

PPP4C Polyclonal Antibody

Catalog number: 10262-1-AP

Size: 41 µg/150 µl

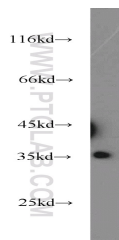
Source: Rabbit

Isotype: IgG

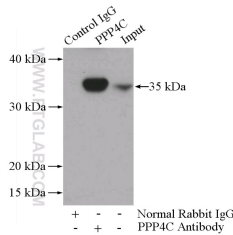
Synonyms:

PPP4C; PP X, PP4, PP4C,
PPH3, PPP4, PPP4C, PPX,

Protein phosphatase X



HEK-293 cells were subjected to SDS PAGE followed by western blot with 10262-1-AP(PPP4C antibody) at dilution of 1:1000



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

Background

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.

Applications

Tested applications:	ELISA, WB, IP
Cited applications:	WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human
Calculated PPP4C MW:	35 kDa
Observed PPP4C MW:	35 kDa
Positive WB detected in	HEK-293 cells, Jurkat cells, mouse kidney tissue
Positive IP detected in	Mouse kidney tissue
Recommended dilution:	WB: 1:500-1:5000 IP: 1:500-1:5000

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag0356
GenBank accession number:	BC001416
Gene ID (NCBI):	5531
Full name:	Protein phosphatase 4 (formerly X), catalytic subunit

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.