

***Leptospira meyeri*, Strain Semarang Veldrat 173 (Serovar Semarang)**

Catalog No. NR-35362

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Leptospiraceae*, *Leptospira*

Species: *Leptospira meyeri*

Serovar: Semarang Veldrat

Strain: Semarang 173 (also known as strain Veldrat S.173)¹

Original Source: *Leptospira meyeri* (*L. meyeri*), strain Semarang Veldrat 173 (serovar Semarang) is a saprophytic strain isolated from a rat in Indonesia.¹⁻³

Comments: Strain Semarang Veldrat 173 was deposited to BEI Resources as part of the [Leptospira Genome Project](#) at the J. Craig Ventor Institute's [Genomic Sequencing Center for Infectious Diseases](#) (GSCID). The whole genome shotgun sequence of *L. meyeri*, strain Semarang Veldrat 173 is available (GenBank: [ANIL00000000](#)).

The genus *Leptospira* consists of thirteen pathogenic species, that cause the acute zoonotic-disease leptospirosis, and six free-living saprophytic species found in water and soil that do not infect animal hosts.^{4,5} Leptospire are thin, motile, slow-growing obligate aerobe spirochetes with distinctive hooked ends and two axial flagella that causes the acute zoonotic-disease leptospirosis.^{4,5}

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Ellinghausen-McCullough-Johnson-Harrison Medium supplemented with 2.5% DMSO.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-35362 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:

Ellinghausen-McCullough-Johnson-Harrison (EMJH) Semisolid Agar (0.15%) (ATCC medium 2653) or equivalent

Incubation:

Temperature: 30°C
Atmosphere: Aerobic

Propagation:

1. Keep vial frozen until ready for use; thaw slowly.
2. Transfer the entire thawed aliquot into a single tube or jar of semisolid agar.
4. Incubate the tube or jar at 30°C for 10 to 18 days until an opaque disk of growth is visible several millimeters below the surface of the medium (Dinger's disk).

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Leptospira meyeri*, Strain Semarang Veldrat 173 (Serovar Semarang), NR-35362."

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.

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References:

1. Belfaiza, J., et al. "Direct Sulfhydrylation for Methionine Biosynthesis in *Leptospira meyeri*." J. Bacteriol. 180 (1998): 250-255. PubMed: 9440513.
2. Brenner, D. J., et al. "Further Determination of DNA Relatedness between Serogroups and Serovars in the Family *Leptospiraceae* with a Proposal for *Leptospira alexanderi* sp. nov. and Four New *Leptospira* Genomospecies." Int. J. Syst. Bacteriol. 49 (1999): 839-858. PubMed: 1031951.
3. Yasuda, P. H., et al. "Deoxyribonucleic Acid Relatedness between Serogroups and Serovars in the Family *Leptospiraceae* with Proposals for Seven New *Leptospira* Species." Int. J. Syst. Bacteriol. 37 (1987): 407-415.
4. Evangelista, K. V. and J. Coburn. "*Leptospira* as an Emerging Pathogen: A Review of its Biology, Pathogenesis and Host Immune Responses." Future Microbiol. 9 (2010): 1413-1425. PubMed: 20860485.
5. Ko, A. I., C. Goarant and M. Picardeau. "*Leptospira*: The Dawn of the Molecular Genetics Era for an Emerging Zoonotic Pathogen." Nat. Rev. Microbiol. 7 (2009): 736-747. PubMed: 19756012.

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