

## anti-Diphtheria Toxin antibody, rabbit polyclonal

64-011

100 µg

**Shipping and Storage:** Shipped at 4°C or -20°C and store at -20°C.

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

**Form:** 1.0 mg/ml IgG fraction of antiserum in PBS- with 50% glycerol

**Specificity:** React with Diphtheria toxin as well as its CRM197 mutant toxin

### 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)

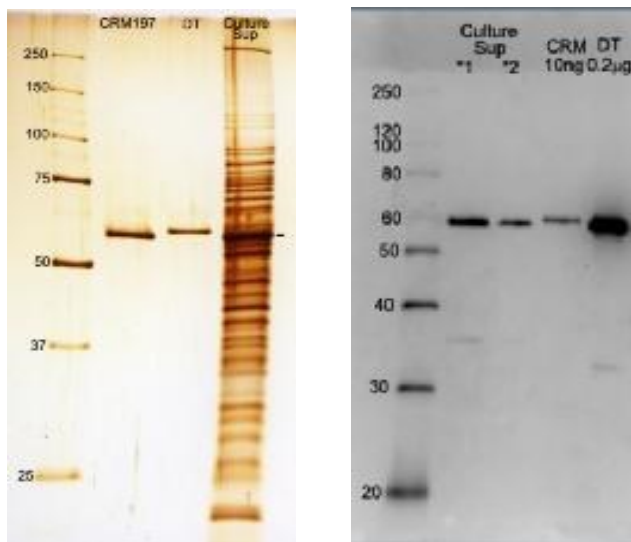
**Background:** Diphtheria toxin(535 aa,58k Da),is an exotoxin secreted as a proenzyme by *Corynebacterium diphtheriae*, the pathogen bacterium that causes diphtheria. The toxin genes encoded by a bacteriophage. The proenzyme undergoes proteolytic nicking and reduction of disulfide bond, giving rise 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.

**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:20040](#)

**Related Products:** # 01-515 Diphtheria toxin mutant (CRM197), # 01-517 Diphtheria toxin



**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 (10 ng). Lane5: Purified Diphtheria toxin (200ng). Western blotting with this antibody at 1/2000 dilution.

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.