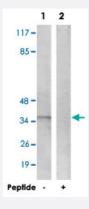


# PPP1CA polyclonal antibody

Catalog # PAB18261 Size 100 ug

### **Applications**



#### Western Blot (Cell lysate)

Western blot analysis of extracts from Jurkat cells, using PPP1CA polyclonal antibody (Cat # PAB18261).

Peptide "+" means "peptide blocking".

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PPP1CA.
Immunogen	A synthetic peptide corresponding to residues surrounding T320 of human PPP1CA.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PPP1CA.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)



#### **Product Information**

Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

# Applications

Western Blot (Cell lysate)

Western blot analysis of extracts from Jurkat cells, using PPP1CA polyclonal antibody (Cat # PAB18261). Peptide "+" means "peptide blocking".

- Immunohistochemistry
- Enzyme-linked Immunoabsorbent Assay

Gene Info — PPP1CA	
Entrez GenelD	<u>5499</u>
Protein Accession#	P62136
Gene Name	PPP1CA
Gene Alias	MGC15877, MGC1674, PP-1A, PPP1A
Gene Description	protein phosphatase 1, catalytic subunit, alpha isoform
Omim ID	176875
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 ( PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulati on of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractili ty, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure. Studies in both human and mice suggest that PP1 is an important regulator of cardiac function. Mouse studies also suggest that PP1 functions as a suppressor of learning and memory. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	protein phosphatase 1, catalytic subunit, alpha serine/threonine protein phosphatase PP1-alpha 1 catalytic subunit



#### **Publication Reference**

 Binding of the concave surface of the Sds22 superhelix to the alpha 4/alpha 5/alpha 6-triangle of protein phosphatase-1.

Ceulemans H, Vulsteke V, De Maeyer M, Tatchell K, Stalmans W, Bollen M.

The Journal of Biological Chemistry 2002 Dec; 277(49):47331.

Protein phosphatase 1--targeted in many directions.

Cohen PT.

J Cell Sci 2002 Jan; 115(Pt 2):241.

Application: WB, Human, Mammalian cells

## Pathway

- Focal adhesion
- Insulin signaling pathway
- Long-term potentiation
- Regulation of actin cytoskeleton
- Vascular smooth muscle contraction