

For Research Use Only

PPP4C Polyclonal antibody

Catalog Number: 10262-1-AP **3 Publications**



Basic Information

Catalog Number: 10262-1-AP	GenBank Accession Number: BC001416	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 400 µg/ml by Nanodrop and 273 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5531	Recommended Dilutions: WB 1:500-1:2000 IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB
Source: Rabbit	Full Name: protein phosphatase 4 (formerly X), catalytic subunit	IF 1:50-1:500
Isotype: IgG	Calculated MW: 35 kDa	
Immunogen Catalog Number: AG0356	Observed MW: 35 kDa	

Applications

Tested Applications: IF, IP, WB, ELISA	Positive Controls: WB : HEK-293 cells, Jurkat cells, mouse kidney tissue
Cited Applications: IP, WB	IP : mouse kidney tissue,
Species Specificity: human, mouse, rat	IF : HEK-293 cells,
Cited Species: human, mouse	

Background Information

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions. The serine/threonine protein phosphatases (PP) are intimately involved in this process. Serine/threonine protein phosphatase X (PPX; also called protein phosphatase 4 (PP4)) are specifically associated with nuclear factor-kappa B (NF-kappa B) p50, c-Rel, and RelA, which are pleiotropic transcription factors that play central roles in the immune and inflammatory responses, as well as apoptosis. Overexpression of PPX stimulated the DNA-binding activity of c-Rel and activated NF-kappa B-mediated transcription. Although the mechanism by which PPX activates Rel/NF-kappa B-mediated transcription is unclear, PPX appeared to act on Rel/NF-kappa B proteins directly through augmentation of c-Rel activity. It is also possible that PPX may dephosphorylate and subsequently activate other c-Rel-associated transcription factors or other kinases regulating I kappaB (e.g. I kappa B kinases or MEKK1). These data suggest that PPX is an activator, but not an inhibitor, of c-Rel/NF-kappa B, which is in contrast to other protein phosphatases.

Notable Publications

Author	Pubmed ID	Journal	Application
Yue Zheng	35845072	Front Cardiovasc Med	
Sabrina Klemz	34301769	Genes Dev	IP
Chen Lu L	18634786	FEBS Lett	WB

Storage

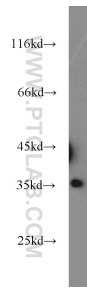
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

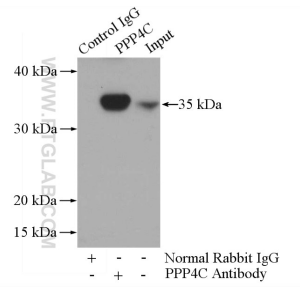
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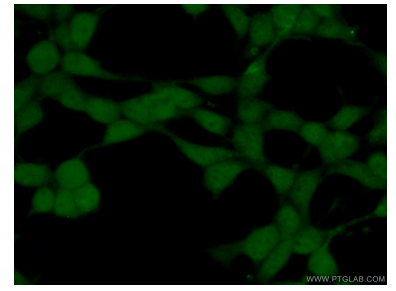
Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with 10262-1-AP (PPP4C antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP Result of anti-PPP4C (IP:10262-1-AP, 4ug; Detection:10262-1-AP 1:1000) with mouse kidney tissue lysate 4000ug.



Immunofluorescent analysis of (10% Formaldehyde) fixed HEK-293 cells using 10262-1-AP (PPP4C antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).