Listeria monocytogenes, Strain FSL N1-017

Catalog No. NR-13231

For research only. Not for human use.

Contributor:
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Product Description:
Bacteria Classification: Listeriaceae, Listeria
Species: Listeria monocytogenes
Strain: FSL N1-017
Serotype: 4b
Original Source: Listeria monocytogenes (L. monocytogenes), strain FSL N1-017 was isolated from trout in brine and has a ribotype exclusive to food sources. It is not associated with any human disease cases.1,2
Comment: The complete genome of L. monocytogenes, strain FSL N1-017 has been drafted (GenBank: AARPO00000000).3 For more sequencing information, refer to the Broad Institute’s Listeria Genome Project.

L. monocytogenes is a Gram-positive, facultative intracellular bacterium that is extremely tolerant of external stresses (pH 3-12, temperatures ranging from 1 to 45°C, and high salt). L. monocytogenes encompasses a diversity of strains with varied virulence and pathogenic potential. There are 13 serotypes (1/2a, 1/2b, 1/2c, 3a, 3b, 3c, 4a, 4b, 4c, 4d, 4e, 5 and 7) that have been isolated from mammalian, bird, fish and shellfish species as well as environmental sources. Of these, only 3 serotypes (1/2a, 1/2b, and 4b) are frequently isolated from outbreaks of human listeriosis. The most common cause of infection is through ingestion of contaminated foods, in particular milk, meat or vegetable products. The infective dose is unknown and varies with species.4

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Nutrient broth supplemented with 10% glycerol.

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

Packaging/Storage:
NR-13231 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 Condition:
Media: Nutrient or Brain Heart Infusion broth or equivalent

Tryptic Soy Agar with 5% Sheep Blood
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 tubes and plate at 37°C for 24 hours.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Listeria monocytogenes, Strain FSL N1-017, NR-13231.”

Biosafety Level: 2

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References:
1. Broad Institute Listeria monocytogenes Database

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