

Datasheet: VMA00742KT

Description:	PP1 ALPHA ANTIBODY WITH CONTROL LYSATE		
Specificity:	PP1 ALPHA		
Format:	Purified		
<b>Product Type:</b>	PrecisionAb™ Monoclonal		
Clone:	OTI6E5		
Isotype:	lgG1		
Quantity:	2 Westerns		

### **Product Details**

#### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting				1/1000

**PrecisionAb antibodies have been extensively <u>validated for the western blot application</u>. The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.** 

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Rat  N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - Liquid
Preparation	20µl Mouse monoclonal antibody affinity purified on Protein G from ascites
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Immunogen	E. coli-derived full length recombinant protein of human PP1 alpha
External Database Links	UniProt: P62136 Related reagents  Entrez Gene: 5499 PPP1CA Related reagents

Synonyms	PPP1A
Specificity	Mouse anti Human PP1 alpha antibody recognizes PP1 alpha, also known as protein phosphatase 1-alpha isoform and serine/threonine protein phosphatase PP1-alpha 1 catalytic subunit.
	The protein encoded by PPP1CA 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 regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, 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 PPP1CA (provided by RefSeq, Jul 2008).
	Mouse anti Human PP1 alpha antibody detects a band of 38 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.
Western Blotting	Mouse anti PP1 alpha detects a band of approximately 38 kDa in Jurkat cell lysates
Instructions For Use	Please refer to the <u>PrecisionAb western blotting protocol.</u> For additional information on secondary antibody dilution and exposure time see product web page.
Lysate Composition	400μg Jurkat lysate lyophilized in RIPA buffer
Lysate Reconstitution	<ul> <li>If using DDT reconstitute the lyophilized lysate with 190μl DI H<sub>2</sub>O, add 200μl 2x Laemmli Sample Buffer and 10μl 2M DTT.</li> <li>If using BME reconstitute the lyophilized lysate with 180μl DI H<sub>2</sub>O, add 200μl 2x Laemmli Sample</li> </ul>
	Buffer and 20µl BME. Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.
Storage	Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
	Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.
Guarantee	As supplied, 12 months from date of despatch
Acknowledgements	PrecisionAb™ is a trademark of Bio-Rad Laboratories
Health And Safety Information	Material Safety Datasheet documentation #10041 #10561 available at: Antibody (10041): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a> Lysate Material (10561): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf</a>
Regulatory	For research purposes only

# **Related Products**

# **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (H/L) (STAR207...) HRP

**Recommended Negative Controls** 

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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