

Certificate of Quality

Product Name: S.enteric sv T'murium ATCC13311 Q+/100TS **Lot Number:** 320980 **Product Number:** R4716100 **Expiration Date:** 2014-09-30

(YYYY-MM-DD)

This product has been manufactured, processed and packaged in accordance with Quality Systems Regulation, 21 CFR Part 820. Representative samples were tested per Remel Inc., a part of Thermo Fisher Scientific Quality Control specifications and were found to meet performance criteria for this product.

Purity:

Standardized aliquots of the rehydrated product are inoculated onto nonselective media and examined for pure growth following the appropriate incubation. Selective and Differential media are also tested where applicable.

Viability And Quantification:

Each organism is recovered from the preserved state within the required time frame and at an acceptable level. Passage number is stated as the current preserved state.

Macroscopic And Microscopic Morphology:

Colony morphology is consistent with documented referenced description.

Traditional staining is performed.

Biochemical Analysis:

Organism exhibits characteristic biochemical and/or enzymatic reactions. Automated and/or conventional testing was performed and results were within established limits. Antimicrobial testing performed where applicable. Results within expected ranges.

CFU/ 0.1ml: <100 Passage: 2

Gram Reaction: Gram Negative Rod Biochemical Profile: Vitek GNI + & Grouping Antisera

Appearance: Preserved Gel Matrix suspended in vial cap

pH: N/A

Colony Count: Not less than 5 samples each were plated to the following:

Trypticase Soy Agar, spread plates, incubated at 35°C for 24 hours.

Colony forming units as noted above are specified under defined growing conditions. Results may vary with more inhibitory or selective media or with the same medium of inferior quality.

Note: S. enterica was formerly named S. choleraesuis.

CFU Mean 64

Signed

Product Performance Technologist