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PTPH1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8426a

Product Information

Application	WB, IHC-P, E
Primary Accession	P26045
Other Accession	A2ALK8
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0626
Calculated MW	103990
Antigen Region	366-397

Additional Information

Gene ID	5774
Other Names	Tyrosine-protein phosphatase non-receptor type 3, Protein-tyrosine phosphatase H1, PTP-H1, PTPN3, PTPH1
Target/Specificity	This PTPH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 366-397 amino acids from the Central region of human PTPH1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PTPH1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PTPN3
Synonyms	PTPH1

Function	May act at junctions between the membrane and the cytoskeleton. Possesses tyrosine phosphatase activity.
Cellular Location	Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton

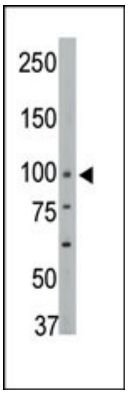
Background

Phosphorylation of receptors by protein kinases is a process that can be reversed by a group of enzymes called protein phosphatases. Coordinated control of kinases and phosphatases provides the cell with the capacity to rapidly switch between phosphorylated and dephosphorylated protein states in dynamic response to environmental stimuli. Activation of critical enzymes by kinase phosphorylation alone is not enough to provide adequate regulation ?it is the combination with phosphatase dephosphorylation that effectively creates on/off switches to control cellular events. Errors in control, either through kinases or their counterpart phosphatases, can lead to unchecked cell growth attributable to human cancers and developmental disorders. Potential mechanisms to control dephosphorylation include changes in the expression of protein phosphatases, their subcellular localization, phosphorylation of phosphatase catalytic and regulatory subunits and regulation by endogenous phosphatase inhibitors. Most protein phosphatases are not stringently specific for their substrates. Consequently, changes in phosphatase activity may have a broad impact on dephosphorylation and turnover of phosphoproteins that are substrates for different kinases. This may be an important point of control to connect cellular circuitry of interrelated signaling pathways, and to synchronize physiological responses.

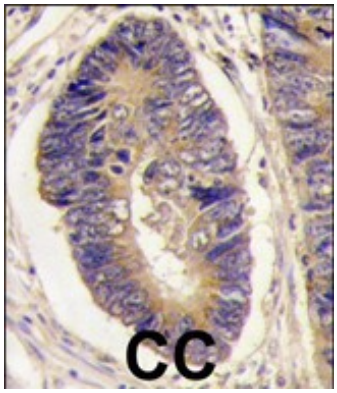
References

Ikuta, S., et al., J. Gastroenterol. 29(6):727-732 (1994).
Arimura, Y., et al., Tumour Biol. 13(3):180-186 (1992).
Yang, Q., et al., Proc. Natl. Acad. Sci. U.S.A. 88(14):5949-5953 (1991).

Images



The anti-PTPH1 Center Pab (Cat. #AP8426a) is used in Western blot to detect PTPH1 in mouse brain tissue lysate.



Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with PTPH1 antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Citations

- The Protein Tyrosine Phosphatase H1 PTPH1 Supports Proliferation of Keratinocytes and is a Target of the Human Papillomavirus Type 8 E6 Oncogene.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.