

SUPPORTING INFECTIOUS DISEASE RESEARCH

Product Information Sheet for NR-28792

Salmonella enterica subsp. enterica, Strain SL476 (CVM30485) (Serovar Heidelberg)

Catalog No. NR-28792

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: Enterobacteriaceae, Salmonella

Species: Salmonella enterica

Subspecies: Salmonella enterica subsp. enterica

Serovar: Heidelberg

Strain: SL476 (also referred to as CVM30485 and N418)^{1,2}
Original Source: Salmonella enterica (S. enterica) subsp.
enterica, strain SL476 (CVM30485) was isolated in 2003
from ground turkey in Minnesota, USA.¹

Comments: Strain SL476 (CVM30485) is reported to be a multi-drug resistant strain. The complete genome for S. enterica subsp. enterica, strain SL476 (CVM30485) was sequenced at the J. Craig Venter Institute (GenBank: CP001120); strain SL476 (CVM30485) is reported to contain two plasmids, an approximately 91 kilobase (kb) pair plasmid (GenBank: CP001118) and an approximately 3 kb pair plasmid (GenBank: CP001119), both of unknown function.

- S. enterica are Gram-negative, rod-shaped, flagellated bacteria. The species is divided into six subspecies (I, II, IIIa, IIIb, IV, VI) where only subspecies I, subsp. enterica, is considered of clinical relevance. Salmonellosis (non-typhoidal), due to the greater than 1500 serovars of S. enterica subsp. enterica, is one of the most common food-borne diseases with approximately 1 million cases that occur in the United States every year. Pathogenicity results from a variety of virulence factors found in plasmids, prophages, and five pathogenicity islands which allow these organisms to colonize and infect host organisms. Sec.
- S. enterica subsp. enterica serovar Heidelberg (formerly Salmonella Heidelberg) is one of the more common serovars causing disease in North America. Infections are typically associated with consumption of contaminated poultry products. Overall, antimicrobial resistance is commonly detected among serovar Heidelberg isolates and isolates that demonstrate resistance to multiple antimicrobials have large plasmids.⁷

The complete genome sequence of several strains of S. enterica subsp. enterica serovar Heidelberg have been completed. 8,9

Material Provided:

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

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

Packaging/Storage:

NR-28792 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:

Tryptic Soy broth or Nutrient broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or Nutrient agar or equivalent

Incubation:

Temperature: 37°C Atmosphere: Aerobic

Propagation:

- 1. Keep vial frozen until ready for use; then thaw.
- 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.
- Incubate the tube, slant and/or plate at 37°C for 24 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Salmonella enterica subsp. enterica, Strain SL476 (CVM30485) (Serovar Heidelberg), NR-28792."

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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