**Vibrio cholerae**, Strain HC-81A1 (Biovar El Tor)

**Catalog No. NR-28891**

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-81A1
- **Original Source:** Vibrio cholerae (V. cholerae), strain HC-81A1 is a clinical isolate collected in 2010 from a patient in Haiti.¹
- **Comment:** The complete genome sequence of V. cholerae, strain HC-81A1 is available (GenBank: [AGVC00000000](https://www.ncbi.nlm.nih.gov/clone/)).

*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-28891 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-81A1 (Biovar El Tor), NR-28891.”

**Biosafety Level:** 2


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References:

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