

# Datasheet for ABIN7601201 anti-PPP3CA antibody (AA 3-511)



#### Overview

Quantity:	100 μg
Target:	PPP3CA
Binding Specificity:	AA 3-511
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPP3CA antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

### **Product Details**

Purpose:	Anti-PPP3CA Antibody Picoband®
Immunogen:	E.coli-derived human PPP3CA recombinant protein (Position: E3-D511).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-PPP3CA Antibody Picoband® (ABIN7601201). Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

## **Target Details**

Target:	PPP3CA
Alternative Name:	PPP3CA (PPP3CA Products)
Background:	Synonyms: Myelin-associated glycoprotein, Siglec-4a, MAG, GMA
	Tissue Specificity: Both isoform 1 and isoform 2 are detected in myelinated structures in the
	central and peripheral nervous system, in periaxonal myelin and at Schmidt-Lanterman
	incisures. Detected in optic nerve, in oligodendroglia and in periaxonal myelin sheaths. Detected
	in compact myelin (at protein level). Both isoform 1 and isoform 2 are detected in the central
	and peripheral nervous system
	Background: Calcineurin A is also known as PPP3CA. It is mapped to 4q24. Semsarian et al.
	(1999) and Musaro et al. (1999) independently showed that IGF1stimulates skeletal muscle
	hypertrophy and a switch to glycolytic metabolism by activating calcineurin A and inducing the
	nuclear translocation of transcription factor NFATC1. Semsarian et al. (1999) found that
	hypertrophy was suppressed by the calcineurin inhibitors cyclosporin A or FK506, but not by
	inhibitors of the MAP kinase or phosphatidylinositol-3-OH kinase pathways. Musaro et al.
	(1999) showed that expression of a dominant-negative calcineurin mutant also repressed
	myocyte differentiation and hypertrophy. Musaro et al. (1999) demonstrated that either IGF1 or
	activated calcineurin induces expression of transcription factor GATA2, which accumulates in a
	subset of myocyte nuclei, where it associates with calcineurin and a specific dephosphorylated
	isoform of NFATC1.
Molecular Weight:	59 kDa
Gene ID:	5530
UniProt:	Q08209
Pathways:	RTK Signaling, WNT Signaling, Fc-epsilon Receptor Signaling Pathway, Negative Regulation of
	Hormone Secretion, Carbohydrate Homeostasis, Synaptic Membrane, Skeletal Muscle Fiber
	Development, Protein targeting to Nucleus, VEGF Signaling, BCR Signaling
Application Details	
Application Notes:	Western blot, 0.25-0.5 μg/mL, Human, Rat
	Immunocytochemistry/Immunofluorescence, 5 μg/mL, Human
	Flow Cytometry (Fixed), 1-3 μg/1x1x10 <sup>6</sup> cells, Human
	ELISA, 0.1-0.5 μg/mL, -
	1. Musaro, A., McCullagh, K. J. A., Naya, F. J., Olson, E. N., Rosenthal, N. IGF-1 induces skeletal
	myocyte hypertrophy through calcineurin in association with GATA-2 and NF-ATc1. Nature 400

## **Application Details**

	581-585, 1999. Semsarian, C., Wu, MJ., Ju, YK., Marciniec, T., Yeoh, T., Allen, D. G., Harvey, R. P., Graham, R. M. Skeletal muscle hypertrophy is mediated by a Ca(2+)-dependent calcineurin signalling pathway. Nature 400: 576-581, 1999.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 μg/mL.
Concentration:	500 μg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month.
	It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and
	thawing.