

Rabbit anti-Human, Rat PPP3CA Polyclonal Antibody | anti-PPP3CA antibody

Anti-PPP3CA Antibody Picoband

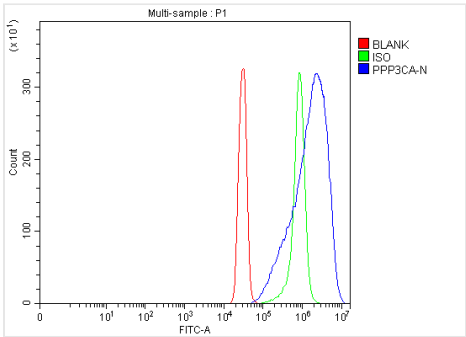
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127158	Rabbit	Human, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

PPP3CA; Polyclonal Antibody; Anti-PPP3CA Antibody Picoband; myelin associated glycoprotein; Myelin-associated glycoprotein; Siglec-4a; MAG; GMA; anti-PPP3CA antibody

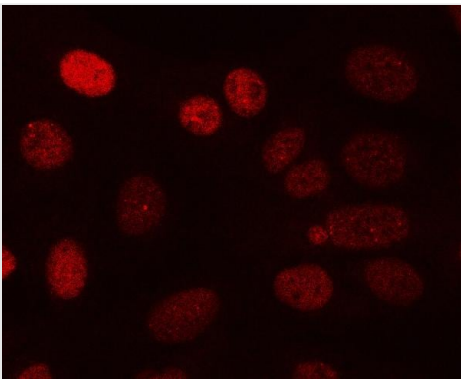
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
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
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-PPP3CA antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human PPP3CA recombinant protein (Position: E3-D511).
Subcellular Localization	Membrane
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Adhesion molecule that mediates interactions between myelinating cells and neurons by binding to neuronal sialic acid-containing gangliosides and to the glycoproteins RTN4R and RTN4RL2 (By similarity). Not required for initial myelination, but seems to play a role in the maintenance of normal axon myelination. Protects motoneurons against apoptosis, also after injury; protection against apoptosis is probably mediated via interaction with neuronal RTN4R and RTN4RL2. Required to prevent degeneration of myelinated axons in adults; this probably depends on binding to gangliosides on the axon cell membrane (By similarity). Negative regulator of neurite outgrowth; in dorsal root ganglion neurons the inhibition is mediated primarily via binding to neuronal RTN4R or RTN4RL2 and to a lesser degree via binding to neuronal gangliosides. In cerebellar granule cells the inhibition is mediated primarily via binding to neuronal gangliosides. In sensory neurons, inhibition of neurite extension depends only partially on RTN4R, RTN4RL2 and gangliosides. Inhibits axon longitudinal growth (By similarity). Inhibits axon outgrowth by binding to RTN4R (By similarity). Preferentially binds to alpha-2,3-linked sialic acid. Binds ganglioside Gt1b (By similarity).
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



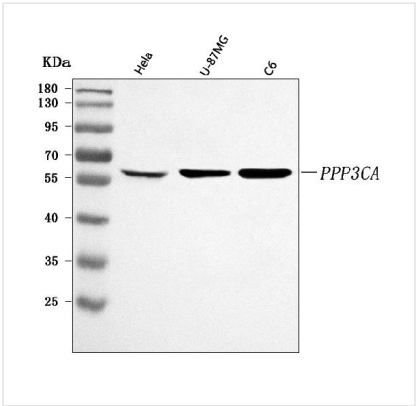
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of SiHa cells using anti-PPP3CA antibody (AAA127158).Overlay histogram showing SiHa cells stained with AAA127158 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PPP3CA Antibody (AAA127158, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of PPP3CA using anti-PPP3CA antibody (AAA127158).PPP3CA was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-PPP3CA Antibody (AAA127158) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of PPP3CA using anti-PPP3CA antibody (AAA127158).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HeLa whole cell lysates,Lane 2: human U-87MG whole cell lysates,Lane 3: rat C6 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PPP3CA antigen affinity purified polyclonal antibody (#AAA127158) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PPP3CA at approximately 59 kDa. The expected band size for PPP3CA is at 59 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PPP3CA antibody	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.
Product Categories/Family for anti-PPP3CA antibody	Primary Antibodies; Adapters; Apoptosis; Associated Proteins; Cancer; Cell Biology; Cell Death; Metabolism; Obesity; Receptors; Signal Transduction; Transmembrane
References	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: 581-585, 1999. Semsarian, C., Wu, M.-J., Ju, Y.-K., Marciniak, 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1352673
NCBI GeneID	5530
UniProt Accession #	Q08209; Q8TAW9; A1A441; A8K3B7; A8W6Z7; A8W6Z8; B5BUA2
Molecular Weight	521
NCBI Official Full Name	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform
NCBI Official Synonym Full Names	protein phosphatase 3, catalytic subunit, alpha isozyme
NCBI Official Symbol	PPP3CA
NCBI Official Synonym Symbols	CALN; CCN1; CNA1; CALNA; PPP2B; CALNA1
NCBI Protein Information	serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform; calcineurin A alpha; CAM-PRP catalytic subunit; calmodulin-dependent calcineurin A subunit alpha isoform; protein phosphatase 2B, catalytic subunit, alpha isoform; protein phosphatas
UniProt Protein Name	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform
UniProt Gene Name	PPP3CA
UniProt Synonym Gene Names	CALNA; CNA
UniProt Entry Name	PP2BA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ppp3ca-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127158>