

***Leptospira broomii*, Strain 5399T (Serovar Hurstbridge)**

Catalog No. NR-22253

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Leptospiraceae*, *Leptospira*

Species: *Leptospira broomii*

Serovar: Hurstbridge

Strain: 5399T (also known as 5399^T and 5399)¹⁻³

Original Source: *Leptospira broomii* (*L. broomii*), strain 5399T (serovar Hurstbridge) is an intermediately pathogenic strain isolated from the blood of a human with acute leptospirosis in Denmark.^{1,4}

Comments: Strain 5399T was deposited to BEI Resources as the type strain for the species. It is 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. broomii*, strain 5399T is available (GenBank: [AHMO00000000](#)).

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 aerobe spirochetes with distinctive hooked ends and two axial flagella that causes 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-22253 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.
3. Incubate the tube or jar at 30°C for 10 to 24 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 broomii*, Strain 5399T (Serovar Hurstbridge), NR-22253."

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. Levett, P. N., et al. "*Leptospira broomii* sp. no., Isolated from Humans with Leptospirosis." Int. J. Syst. Evol. Microbiol. 56 (2006): 671-673. PubMed: 16514048.
<http://www.ncbi.nlm.nih.gov/bioproject/74059>
2. Vinetz, J. M. and K. Nelson. "*Leptospira* Genomics and Human Health." J. Craig Venter Institute's [Genomic Sequencing Center for Infectious Diseases](http://gsc.icvi.org/projects/gsc/leptospira/index.shtml). (2010) <<http://gsc.icvi.org/projects/gsc/leptospira/index.shtml>>
3. Hartskeerl, R. A., Personal Communication.
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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