

***Vibrio cholerae*, Strain HC-7A1 (Biovar El Tor)**

Catalog No. NR-28889

Product Description: *Vibrio cholerae* (*V. cholerae*), strain HC-7A1 was deposited as a serogroup O1, biovar El Tor strain that was isolated from a patient in Haiti in 2010.

Lot¹: 63424822

Manufacturing Date: 27MAR2015

TEST	SPECIFICATIONS	RESULTS	
		COLONY TYPE 1	COLONY TYPE 2
Phenotypic Analysis^{2,3} Cellular morphology Colony morphology (Figure 1) Hemolysis ^{4,5} Motility (wet mount) VITEK [®] MS (MALDI-TOF) ⁶	Gram-negative rods Report results Report results Report results Consistent with <i>V. cholerae</i>	Gram-negative curved rods Circular, low convex, entire, smooth and gray Non-hemolytic Motile Consistent with <i>V. cholerae</i>	Gram-negative curved rods Circular, low convex, entire, smooth and gray-tan β-hemolytic Motile Consistent with <i>V. cholerae</i>
Genotypic Analysis Sequencing of 16S ribosomal RNA gene	Consistent with <i>V. cholerae</i>	Consistent with <i>V. cholerae</i> (~ 1490 base pairs) ^{7,8}	Consistent with <i>V. cholerae</i> (~ 1490 base pairs) ^{7,8}
Purity (post-freeze)⁹	Growth consistent with <i>V. cholerae</i>	Growth consistent with <i>V. cholerae</i>	
Viability (post-freeze)²	Growth	Growth	

¹The deposited material was inoculated into Tryptic Soy broth and grown 21 hours at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles and grown 25 hours under propagation conditions to produce this lot.

²24 hours on Tryptic Soy agar with 5% defibrinated sheep blood under propagation conditions

³Two colony types were observed. Plating of individual colony types showed that they did not revert to the mixed colony types. The 16S gene of each colony type was sequenced and determined to be 100% identical.

⁴24 hours on Tryptic Soy agar with 5% defibrinated sheep blood under propagation conditions

⁵On aerobic sheep blood agar plates, non-hemolytic *V. cholerae* frequently produces greenish clearing around areas of heavy growth but not around well-isolated colonies. This phenomenon, often described as "hemodigestion," is produced by metabolic by-products which are inhibited by anaerobic incubation of the blood agar plate. From Chapter VI. Laboratory Identification of *Vibrio cholerae* in: Laboratory Methods for the Diagnosis of *Vibrio cholerae*, Centers for Disease Control and Prevention <http://www.cdc.gov/cholera/laboratory.html>

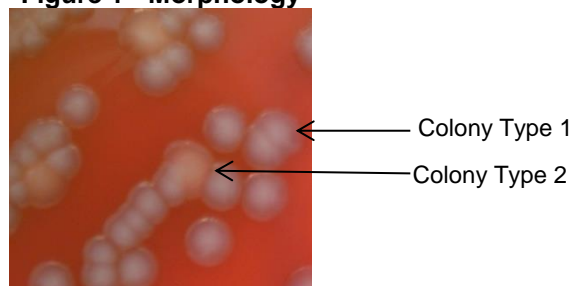
⁶MALDI-TOF was performed on each colony type and both identified as *V. cholerae*.

⁷99.9% identical to *V. cholerae*, strain HC-7A1 (GenBank: AGVA02000002)

⁸Consistent with other *Vibrio* species

⁹Purity of this lot was assessed for 8 days on Tryptic Soy agar with 5% defibrinated sheep blood under propagation conditions.

Figure 1 - Morphology



Certificate of Analysis for NR-28889

Date: 21 MAY 2015

Signature:



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