**Bacillus cereus**, Strain E33L

Catalog No. NR-12264

For research use only. Not for human use.

**Contributor:**
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**Product Description:**

**Bacteria Classification:** Bacillaceae, Bacillus

**Species:** Bacillus cereus

**Strain:** E33L (formerly ZK)

**Original Source:** Bacillus cereus (B. cereus), strain E33L was isolated from a swab of a dead zebra carcass in Etosha National Park, Namibia in April 1996 by P. C. B. Turnbull.¹

**Comments:** The complete genome including 5 plasmids (pE33L466, pE33L5, pE33L54, pE33L8 and pE33L9) of B. cereus, strain E33L has been sequenced (GenBank: CP00001 and CP000040 to CP000044).¹

B. cereus is a Gram-positive, spore-forming, facultative aerobe. This organism is a ubiquitous opportunistic pathogen that can cause food poisoning in infected individuals. There are two forms of food poisoning that occur. The early onset (emetic) disease is caused by a small, stable dodecadepsipeptide cerulide² whereas the late onset (diarrheal) disease is caused by heat-labile enterotoxins.³ Genetic and genomic analyses have revealed that the chromosome of B. cereus is very similar to B. anthracis.⁴

B. cereus, strain E33L virulence factors show no homology to B. anthracis toxin genes on pXO1 (pag, lef and cya) or the cap genes on pXO2 but are common to the B. cereus group. These virulence factors include nonhemolytic enterotoxin genes, channelforming type III hemolysins, perfringolysin O, phosphotidyl-inositol and phosphotidyl-choline specific phospholipases, RNA polymerase sigma-B factor and a p60 family extracellular protease.¹

**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-12264 was packaged aseptically in screw-capped plastic 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 equivalent

**Tryptic Soy Agar or equivalent**

**Incubation:**

Temperature: 37°C

**Atmosphere:** Aerobic

**Propagation:**

1. Keep vial frozen until ready for use; thaw slowly.
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 tubes and plate at 37°C for 24 hours.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Bacillus cereus, Strain E33L, NR-12264."

**Biosafety Level:** 2


**Disclaimers:**

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References:

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