Anti-E. coli LT toxin antibody, rabbit serum

64-020　　100 µl

Shipping and Storage: Shipped at 4℃ or -20℃. Store at -20℃.

Immunogen: Initial immunization with LT toxoid and booster with LT toxin.

Form: Rabbit antiserum added with 0.09% sodium azide.

Reactivity: LT and cholera toxin.

Background: Heat labile enterotoxin (LT) is produced by Entero Toxigenic E. coli.and is similar to cholera toxin (CT). The identity of the amino acid sequences of LT and CT is about 80% and both toxins are consist of one subunit A and five subunit B. LT continuously activates adenylate cyclase and elevated level of cAMP inhibits absorption of Na+ by intestinal villi cells, and stimulates secretion of Cl- by villi and crypt cells, thus causing diarrhea. It works as a potent mucosal adjuvant and is considered to be used as adjuvant with vaccines. Subunit A possesses signal peptide of the amino acids 1-18, and the mature form consists of 19-258 amino acids. Subunit B has signal peptide of 1-21, and the mature form consists of 22-124 amino acids.

Applications: 1) Western blotting (2,000~10,000 time dilution) (figure 1)

　　　　　　2) Immunoprecipitation　　Other applications have not been tested.

Data link: UniProtKB/Swiss-Prot P06717　E. coli LT-A
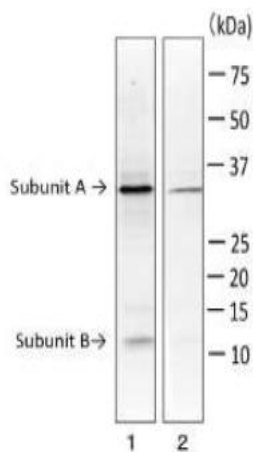
　　　　　　UniProtKB/Swiss-Prot P32890　E. coli LT-B

Fig.1. Western blot of LT toxin in extract of *E. coli* ETEC strain

1.Culture medium of *E. coli*（ETEC, LT＋）blotted with this antibody at 1/4,000 dilution. As second antibody, HRP conjugated goat anti-rabbit IgG was used at 1/20,000 dilution.

2.Culture medium of *E. coli*（ETEC, LT＋）blotted with monoclonal antibody to subunit A of LT（BioAcademia 64-022）at 1/1,000 dilution. As second antibody, HRP conjugated goat anti-mouse IgG was used at 1/20,000
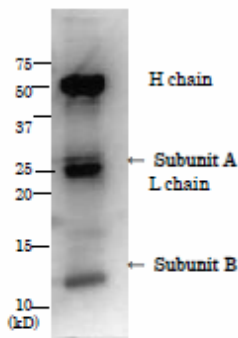

Fig. 2 Immunopprecipitation of LT from culture medium of ETEC by using anti-LT antibody.

The antibody was used at 1/200 dilution for immunoprecipitation and analyzed by western blot

H chain and L chain indicate heavy chain and light chain of IgG, respectively.