

PPP3CA Recombinant monoclonal antibody

Catalog Number: 87902-1-RR

Basic Information

Catalog Number: 87902-1-RR	GenBank Accession Number: BC025714	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 5530	CloneNo.: 253412F1
Isotype: IgG	UNIPROT ID: Q08209	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:500-1:2000 IF/ICC: 1:200-1:800
Immunogen Catalog Number: AG4203	Full Name: protein phosphatase 3 (formerly 2B), catalytic subunit, alpha isoform	
	Calculated MW: 59 kDa	
	Observed MW: 59 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB: LNCaP cells, SH-SY5Y cells, NIH/3T3 cells, mouse heart tissue
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC: human heart tissue, IF/ICC: SH-SY5Y cells,

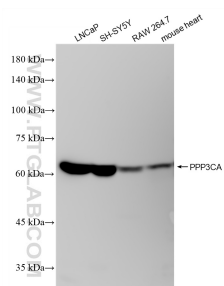
Background Information

PPP3CA, also called calcineurin A α , is the only serine/threonine protein phosphatase under the control of Ca²⁺/calmodulin, and plays a critical role in the coupling of Ca²⁺ signals to cellular responses. Ca²⁺ 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.

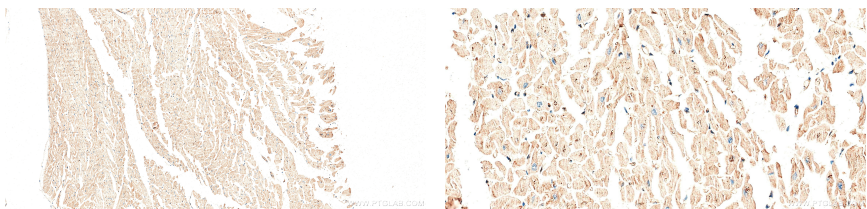
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

Selected Validation Data

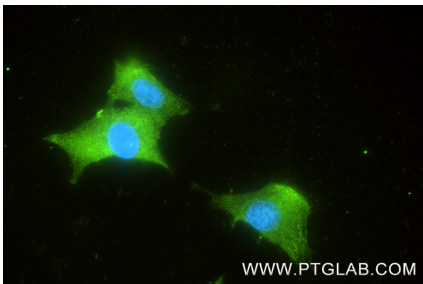


Various lysates were subjected to SDS PAGE followed by western blot with 87902-1-RR (PPP3CA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

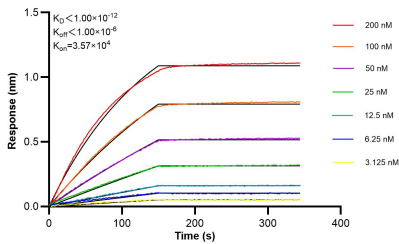


Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 87902-1-RR (PPP3CA antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 87902-1-RR (PPP3CA antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using PPP3CA antibody (87902-1-RR, Clone: 253412F1) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 87902-1-RR against Human PPP3CA were performed. The affinity constant is below 1 pM.