

anti-Diphtheria Toxin antibody (rabbit serum)

64-010

100 ul

Diphtheria toxin(535 aa,58k Da),is an exotoxin secreted as a proenzyme by *Corynebacterium diphtheriae*, the pathogen bacterium that causes diphtheria. The toxin genes encoded by a bacteriophage. The proenzyme undergoes proteolytic nicking and reduction of disulfide bond, giving rise to subunit A (21kDa) and B (37kDa). Subunit B (C-terminal) recognizes cellular receptor, HB-EGF receptor, and subunit A (N-terminal) catalyzes the ADP-ribosylation of eukaryotic E longation factor-2 (eEF2), in activating this protein.

Applications:

1. Westernblotting (1/2,000 dilution,).
2. ELISA (1/2,000~1/7,000 dilution. Could detect 1 ng or less of the toxin)
3. Immunoprecipitation (1/200~1/1,000 dilution, depending on assay)
4. Dotblotting (1/1,000 dilution. Could detect 1 ng or less of the toxin)

Immunogen: Purified nontoxic mutant Diphtheria toxin CRM197 (Ref1, Product #01-515)

Specificity: React with Diphtheria toxin as well as its CRM197 mutanttoxin

Form: Whole antiserum sterilized by filtration.

Storage: Shipped at 4 °C or -20 °C, and store at -20°C or below

DataLink: UniProtKB [Diphtheria](#)

References:

1. Uchida T. et al. "Diphtheria toxin and related proteins.
2. Reconstitution of hybrid "diphtheria toxin" from nontoxic Mutant proteins." J. Biol. Chem. 248:3851-3854 (1973) PMID:4196586
3. Pappenheimer A. "Diphtheriatoxin." Annu Rev Biochem 46: 69-94 (1977) PMID:2004

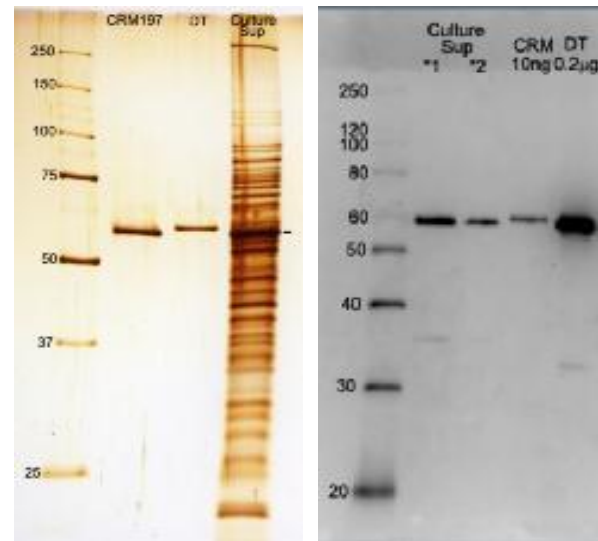


Figure1 (left): SDS-PAGE analysis of culture medium of *Corynebacterium Diphtheria*. Lane1: Protein size markers (kDa). Lane2: Purified Diphtheria CRM197 mutant protein. Lane3: Purified Wild-type Diphtheria toxin. Lane4: Culture medium of *Corynebacterium Diphtheria*. Silver-staining.

Figure2 (right): Western blotting of culture medium of *Corynebacterium Diphtheria*. Lane1: Protein size markers (kDa). Lane2(*1): Crude culture medium of *Corynebacterium Diphtheria*. Lane3 (*2): The two-fold diluted culture medium. Lane4: Purified CRM197 (10ng). Lane5: Purified Diphtheria toxin (200ng). Western blotting with this antibody at 1/2000 dilution.

RelatedProducts: [#01-515 Diphtheria toxin mutant \(CRM197\)](#), [#01-517 Diphtheria toxin](#)