

# Mouse Anti-PPP3CA antibody

# SL0030M

<b>Product Name:</b>	PPP3CA
Chinese Name:	钙调 <b>磷酸</b> 酶A/钙 <b>依</b> 赖磷酸酶A <b>抗体</b>
Alias:	Calcineurin A alpha; CalcineurinA; Calcineurin-A; Calcineurin A; Calmodulin dependent calcineurin A subunit alpha isoform; CALN; CALNA 1; CALNA; CALNA1; CAM PRP catalytic subunit; CCN 1; CCN1; CNA 1; CNA; CNA1; PPP2B; Protein phosphatase 3 (formerly 2B) catalytic subunit alpha isoform; Serine/threonine protein phosphatase 2B catalytic subunit alpha isoform; PP2BA_HUMAN; CAM-PRP catalytic subunit; Calmodulin-dependent calcineurin A subunit alpha isoform; protein phosphatase 2B, catalytic subunit, alpha isoform; serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform.
Organism Species:	Mouse
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	57kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PPP3CA:15-80/521
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:	<u>PubMed</u>

Calcineurin, a major soluble calmodulin binding protein in the brain, a Ca2+/calmodulin dependent serine/threonine protein phosphatase, with a relatively narrow substrate specificity. This metalloenzyme, also known as phosphatase 2B, is a heterodimer composed of a calmodulin binding, catalytic alpha subunit 61 kDa, calcineurin A) and calcium binding beta subunit (18 kDa, calcineurin B). The Ca2+ binding subunit, calcineurin B, is immunologically conserved from yeast to mammals. The presence of 2 different calcineurin B isoforms (beta 1 and beta 2) has been reported in rat testis. The catalytic subunit of calcineurin, calcineurin A, isolated from different tissues or different organisms, exhibits some immunological heterogeneity. Further, there are at least 2 isoforms of calcineurin A in bovine brain (alpha 1 and alpha 2, 61 and 59 kDa, respectively).

#### **Function:**

Calcium-dependent, calmodulin-stimulated protein phosphatase. This subunit may have a role in the calmodulin activation of calcineurin. Dephosphorylates DNM1L, HSPB1 and SSH1.

#### Subunit:

Interacts with CHP1 and CHP2. Composed of two components (A and B), the A component is the catalytic subunit and the B component confers calcium sensitivity. Interacts with CRTC2, MYOZ1, MYOZ2 and MYOZ3. Interacts with DNM1L; the interaction dephosphorylates DNM1L and regulates its translocation to mitochondria. Interacts with CMYA5; this interaction represses calcineurin activity in muscle.

# Product Detail:

#### Subcellular Location:

Nucleus. Note=Colocalizes with ACTN1 and MYOZ2 at the Z line in heart and skeletal muscle.

### Similarity:

Belongs to the PPP phosphatase family. PP-2B subfamily.

# **SWISS**:

O08209

#### Gene ID:

5530

#### Database links:

Entrez Gene: 5530Human

Entrez Gene: 19055Mouse

Entrez Gene: 24674Rat

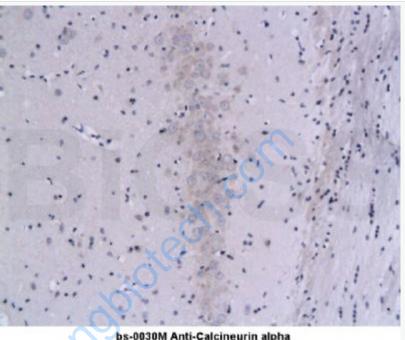
Omim: 114105Human

SwissProt: Q08209Human

SwissProt: P63328Mouse SwissProt: P63329Rat Unigene: 435512Human Unigene: 331389 Mouse Unigene: 6866Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 180 135 -100 ---75 -63 -Picture: PPP3CA 48 -35 -Sample: Hippocampus (Mouse) Lysate at 40 ug Primary: Anti-PPP3CA (SL0030M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 57 kD



bs-0030M Anti-Calcineurin alpha

Formalin-fixed and paraffin-embedded rat brain tissue labeled with Mouse Anti-Calcineurin alpha

Polycional Antibody, Unconjugated(bs-0030M) at 1:200 followed by conjugation to the secondary
antibody and DAB staining