



Mouse anti-Human Calcineurin monoclonal antibody, clone 30 (CABT-B9180)

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

PRODUCT INFORMATION

Immunogen	Human Calcineurin aa. 247-449
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Rat, Human, Mouse, Chicken, Frog
Clone	30
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IHC; IF
Format	Liquid
Concentration	250 µg/ml
Size	50 µg, 150 µg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	Calcineurin is a Ca ²⁺ /calmodulin-dependent protein phosphatase. The active enzyme is a
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heterodimer of a large calmodulin-binding catalytic subunit A (61 kDa) and a smaller Ca²⁺ binding subunit B (19 kDa). Regions corresponding to the calmodulin-binding site, an autoinhibitory domain, and a putative subunit B binding site have been identified within the large subunit A. The activity of calcineurin is sensitive to immunosuppressants such as cyclosporin A (CsA) and tacrolimus (FK506). The study of FK506-mediated inhibition of nitric oxide formation has revealed that nitric oxide synthase (NOS) is a calcineurin substrate. Calcineurin dephosphorylates NOS and enhances its catalytic activity. Therefore, Calcineurin is an essential mediator for efficient T cell antigen receptor (TCR)-mediated T cell activation.

Keywords

CaN; Calcineurin; protein phosphatase 3; calcium-dependent serine-threonine phosphatase;
