**Vibrio cholerae**, Strain HC-49A2 (Biovar El Tor)

**Catalog No. NR-28860**

For research use only. Not for human use.

**Contributor:**
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**Manufacturer:**
BEI Resources

**Product Description:**

**Bacteria Classification:** Vibronaceae, Vibrio  
**Species:** Vibrio cholerae  
**Serogroup:** O1  
**Biovar:** El Tor  
**Strain:** HC-49A2

**Original Source:** Vibrio cholerae (V. cholerae), strain HC-49A2 is a clinical isolate collected in 2010 from a patient in Haiti.¹  
**Comment:** The complete genome sequence of V. cholerae, strain HC-49A2 is available (GenBank: AFOM00000000).

V. cholerae is a natural inhabitant of warm aquatic environments and the causative agent of the diarrheal disease cholera. More than 200 O-antigen serogroups have been identified but only O1 and more recently O139 are known to cause epidemic and pandemic cholera.² Occasionally, there are cholera outbreaks that result from non-O1 and non-O139 serogroups. Cholera has a high lethality if left untreated, and millions have died in the seven pandemics that have occurred since 1817.

V. cholerae colonizes the mucosal surface of the small intestines of humans, the only known animal host.³ Cholera toxin, the toxin-coregulated pilus (TCP) and the central regulatory protein (ToxR) are recognized as significant factors in the pathogenicity of toxigenic strains of V. cholerae serogroups O1 and O139.⁴

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-28860 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Media:**
Tryptic Soy broth or Brain Heart Infusion broth or equivalent  
Tryptic Soy agar with 5% defibrinated sheep blood or Brain Heart Infusion agar or equivalent

**Incubation:**
Temperature: 37°C  
Atmosphere: Aerobic

**Propagation:**
1. Keep vial frozen until ready for use, then thaw.  
2. Transfer the entire thawed aliquot into a single tube of broth.  
3. Use several drops of the suspension to inoculate an agar slant and/or plate.  
4. Incubate the tube, slant and/or plate at 37°C for 24 hours.

**Citation:**
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Vibrio cholerae, Strain HC-49A2 (Biovar El Tor), NR-28860.”

**Biosafety Level:** 2


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References:

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