

Anti-*E. coli* LT toxin antibody, rabbit antiserum

64-020 100 µl

Heat labile enterotoxin (LT) is produced by Enterotoxigenic *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 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.

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

Reactivity: LT and cholera toxin.

Form: Rabbit antiserum added with 0.09% sodium azide.

Storage: Sent at 4°C. Upon arrival, spin-down, aliquot and store at -20°C.

Data link: UniProtKB/Swiss-Prot [P06717](#) *E. coli* LT-A

UniProtKB/Swiss-Prot [P32890](#) *E. coli* LT-B

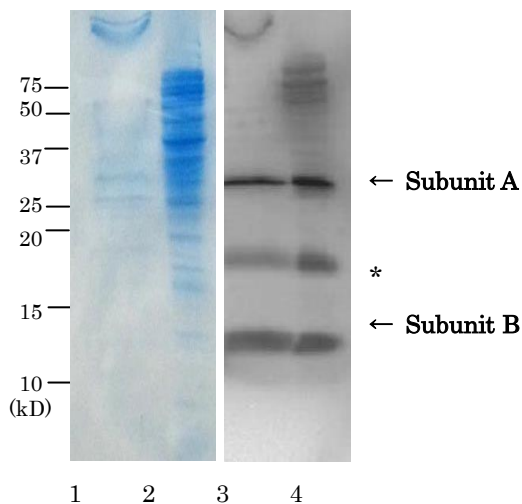


Fig. 1. Detection LT in culture medium and crude extract of ETEC cells by western blotting, using anti-LT antibody

- Samples
1. SDS-PAGE of the culture medium of ETEC, CBB stained.
 2. SDS-PAGE of the crude extract of ETEC cells, CBB stained.
 3. Western Blotting of the culture medium
 4. Westerns blotting of crude extract of ETEC cells.

* Indicates a non-specific protein band.

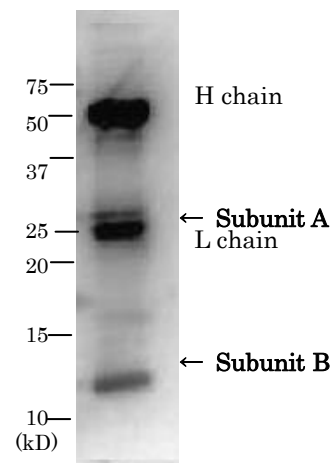


Fig. 2 Immunoprecipitation of LT from culture medium of ETEC by using anti-LT antibody.

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