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PCPTP1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8409a

Product Information

Application	IHC-P, WB, E
Primary Accession	Q15256
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0621
Calculated MW	73834
Antigen Region	234-265

Additional Information

Gene ID	5801
Other Names	Receptor-type tyrosine-protein phosphatase R, R-PTP-R, Ch-1PTPase, NC-PTPCOM1, Protein-tyrosine phosphatase PCPTP1, PTPRR, ECPTP, PTPRQ
Target/Specificity	This PCPTP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 234-265 amino acids from the N-terminal region of human PCPTP1.
Dilution	IHC-P~~1:100~500 WB~~1:1000 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	PCPTP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PTPRR
Synonyms	ECPTP, PTPRQ
Function	Sequesters mitogen-activated protein kinases (MAPKs) such as MAPK1,

	MAPK3 and MAPK14 in the cytoplasm in an inactive form. The MAPKs bind to a dephosphorylated kinase interacting motif, phosphorylation of which by the protein kinase A complex releases the MAPKs for activation and translocation into the nucleus (By similarity).
Cellular Location	Secreted. [Isoform Delta]: Cytoplasm, perinuclear region. Note=Locates to the perinuclear areas within the cytoplasm
Tissue Location	Detected in cerebrospinal fluid (at protein level) (PubMed:25326458). Expressed in brain, placenta, small intestine, stomach, uterus and weakly in the prostate. Isoform alpha has been observed only in the brain. Isoform gamma is expressed in brain, placenta and uterus. Isoform delta is expressed in brain, kidney, placenta, prostate, small intestine and uterus

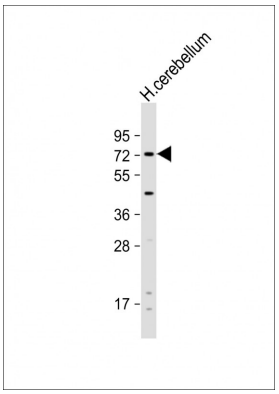
Background

PCPTP1 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region, a single transmembrane region, and a single intracellular catalytic domains, and thus represents a receptor-type PTP. The similar gene for this protein predominately expressed in mouse brain was found to associate with, and thus regulate the activity and cellular localization of MAP kinases. The rat counterpart of the gene for this protein was reported to be regulated by the nerve growth factor, which suggested a function in neuronal growth and differentiation.

References

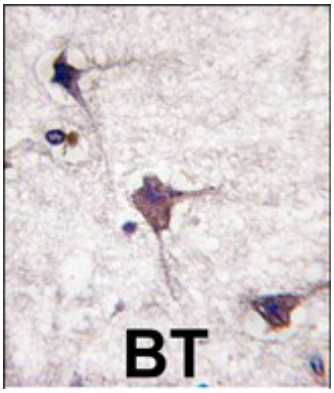
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Ogata, M., et al., J. Biol. Chem. 270(5):2337-2343 (1995).
Shiozuka, K., et al., Gene 162(2):279-284 (1995).
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Images



Anti-PCPTP1 Antibody (N-term) at 1:1000 dilution + human cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 74 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human brain tissue reacted with hPCPTP1-Y249, 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.



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