CPI17alpha Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CPI17alpha, Polyclonal Antibody
Full Product Name	CPI17alpha (Ab-38) Conjugated Antibody
Product Gene Name	anti-CPI17alpha antibody
Product Synonym Names	CPI; CPI-17; CPI17; PP14A
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Specificity	The antibody detects endogenous level of total CPI17-alpha protein.
Preparation and Storage	Store at 4 degree C for 6 months.
Molecular Weight	16,693 Da
Chromosome Location	Chromosome: 19; NC_000019.9 (38741877..38747231, complement). Location: 19q13.1
OMIM	608153
3D Structure	ModBase 3D Structure for Q96A00
Immunogen	Peptide sequence around aa.36~40 (R-V-T-V-K) derived from Human CPI17alpha.
Conjugation	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Excitation Emission	AF350: 346nm/442nm
Applications Tested/Suitable for anti-CPI17alpha antibody	Most Applications
Application Notes for anti-CPI17alpha antibody	Suggested Dilution: AF350 conjugated: most applications: 1:50-1:250 AF405 conjugated: most applications: 1:50-1:250 AF488 conjugated: most applications: 1:50-1:250 AF555 conjugated: most applications: 1:50-1:250 AF594 conjugated: most applications: 1:50-1:250 AF647 conjugated: most applications: 1:50-1:250 AF680 conjugated: most applications: 1:50-1:250 AF750 conjugated: most applications: 1:50-1:250 Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1:50-1:1000
Related Product Information for anti-CPI17alpha antibody	Inhibitor of PPP1CA. Has over 1000-fold higher inhibitory activity when phosphorylated, creating a molecular switch for regulating the phosphorylation status of PPP1CA substrates and smooth muscle contraction.
Other Notes	Small volumes of anti-CPI17alpha antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CPI17alpha purchase	MBS9438782 is an antibody targeting CPI17alpha. Also known as CPI17alpha (Ab-38) Conjugated Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CPI17alpha. It may not necessarily be applicable to this product.

NCBI GI #	15147250
NCBI GeneID	94274
NCBI Accession #	NP_150281.1
UniProt Primary Accession #	Q96A00
UniProt Secondary Accession #	Q7Z4X7; Q96S54
UniProt Related Accession #	Q96A00
GenBank Nucleotide #	NM_033256.1
NCBI Official Full Name	protein phosphatase 1 regulatory subunit 14A isoform 1
NCBI Official Synonym Full Names	protein phosphatase 1, regulatory (inhibitor) subunit 14A
NCBI Official Symbol	PPP1R14A
NCBI Official Synonym Symbols	CPI17; CPI-17; PPP1INL
UniProt Protein Name	Protein phosphatase 1 regulatory subunit 14A
UniProt Synonym Protein Names	17 kDa PKC-potentiated inhibitory protein of PP1; Protein kinase C-potentiated inhibitor protein of 17 kDa
UniProt Gene Name	PPP1R14A
UniProt Synonym Gene Names	CPI17; PPP1INL; CPI-17
UniProt Entry Name	PP14A_HUMAN
NCBI Protein Information	protein phosphatase 1 regulatory subunit 14A; 17-KDa protein; PKC-potentiated inhibitory protein of PP1; 17 kDa PKC-potentiated inhibitory protein of PP1; 17-kDa PKC-potentiated inhibitory protein of PP1; protein kinase C-potentiated inhibitor protein of
NCBI Summary for CPI17alpha	The protein encoded by this gene belongs to the protein phosphatase 1 (PP1) inhibitor family. This protein is an inhibitor of smooth muscle myosin phosphatase, and has higher inhibitory activity when phosphorylated. Inhibition of myosin phosphatase leads to increased myosin phosphorylation and enhanced smooth muscle contraction. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Sep 2011]
UniProt Comments for CPI17alpha	PPP1R14A: a phosphorylation-dependent inhibitory subunit of protein phosphatase 1 (PP-1A). Phosphorylation by PKC regulates its binding to PP-1A. Acts co-operatively to inhibit myosin light chain phosphatase (MLCP) activity. Inhibition leads to increased myosin phosphorylation and enhances smooth muscle contraction in the absence of increased intracellular Ca(2) concentration. Involved in the regulation of cell morphology, re-organisation of microfilaments, and cell spreading. Also expressed in human platelets and in brain where it may play a role in cerebellar long-term synaptic depression. Phosphorylation by ILK or Rho kinase enhances its ability to inhibit PP-1A. Protein type: Protein phosphatase, regulatory subunit; Inhibitor Chromosomal Location of Human Ortholog: 19q13.1 Cellular Component: cytoplasm Molecular Function: protein phosphatase inhibitor activity Biological Process: regulation of phosphorylation; negative regulation of catalytic activity
Research Articles on CPI17alpha	**1.** The N-terminal 21-residue tail domain of CPI-17 is necessary for nuclear localization. Phospho-mimetic Asp-substitution of CPI-17 at Ser12 attenuates the nuclear import.
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