Product Information Sheet for NR-50515

Sneathia vaginalis, Strain Sn35

Catalog No. NR-50515

For research use only. Not for use in humans.

Contributor:
Kimberly K. Jefferson, Ph.D., Associate Professor, Department of Microbiology and Immunology and Gregory A. Buck, Ph.D., Professor, Director of Center for the Study of Biological Complexity, Department of Microbiology and Immunology, Virginia Commonwealth University School of Medicine, Richmond, Virginia, USA

Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Leptotrichiaceae, Sneathia*
Species: *Sneathia vaginalis* (Previously referred to as *Sneathia amnii,* this has been reclassified[1,2])
Strain: Sn35
Original Source: *Sneathia vaginalis* (*S. vaginalis*), strain Sn35 was isolated in 2011 from a vaginal swab collected from a woman presenting with symptoms of preterm labor at 26 weeks of gestation in Virginia, USA.[1,3]
Comments: *S. vaginalis*, strain Sn35 is part of the Vaginal Human Microbiome Project at Virginia Commonwealth University.[4] The complete genome of *S. vaginalis*, strain Sn35 is available (GenBank: CP011280).

S. vaginalis is a Gram-negative, non-spore forming, non-motile, anaerobic bacillus and is a member of the normal microbiota of both male and female genitourinary tracts, as well as oral cavities and gastrointestinal tract.[3,4] It is also a disease-causing pathogen responsible for infections of the genitourinary tracts, infant and maternal post-partum bacteremia, and bacterial arthritis.[3,4,5,6,7,8,9] The presence of *S. vaginalis* has been associated with bacterial vaginosis (BV) and obstetric complications, including preterm delivery and spontaneous abortion.[3,4,5,6,7,8]

Sneathia amnii and *Leptotrichia amnionii* have been reclassified as *Sneathia vaginalis*. Neither organism had previously been validated and 16S rRNA gene sequencing and genomic sequence analysis revealed that *Leptotrichia amnionii* was the same species as *Sneathia amnii*. The decision was made to rename both species as *Sneathia vaginalis*.[2]

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in Modified Brain Heart Infusion broth with 5% human serum supplemented with 10% glycerol.

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

Packaging/Storage:
NR-50515 was packaged aseptically in 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:
Modified Brain Heart Infusion broth with 5% human serum or Chocolate broth or equivalent
Modified Brain Heart Infusion agar with 5% human serum or Chocolate agar or equivalent
Incubation:
Temperature: 37°C
Atmosphere: Anaerobic
Propagation:
1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 2 to 3 days.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Sneathia vaginalis*, Strain Sn35, NR-50515."

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 (BMBL). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Jefferson, K. K. and G. A. Buck, Personal Communication.
2. Eisenberg, T., et al. "*Sneathia vaginalis* sp. nov. (*Fusobacteriales, Leptotrichiaceae*) as a Replacement of the Species '*Sneathia amnii*' Harwich *et al*. 2012 and '*Leptotrichia amnionii*' Shukla *et al.* 2002, and the Emended Description of *Sneathia* Collins *et al.* 2001." Int. J. Syst. Evol. Microbiol. 71 (2019). PubMed: 33616512
3. Theis, K. R, et al. "*Sneathia*: An Emerging Pathogen in Female Reproductive Disease and Adverse Perinatal Outcomes." Crit. Rev. Microbiol. 47 (2021): 517-542. PubMed: 33823747
4. Gottschick, C., et al. "The Urinary Microbiota of Men and Woman and Its Changes in Women During Bacterial Vaginosis and Antibiotic Treatment." Microbiome. 5 (2017): 99. PubMed: 28807017.
5. Gentile, G.L., et al. "Identification of a Cytopathogenic Toxin from *Sneathia amnii*." J. Bacteriol. 202 (2020): e00162-20. PubMed: 32291280.
6. Shukla, S. K., et al. "*Leptotrichia amnionii* sp. nov., a Novel Bacterium Isolated from the Amniotic Fluid of a Woman After Intrauterine Fetal Demise." J. Clin. Microbiol. 40 (2002): 3346-3349. PubMed: 12202577.
7. Harwich, M. D., et al. "Genomic Sequence Analysis and Characterization of *Sneathia amnii* sp. nov." BMC Genomics Suppl 8:S4 (2012): 13. PubMed: 23281612.
8. Thilesen, C. M., et al. "*Leptotrichia amnionii*, an Emerging Pathogen of the Female Urogenital Tract." J. Clin. Microbiol. 45 (2007): 2344-2347. PubMed: 17522272.
9. Manhart, L. E., et al. "Bacterial Vaginosis-Associated Bacteria in Men: Association of *Leptotrichia*/ *Sneathia* spp. with Nongonococcal Urethritis." Sex. Transm. Dis. 40 (2013): 944-949. PubMed: 24220356.
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www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898