

Rabbit PPP1CB Polyclonal Antibody | anti-PPP1CB antibody

PPP1CB Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326014	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PPP1CB; Polyclonal Antibody; PPP1CB Antibody; MGC3672; PP 1B; PP-1B; PP1B; PP1B_HUMAN; PP1beta; PPP1CD; Protein phosphatase 1 beta; Protein phosphatase 1 catalytic subunit beta isoform; Protein phosphatase 1 delta; Protein phosphatase 1; catalytic subunit; beta isozyme; delta isoform; Serine threonine protein phosphatase PP1 beta catalytic subunit; Serine/threonine-protein phosphatase PP1-beta catalytic subunit; anti-PPP1CB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PPP1CB antibody detects endogenous levels of total PPP1CB
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	327
Applicable Applications for anti-PPP1CB antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PPP1CB
Subcellular Location	Cytoplasm. Nucleus. Nucleus, Nucleoplasm. Nucleus, Nucleolus. Highly mobile in cells and can be relocalized through interaction with targeting subunits. In the presence of PPP1R8 relocates from the nucleus to nuclear speckles.
Tissue Specificity	Up-regulated in synovial fluid mononuclear cells and peripheral blood mononuclear cells from patients with rheumatoid arthritis.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Jurkat using PPP1CB antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326014 at 1/100 staining Rat liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PPP1CB antibody

Description: Protein phosphatase 1 (PP1) is the main eukaryotic protein serine/threonine phosphatase that regulates an enormous variety of cellular processes including protein-protein interactions, gene transcription, cell-cycle progression and apoptosis. It is a trimeric complex composed of a regulatory subunit, a variable subunit and a catalytic subunit. The catalytic subunit of PP1 (PP1c) can interact with amount of regulatory subunits in vivo that target it to particular subcellular locations and regulate its activity towards specific substrates. PPP1CB migrated as a 37kd protein on SDS page.

Function: Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase (PP1) is essential for cell division, it participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the 'Ser-418' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208).

Subunit Structure: PP1 comprises a catalytic subunit, PPP1CA, PPP1CB or PPP1CC, which is folded into its native form by inhibitor 2 and glycogen synthetase kinase 3, and then complexed to one or several targeting or regulatory subunits. The targeting or regulatory subunits determine the substrate specificity of PP1. PPP1R12A, PPP1R12B and PPP1R12C mediate binding to myosin. PPP1R3A (in skeletal muscle), PPP1R3B (in liver), PPP1R3C, PPP1R3D and PPP1R3F (in brain) mediate binding to glycogen. Part of a complex containing PPP1R15B, PP1 and NCK1/2 (By similarity). Interacts with PPP1R7 and PPP1R12C. PPP1R15A and PPP1R15B mediate binding to EIF2S1. Interacts with PPP1R16B. Component of the PTW/PP1 phosphatase complex, composed of PPP1R10/PNUTS, TOX4, WDR82, and PPP1CA or PPP1CB or PPP1CC. Interacts with PPP1R8. Interacts with TRIM28; the interaction is weak. Interacts with PPP1R12A and NUAK1; the interaction is direct. Interacts with FOXP3. Interacts with RRP1B (PubMed:20926688). Interacts with SERPINE1 (PubMed:28296156).

Similarity: Belongs to the PPP phosphatase family. PP-1 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506005
NCBI GeneID	5500
NCBI Accession #	NP_002700.1
NCBI GenBank Nucleotide #	NM_002709.2
UniProt Accession #	P62140; P37140; Q5U087; Q6FG45; B2R5V4; D6W565
Molecular Weight	Observed: 37 kDa Predicted: 38 kDa
NCBI Official Full Name	serine/threonine-protein phosphatase PP1-beta catalytic subunit isoform 1
NCBI Official Synonym Full Names	protein phosphatase 1 catalytic subunit beta
NCBI Official Symbol	PPP1CB
NCBI Official Synonym Symbols	PP1B; NSLH2; PP-1B; PPP1CD; PP1beta; HEL-S-80p

NCBI Protein Information	serine/threonine-protein phosphatase PP1-beta catalytic subunit
UniProt Protein Name	Serine/threonine-protein phosphatase PP1-beta catalytic subunit
UniProt Gene Name	PPP1CB
UniProt Synonym Gene Names	PP-1B; PPP1CD

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/ppp1cb-antibody-immunohistochemistry-western-blot-elisa/326014>