

For Research Use Only

PPP3CA Polyclonal antibody

Catalog Number: 13422-1-AP

13 Publications



Basic Information

Catalog Number: 13422-1-AP	GenBank Accession Number: BC025714	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 750 µg/ml by Nanodrop and 500 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5530	Recommended Dilutions: WB 1:1000-1:8000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Source: Rabbit	Full Name: protein phosphatase 3 (formerly 2B), catalytic subunit, alpha isoform	IHC 1:50-1:500 IF 1:20-1:200
Isotype: IgG	Calculated MW: 59 kDa	
Immunogen Catalog Number: AG4203	Observed MW: 59 kDa	

Applications

Tested Applications: FC, IF, IHC, IP, WB, ELISA	Positive Controls:
Cited Applications: IF, WB	WB : mouse skeletal muscle tissue, RAW 264.7 cells, mouse heart tissue, SH-SY5Y cells
Species Specificity: human, mouse	IP : mouse heart tissue,
Cited Species: human, chicken, mouse, pig	IHC : human colon cancer tissue, human cervical cancer tissue
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IF : 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Armagan Caner	34580765	J Membr Biol	WB
Xiju He	28526717	Proc Natl Acad Sci U S A	WB
Yuetao Wen	28299629	Neurochem Res	WB, IF

Storage

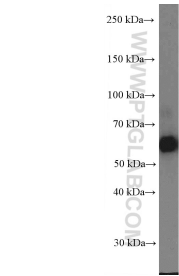
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

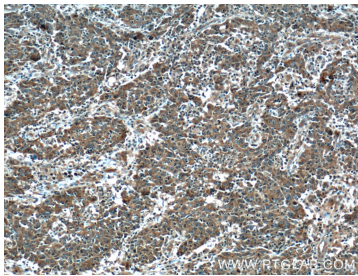
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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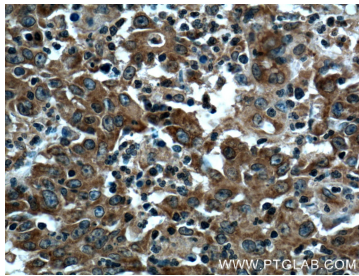
Selected Validation Data



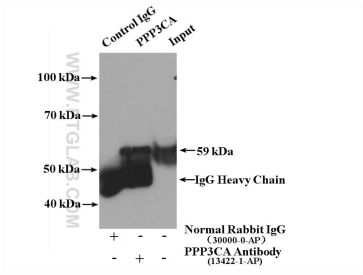
mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 13422-1-AP (PPP3CA Antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



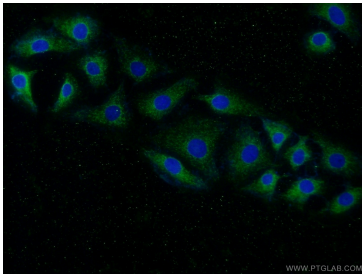
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 13422-1-AP (PPP3CA Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



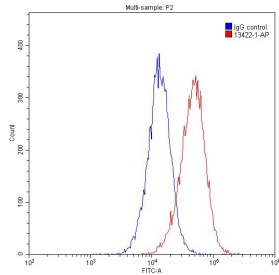
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 13422-1-AP (PPP3CA Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PPP3CA (IP:13422-1-AP, 4ug; Detection:13422-1-AP 1:1000) with mouse heart tissue lysate 4000 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using 13422-1-AP (PPP3CA antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10⁶ HeLa cells were stained with 0.20ug PPP3CA antibody (13422-1-AP, red) and control antibody (blue). Fixed with 90% MeOH.