* sp., strain D9 ([HMP ID 0760](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *Shigella* sp., strain D9 is currently being sequenced at the [Broad Institute](#) (GenBank: [ACDL00000000](#)).

Note: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

Shigellae are Gram-negative, nonsporulating, facultatively anaerobic, rod-shaped bacteria 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.<sup>3,4</sup>

**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:**

HM-87 was packaged aseptically in 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 with 5% defibrinated sheep blood 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 tube, slant and/or plate at 37°C for 24 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Shigella* sp., Strain D9, HM-87.”

**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, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. [HMP ID 0760](#) (*Shigella* sp., strain D9)
2. Professor Emma Allen-Vercoe, personal communication.
3. 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.
4. Niyogi, S. K. "Shigellosis." J. Microbiol. 43 (2005): 133-143. PubMed: 15880088.
5. Kweon, M.-N. "Shigellosis: the Current Status of Vaccine Development." Curr. Opin. Infect. Dis. 21 (2008): 313-318. PubMed: 18448978.

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