10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PCPTP1 Rabbit pAb

Catalog # AP99870

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q15256
Other Accession	Q15256
Predicted	Rat, Pig, Human, Mouse, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73834
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PCPTP1
Epitope Specificity	165-270/657
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein-tyrosine phosphatase family. Receptor class 7 subfamily. Contains 1 tyrosine-protein phosphatase domain.
SUBUNIT	Interacts with MAPKs
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein tyrosine phosphatase (PTP) family of proteins are signaling molecules that regulate processes such as cell growth, cell differentiation, oncogenic transformation and the mitotic cycle. PCPTP1, also known as PTPRR (Receptor-type tyrosine-protein phosphatase R), ECPTP, PTPBR7 or PTPRQ, is a 657 amino acid protein that functions to sequester inactive mitogen-activated protein kinases (MAPKs) to the cytoplasm. Expressed primarily in the brain with weaker expression in other parts of the body, PCPTP1 is a receptor-like molecule that is able to dephosphorylate MAPKs, thereby rendering them inactive. Three isoforms of PCPTP1 exist and are designated alpha, beta and gamma. The alpha form is localized to the cell membrane, while the beta and gamma forms are localized to the perinuclear areas within the cytoplasm.

Additional Information

Gene ID	5801
Other Names	PCPTP1; EC-PTP; PTP-SL; PTPBR7; PTPRQ; Gmcp1; RPTPRR; mPTP213; PC12-PTP1; R-PTP-R; PTPRR_HUMAN; PTPRR; Ch-1PTPase; NC-PTPCOM1; Protein-tyrosine phosphatase PCPTP1; 3.1.3.48; ECPTP; PTPRR_MOUSE; Phosphotyrosine phosphatase 13; Protein-tyrosine-phosphatase SL; Ptp13; protein tyrosine phosphatase receptor type R
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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