

## **Certificate of Analysis for NR-12157**

## Salmonella enterica subsp. enterica, Strain 14028s himD::kan<sup>r</sup> (Serovar Typhimurium)

Catalog No. NR-12157

Product Description: Salmonella enterica (S. enterica) subsp. enterica, strain 14028s himD::kan<sup>r</sup> (serovar Typhimurium) was derived from strain 14028s. The himD::kan mutant was produced by creating a PCR product with himD homologous sequences at the 5' and 3' ends of a linear fragment containing a kanamycin resistance cassette. S. enterica subsp. enterica, strain 14028s was transformed, and insertion of the kan cassette in place of himD was confirmed by PCR.

Lot<sup>1</sup>: 61693053 Manufacturing Date: 18APR2013

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Report results	Gram-negative rod
Colony morphology <sup>2</sup>	Report results	Circular, convex, entire and cream (Figure 1)
Analytical profile index (API <sup>®</sup> 20 E) <sup>3</sup>	Consistent with Salmonella spp.	Consistent with Salmonella spp.
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	Consistent with S. enterica	Consistent with <i>S. enterica</i> subsp. <i>enterica</i>
Riboprinter® Microbial Characterization System	Consistent with S. enterica	Consistent with S. enterica subsp. enterica serovar Typhimurium
Serogroup Analysis	Report results	Serogroup B <sup>4</sup>
Presence of Kanamycin Resistance Marker <sup>5</sup>	Confirmed	Confirmed
Viability (post-freeze) <sup>2</sup>	Growth	Growth

<sup>&</sup>lt;sup>1</sup>NR-12157 was produced by inoculation of the deposited material into Nutrient broth and grown 24 hours in an aerobic atmosphere. inoculum was added to kolles which was grown 24 hours at 37°C and aerobic atmosphere to produce this lot.

Figure 1



Date: 17 OCT 2013 Signature:

> Title: Technical Manager, BEI Authentication or designee

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<sup>&</sup>lt;sup>2</sup>24 hours at 37°C and aerobic atmosphere on Nutrient agar

<sup>&</sup>lt;sup>3</sup>Additional serological tests are required to determine Salmonella species using API<sup>®</sup> 20 E

<sup>&</sup>lt;sup>4</sup>Serogroup B contains serotype Typhimurium in addition to other serotypes

<sup>&</sup>lt;sup>5</sup>24 hours at 37°C and aerobic atmosphere on Luria-Bertani agar with 60 mg/mL kanamycin