



# 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

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

## BACKGROUND

**Introduction** Calcineurin is a Ca<sup>2+</sup>/calmodulin-dependent protein phosphatase. The active enzyme is a

heterodimer of a large calmodulin-binding catalytic subunit A (61 kDa) and a smaller Ca<sup>2+</sup> 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;

---