

IHC*easy* PPP4C Ready-To-Use IHC Kit

Catalog Number: **KHC1002**

General Information

Sample type:
FFPE tissue

Cited sample type:

Reactivity:
Human, Mouse, Rat

Cited Reactivity:

Assay type:
Immunohistochemistry

Primary antibody type:
Rabbit Polyclonal

Secondary antibody type:
Polymer-HRP-Goat anti-Rabbit

Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL × 2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

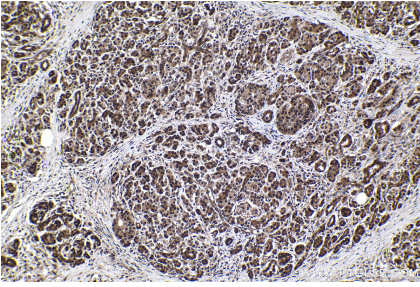
Background

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 kappa B (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.

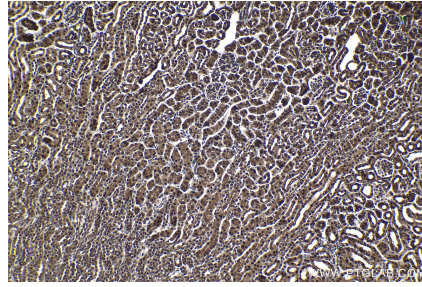
Synonyms

PP X, PP4, PP4C, PPH3, PPP4, PPP4C, PPX, Protein phosphatase X

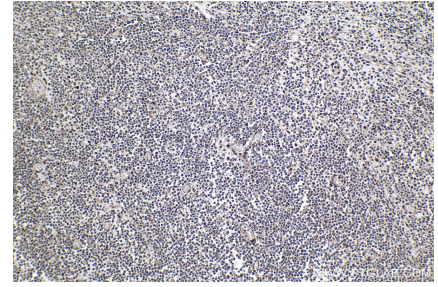
Selected Validation Data



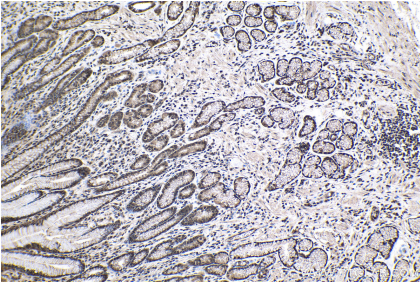
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using KHC1002 (PPP4C IHC Kit).



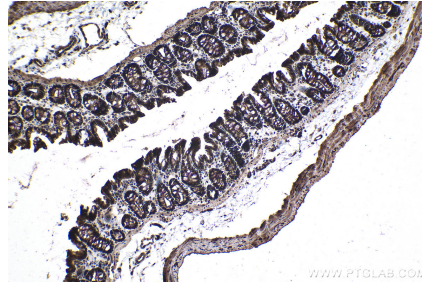
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using KHC1002 (PPP4C IHC Kit).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using KHC1002 (PPP4C IHC Kit).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using KHC1002 (PPP4C IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using KHC1002 (PPP4C IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using KHC1002 (PPP4C IHC Kit).