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SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-40613

Salmonella enterica subsp. *enterica*, Strain 14028s ΔSTM14:2687 (Serovar Typhimurium)

Catalog No. NR-40613

Product Description: *Salmonella enterica* (*S. enterica*) subsp. *enterica*, strain 14028s ΔSTM14:2687 (STM:2180) (serovar Typhimurium) was derived from strain 14028s. The deletion mutant was produced by creating a PCR product with STM14:2687 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 was confirmed by PCR. The final non-polar deletions were completed by elimination of the *kan* cassette.

Lot[1]: 62251358 **Manufacturing Date: 15JAN2014**

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rod	Gram-negative rod
Colony morphology[2]	Report results	Circular, convex, entire, smooth and cream (Figure 1)
Motility (wet mount)	Report results	Motile
Analytical profile index (API® 20 E)[3]	Consistent with *Salmonella* spp.	Consistent with *Salmonella* spp.
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 700 base pairs)	Consistent with *S. enterica*	Consistent with *S. enterica* subsp. *enterica*
Riboprinter® Microbial Characterization System	Consistent with *S. enterica*	Consistent with *S. enterica* subsp. *enterica* serovar Typhimurium
Serogroup Verification	Serogroup B	Serogroup B[4,5]
Viability (post-freeze)[2]	Growth	Growth

[1]NR-40613 was produced by inoculation of the deposited material into LB broth (supplemented with 1% Bacto-tryptone, 0.5% yeast extract and 1% sodium chloride) and grown 25 hours in an aerobic atmosphere at 37°C. Broth inoculum was added to kolles which were grown 24 hours at 37°C and aerobic atmosphere to produce this lot. Purity of this lot was accessed for 7 days under propagation conditions.
[2]24 hours at 37°C and aerobic atmosphere on LB agar (supplemented with 1% Bacto-tryptone, 0.5% yeast extract and 1% sodium chloride).
[3]Additional serological tests are required to determine *Salmonella* species using API® 20 E.
[4]No other serogroups were assayed.
[5]Serogroup B contains serovar Typhimurium in addition to other serovars.

Figure 1

Date: 26 MAR 2014 **Signature:**

Title: Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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