# Product Information Sheet for NR-35357

## *Leptospira wolbachii*, Strain CDC (Serovar Codice)

## Catalog No. NR-35357

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

### Contributor:
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### Manufacturer:
BEI Resources

### Product Description:
Bacteria Classification: *Leptospiraceae, Leptospira*
Species: *Leptospira wolbachii*
Serovar: Codice
Strain: CDC
Original Source: *Leptospira wolbachii* (*L. wolbachii*), strain CDC (serovar Codice) is a saprophytic strain isolated from water in the USA.[1]
Comments: Strain CDC was deposited to BEI Resources as the type strain for the species.[1] It is part of the *Leptospira* Genome Project at the J. Craig Ventor Institute's Genomic Sequencing Center for Infectious Diseases (GSCID).[2] The whole genome sequence of *L. wolbachii*, strain CDC is available (GenBank: AOGZ00000000).

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.[3,4] Leptospires are thin, motile, slow-growing obligate aerobe spirochetes with distinctive hooked ends and two axial flagella that cause the acute zoonotic disease leptospirosis.[3,4]

*L. wolbachii*, strain CDC is known to grow in the presence of 8-azaguanine and 2,6-diaminopurine and produce lipase. It is also reported to be inhibited by copper sulfate and unable to grow at 11°C and 37°C.[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-35357 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
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 2 to 8 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 wolbachii*, Strain CDC (Serovar Codice), NR-35357."

### 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.

### Disclaimers:
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## References:

1. 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.
2. 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>
3. 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.
4. 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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