



Rabbit Anti-Diphtheria toxin fragment B antibody

SL10668R

Product Name:	Diphtheria toxin fragment B
Chinese Name:	白喉毒素B抗体
Alias:	Diphtheria Toxin; DT; NAD(+)--diphthamide ADP-ribosyltransferase; Diphtheria toxin fragment B; DTX CORBE.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Corynephage beta
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	38kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Diphtheria toxin fragment B:226-326/567
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Diphtheria toxin is a 58 kDa protein secreted by lysogenic strains of Corynebacterium diphtheriae. The toxin causes the disease diphtheria in humans by gaining entry into the cell cytoplasm and inhibiting protein synthesis. The mechanism of inhibition involves transfer of the ADP-ribose group of NAD to elongation factor-2 (EF-2), rendering EF-2 inactive. The catalysed reaction is as follows: NAD + + peptide diphthamide = nicotinamide + peptide N-(ADP-D-ribosyl)diphthamide The crystal structure of the

diphtheria toxin homodimer has been determined to 2.5Å resolution. The structure reveals a Y-shaped molecule of 3 domains, a catalytic domain (fragment A), whose fold is of the alpha + beta type; a transmembrane (TM) domain, which consists of 9 alpha-helices, 2 pairs of which may participate in pH-triggered membrane insertion and translocation; and a receptor-binding domain, which forms a flattened beta-barrel with a jelly-roll-like topology. The TM- and receptor binding-domains together constitute fragment B.

Function:

Diphtheria toxin, produced by a phage infecting *Corynebacterium diphtheriae*, is a proenzyme that, after activation, catalyzes the covalent attachment of the ADP ribose moiety of NAD to eukaryotic elongation factor 2 (eEF-2). Fragment A is the catalytic portion responsible for enzymatic ADP-ribosylation of elongation factor 2, while fragment B is responsible for binding of toxin to cell receptors and entry of fragment A.

Subcellular Location:

Homodimer.

SWISS:

P00588

Gene ID:

2650491

Database links:

[Entrez Gene: 2650491](#) CORBE

[Swiss Prot: P00588](#) CORBE

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.