# Product Information Sheet for NR-28793

## *Salmonella enterica* subsp. *enterica*, Strain SL477 (CT_02021853) (Serovar Dublin)

## Catalog No. NR-28793

## 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: Dublin
Strain: SL477 (also referred to as strain CT_02021853 CVM35944, AM22486-13 and MOENT0284-05)[1,2]
Original Source: *Salmonella enterica* (*S. enterica*) subsp. *enterica*, strain SL477 (CT_02021853) was isolated in 2004 from a human in Missouri, USA.[1,2]
Comments: The complete genome of *S. enterica* subsp. *enterica*, strain SL477 (CT_02021853) is available (GenBank: CP001144).[1] Strain SL477 (CT_02021853) is reported to contain an approximately 74.5 kilobase pair plasmid (GenBank: CP001143).[1]

*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.[3] 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.[4] 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.[5,6]

*S. enterica* subsp. *enterica* serovar Dublin (formerly *Salmonella dublin*) is a host-adapted, cattle-specific serovar that is very uncommon in other species.[7] Clinical signs associated with acute enteritis in cattle include fever, anorexia, depression, reduced milk yield, abortion and diarrhea.[8,9] Human infections are rare but severe, representing less than seven percent of all reported serovars.[6] Antimicrobial resistance observed in this serovar is believed to have emerged in cattle, unaffected by the use of antimicrobials in human populations (in contrast to *S. enterica* subsp. *enterica* serovar Typhimurium, whose selection focus could be within any of the many host species that this serovar infects).

The genomic sequence of several strains of *S. enterica* subsp. *enterica* serovar Dublin have been completed[1,10] and several others are in progress.[11]

### 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-28793 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.
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 24 hours.

### Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Salmonella enterica* subsp. *enterica*, Strain SL477 (CT_02021853) (Serovar Dublin), NR-28793."

### 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:
You are authorized to use this product for research use only. It is not intended for human use.

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## References:

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