Product Information Sheet for NR-19925

Leptospira licerasiae, Strain VAR10 (Serovar Varillal)

Catalog No. NR-19925

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Leptospiraceae, Leptospira*
Species: *Leptospira licerasiae*
Serovar: Varillal
Strain: VAR10 (also known as VAR10^T, VAR010^T, VAR 010^T, VAR010 and VAR 010)[1-3]
Original Source: *Leptospira licerasiae* (*L. licerasiae*), strain VAR10 (serovar Varillal) is an intermediately pathogenic strain isolated between 2002 and 2005 from a 31-year-old woman with acute differentiated febrile illness in Varillal Village, Iquitos, Peru.[1,2]
Comments: Strain VAR10 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. licerasiae*, strain VAR10 is available (GenBank: AHOO00000000).

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] Leptospires are thin, motile, slow-growing obligate aerobe spirochetes with distinctive hooked ends and two axial flagella that cause the acute zoonotic disease leptospirosis.[4,5]

L. licerasiae is an antigenically-unique species that causes a non-specific syndrome of undifferentiated fever in humans, is a significant cause of acute leptospirosis in the Peruvian Amazon region of Iquitos via a *Rattus* reservoir.[1]

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-19925 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 licerasiae*, Strain VAR10 (Serovar Varillal), NR-19925."

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. Matthias, M. A., et al. "Human Leptospirosis Caused by a New, Antigenically Unique *Leptospira* Associated with a *Rattus* Species Reservoir in the Peruvian Amazon." PLoS Negl. Trop. Dis. 2 (2008): e213. PubMed: 18382606.
2. Ricaldi, J. N., et al. "Whole Genome Analysis of *Leptospira licerasiae* Provides Insight into Leptospiral Evolution and Pathogenicity." PLoS Negl. Trop. Dis. 6 (2012): e1853. PubMed: 23145189.
3. http://www.ncbi.nlm.nih.gov/bioproject/74167
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.
6. Vinetz, J. M. and K. Nelson. "*Leptospira* Genomics and Human Health." J. Craig Ventor Institute's Genomic Sequencing Center for Infectious Diseases. (2010) <http://gsc.jcvi.org/projects/gsc/leptospira/index.shtml>

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