

## Anti-LT Subunit B (*E.coli*) antibody, mouse monoclonal (ec-01)

| Product code   | 64-023  |
|--|---|
| Size   | 100 μg  |
| Storage  | -20℃  |
| Concentration  | 0.5 mg/ml   |
| Buffer   | PBS- with 50% glycerol  |
| Purity   | Purified IgG fraction with protein A from hybridoma cell culture medium   |
| Immunogen  | Crude extract of <i>Escherichia coli</i> (ETEC LT+) cells   |
| Isotype  | Mouse IgG2ак  |
| Reactivity   | subunit B of <i>E. coli</i> LT and <i>V. Cholera</i> CT.  |
| Special notes  | N/A   |
| Application  | 1. Western blotting (1/500~1/5000)  |
|  | 2. ELISA (assay dependent)  |
|  | This antibody is useful for detecting food poisoning Entero Toxigenic E. coli   |
|  | (ETEC)  |
| Background   | Pathogenic Escherichia coli is one of the major causative agents of food poisoning. One group of them, enterotoxigenic E. coli (ETEC) produces some toxins. Heat labile enterotoxin (LT) produced by ETEC is similar to cholera toxin (CT). The identity of the amino acid sequences of LT and CT is about 80% and both toxins are consisted 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. Subunit A possesses signal peptide of the amino acids 1-18, and the mature form consists of 19-258 amino acids (MW: 28.8 kDa). Subunit B has signal peptide of 1-21, and the mature form consists of 22-124 amino acids (MW: 11.8 kDa). The holotoxin MW is 86.4 KDa. |
| Data Link  | UniProtKB: POCK94 (Heat-labile enterotoxin B chain)   |
| Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE. |   |



Data Images: 64-023 LT Subunit B (E.coli) antibody, mouse monoclonal (ec-01)

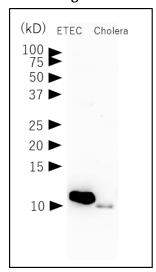


Fig.1. Detection of LT in crude extract of *E. coli* ETEC strain and Cholera toxin (#01-511) by Western blot.

The anti- LT toxin subunit B antibody was used at 1/1,000 dilution.

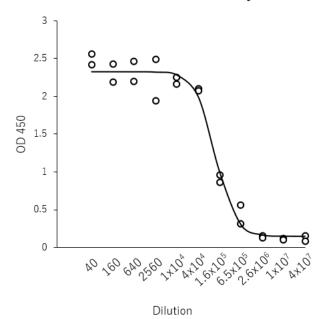


Fig.2. Titration of antibody reactivity of MAb by indirect ELISA using crude extract of ETEC cells.

The wells of plate were coated with crude extract of  $E.\ coli$ . After blocking with 5% skim milk, 100 µl of antibody at the indicated dilutions was added to the each well. HRP-conjugated goat anti-mouse IgG (100µl, x 2000 dilution) was added. Color was developed with orthophenylenediamine as substrate. Optical densities (OD) measured at 450nm.

**Reference:** There has been no publication using this antibody.

## Related Product:

64-020 anti-LT (E.coli) antibody, rabbit serum