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PCPTP1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8409a

Specification

PCPTP1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q15256

PCPTP1 Antibody (N-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP8409a was selected from the N-term region of human PCPTP1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PCPTP1 Antibody (N-term) Blocking Peptide - 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

PCPTP1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

PCPTP1 Antibody (N-term) Blocking Peptide - Images

PCPTP1 Antibody (N-term) Blocking Peptide - 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.

PCPTP1 Antibody (N-term) Blocking Peptide - References

Blanco-Aparicio, C., et al., J. Cell Biol. 147(6):1129-1136 (1999).Ogata, M., et al., J. Biol. Chem. 270(5):2337-2343 (1995).Shiozuka, K., et al., Gene 162(2):279-284 (1995).Sharma, E., et al., J. Biol. Chem. 270(1):49-53 (1995).