

Anti-Diphtheria Toxin antibody, rabbit serum

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| Product code | 64-010 |
| Size | 100 µl |
| Storage | Store 4°C for short term For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing. |
| Concentration | N/A |
| Buffer | 0.09% sodium azide |
| Purity | Rabbit antiserum |
| Immunogen | Purified nontoxic mutant Diphtheria toxin CRM197 (Ref1, Product #01-515) |
| Isotype | Rabbit IgG |
| Reactivity | React with Diphtheria toxin as well as its CRM197 mutant toxin |
| Special notes | N/A |
| Application | <ol style="list-style-type: none"> 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 | <p>Diphtheria toxin(535 aa,58k Da),is an exotoxin secreted as a proenzyme by <i>Corynebacterium diphtheriae</i>, the pathogen bacterium that causes diphtheria. The toxin gene is 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.</p> |
| Data Link | UniProtKB Diphtheria |
| Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE. | |

Data Images: 64-010 Anti-Diphtheria Toxin antibody, rabbit serum

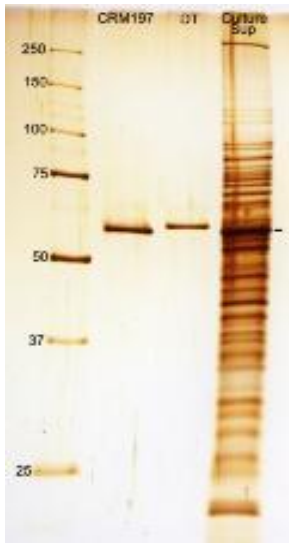


Fig.1 SDS-PAGE analysis of culture medium of *Corynebacterium Diphtheria*.

Lane1: Protein size markers (kDa).

Lane2: Purified Diphtheria CRM197 mutan tprotein.

Lane3: Purified Wild-type Diphtheria toxin. Lane4: Culture medium of *Corynebacterium Diphtheria*.

Silver-staining

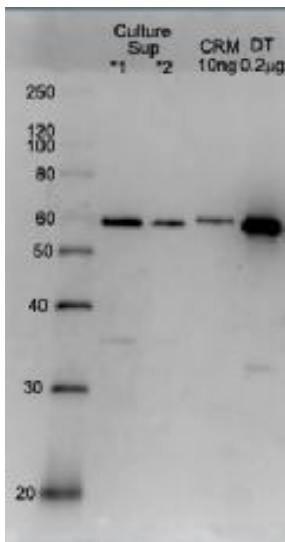


Fig.2 Western blotting of culture medium of *Corynebacterium Diphtheria*.

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.

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. "Diphtheria toxin." *Annu Rev Biochem* 46: 69-94 (1977) PMID:2004

Related Products

64-011 Anti-Diphtheria Toxin antibody, rabbit polyclonal

01-515 Diphtheria toxin mutant CRM197, active but nontoxic

01-517 Diphtheria toxin, active