

For Research Use Only

# PPP3CA Monoclonal antibody, PBS Only

Catalog Number: 68163-1-PBS



## Basic Information

<b>Catalog Number:</b> 68163-1-PBS	<b>GenBank Accession Number:</b> BC025714	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5530	<b>CloneNo.:</b> 2A5C1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q08209	
<b>Isotype:</b> IgG2b	<b>Full Name:</b> protein phosphatase 3 (formerly 2B), catalytic subunit, alpha isoform	
<b>Immunogen Catalog Number:</b> AG32642	<b>Calculated MW:</b> 59 kDa	
	<b>Observed MW:</b> 59 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IP, Indirect ELISA

**Species Specificity:**  
human, mouse, rat, pig, rabbit

## Background Information

PPP3CA, also called calcineurin A $\alpha$ , is the only serine/threonine protein phosphatase under the control of Ca<sup>2+</sup>/calmodulin, and plays a critical role in the coupling of Ca<sup>2+</sup> signals to cellular responses. Ca<sup>2+</sup> signaling plays a central role in hypertrophic growth of cardiac and skeletal muscle in response to mechanical load and a variety of signals. Therefore, PPP3CA plays an important role in muscle differentiation, especially in muscle fiber type conversion. It is also involved in osteoclast regulation, regulating bone formation through an effect on osteoblast differentiation.

## Storage

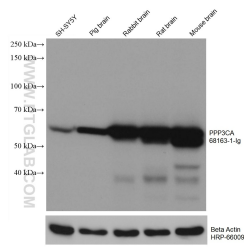
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

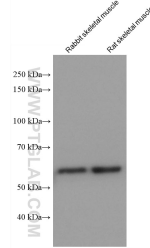
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

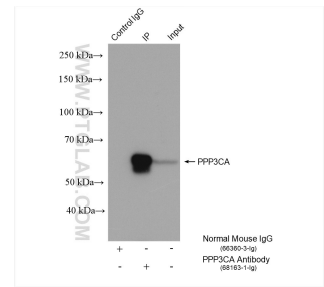
## Selected Validation Data



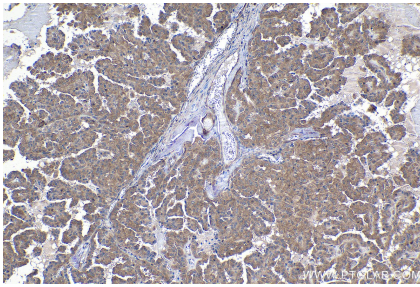
Various lysates were subjected to SDS PAGE followed by western blot with 68163-1-Ig (PPP3CA antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control. This data was developed using the same antibody clone with 68163-1-PBS in a different storage buffer formulation.



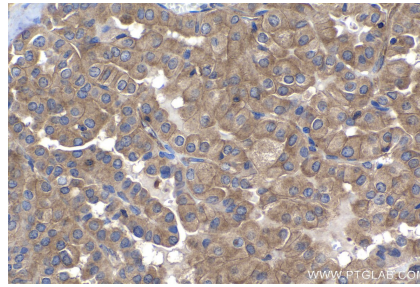
Various lysates were subjected to SDS PAGE followed by western blot with 68163-1-Ig (PPP3CA antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68163-1-PBS in a different storage buffer formulation.



IP result of anti-PPP3CA (IP:68163-1-Ig, 5ug; Detection:68163-1-Ig 1:4000) with rat brain tissue lysate 1120 ug. This data was developed using the same antibody clone with 68163-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using 68163-1-Ig (PPP3CA antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68163-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using 68163-1-Ig (PPP3CA antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68163-1-PBS in a different storage buffer formulation.