

Certificate of Analysis for NR-20446

Escherichia coli, Strain 493/89

Catalog No. NR-20446

Product Description: Escherichia coli (E. coli), strain 493/89 was isolated in 1989 from a human patient with hemolytic uremic syndrome (HUS) treated in a pediatric center in Germany. Strain 493/89 has been typed as an O157:H- serotype, sorbitol-fermenting (SF) enterohemorrhagic *E. coli* (EHEC).

Lot¹: 63325992 Manufacturing Date: 13FEB2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphology ²	Report results	Circular, convex, entire, smooth and cream (Figure 1)
Motility (wet mount)	Report results	Motile ³
VITEK® 2 (GN Card)	Consistent with E. coli	Consistent with E. coli
Genotypic Analysis		4.5
Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	Consistent with E. coli	Consistent with E. coli ^{4,5}
PCR Assay of Extracted DNA		
16S ribosomal RNA gene	~ 1500 base pair amplicon	~ 1500 base pair amplicon
PCR amplification of chromosomal borne virulence markers		
stx1	Negative	Negative
stx2	Positive	Positive
Purity (post-freeze) ⁶	Growth consistent with E. coli	Growth consistent with E. coli
Viability (post-freeze) ²	Growth	Growth

¹The deposited material was inoculated into Tryptic soy broth and grown 24 hours at 37°C in an aerobic atmosphere, and the resulting subculture was vialed and frozen. NR-20446 was produced by inoculation of the frozen subculture into Tryptic soy broth and grown 24 hours at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic soy agar kolles which were grown 23 hours under propagation conditions to produce this lot.

Figure 1: Colony Morphology



Date: 12 AUG 2015 Signature:

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²22 hours on Tryptic soy agar under propagation conditions

³E. coli, strain 493/89 is reported as non-motile in literature, however, motility was observed using wet mount technique.

⁴≥ 99.1% identical to GenBank: AETY01000060.1 (*E. coli*, strain 493/89)

⁵Also consistent with *Shigella* species

⁶Purity of this lot was assessed for 8 days on Tryptic soy agar under propagation conditions.