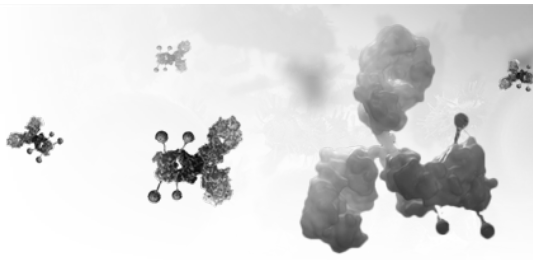

Mouse Anti-Diphtheria Toxin Monoclonal Antibody, clone 4C7 (CABT-NS1532)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	MAb reacts with different determinants of Diphtheria toxin and anatoxin. It does not react with free A or B subunits of Diphtheria toxin.
Target	Diphtheria Toxin
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	C. diphtheriae
Purification	Protein A
Conjugate	unconjugated
Applications	ELISA
Format	Liquid
Size	1 mg
Buffer	PBS, pH 7.4
Preservative	0.09% Sodium Azide
Storage	4°C (2-8°C allowed)

BACKGROUND

Introduction	Diphtheria toxin is a 58 kDa protein secreted by lysogenic strains of Corynebacterium

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	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-Dribosyl)diphthamide The crystal structure of the diphtheria toxin homodimer has been determined to 2.5A 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.
Keywords	Diphtheria; Toxin; Corynebacterium diphtheriae toxoid; Diphtheria Toxin; Diphtheria Toxin

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