

***Leptospira alexanderi*, Strain L 60T
(Serovar Manhao 3)**

Catalog No. NR-22256

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Leptospiraceae*, *Leptospira*

Species: *Leptospira alexanderi*

Serovar: Manhao 3

Strain: L 60T (ATCC® 700520™)

Original Source: *Leptospira alexanderi* (*L. alexanderi*), strain L 60T (serovar Manhao 3) was isolated in 1979 from a human in China.¹

Comments: *L. alexanderi*, strain L 60T was deposited to BEI Resources as the type strain of the species.^{2,3} It is part of the [Leptospira Genome Project](#) at the J. Craig Venter Institute's [Genomic Sequencing Center for Infectious Diseases](#) (GSCID).⁴ The whole genome sequence of *L. alexanderi*, strain L 60T (ATCC® 700520™) is available (GenBank: [AHMT02000000](#)).

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.^{5,6} Leptospire are thin, motile, slow-growing obligate aerobic spirochetes with distinctive hooked ends and two axial flagella that cause the acute zoonotic disease leptospirosis.^{5,6}

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-22256 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) semi-

solid agar (0.15%) (ATCC® medium 2653) or equivalent

Note: *L. alexanderi* does not grow on solid agar.

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.
3. Incubate the tube or jar at 30°C for 10 days to 10 weeks until an opaque disk of growth is visible several millimeters below the surface of the medium (Dinger's disk).

Note: Due to the nature of *Leptospira* to form a Dinger's disk in semi-solid agar, it may be difficult to obtain a homogenous pool of cells to ensure an even distribution in all vials. If growth is not observed after 10 weeks in culture, please contact BEI Resources for a replacement.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Leptospira alexanderi*, Strain L 60T (Serovar Manhao 3), NR-22256."

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. Hartskeerl, R. A., Personal Communication.
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: 10319510.
3. Morey, R. E., et al. "Species-Specific Identification of *Leptospiraceae* by 16S rRNA Gene Sequencing." *J. Clin. Microbiol.* 44 (2006): 3510-3516. PubMed: 17021075.
4. Vinetz, J. M. and K. Nelson. "*Leptospira* Genomics and Human Health." J. Craig Venter Institute's [Genomic Sequencing Center for Infectious Diseases](http://gcid.jcvi.org/docs/Leptospirosis_White_Paper_FINAL_November_2009[1].pdf). (2010) <[http://gcid.jcvi.org/docs/Leptospirosis_White_Paper_FINAL_November_2009\[1\].pdf](http://gcid.jcvi.org/docs/Leptospirosis_White_Paper_FINAL_November_2009[1].pdf)>
5. 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.
6. 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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