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PTPRE Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14405a

Product Information

Application	WB, IHC-P, E
Primary Accession	P23469
Other Accession	B2GV87, P49446, NP_569119.1, NP_006495.1
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34352
Calculated MW	80642
Antigen Region	134-163

Additional Information

Gene ID	5791
Other Names	Receptor-type tyrosine-protein phosphatase epsilon, Protein-tyrosine phosphatase epsilon, R-PTP-epsilon, PTPRE
Target/Specificity	This PTPRE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 134-163 amino acids from the N-terminal region of human PTPRE.
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 purified through a protein A column, followed by peptide affinity purification.
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	PTPRE Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PTPRE
Function	Isoform 1 plays a critical role in signaling transduction pathways and phosphoprotein network topology in red blood cells. May play a role in

	osteoclast formation and function (By similarity).
Cellular Location	[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Cytoplasm.
Tissue Location	Expressed in giant cell tumor (osteoclastoma rich in multinucleated osteoclastic cells).

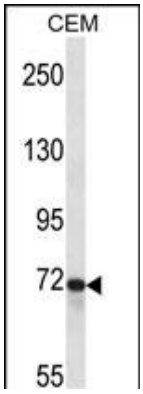
Background

The protein encoded by this gene 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. Two alternatively spliced transcript variants of this gene have been reported, one of which encodes a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains; Another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform of this PTP. Studies of the similar gene in mice suggested the regulatory roles of this PTP in RAS related signal transduction pathways, cytokines induced SATA signaling, as well as the activation of voltage-gated K+ channels. [provided by RefSeq].

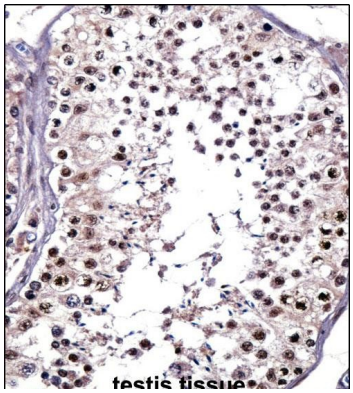
References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
Barr, A.J., et al. Cell 136(2):352-363(2009)
Kraut-Cohen, J., et al. J. Biol. Chem. 283(8):4612-4621(2008)
Tremblay, K., et al. PLoS ONE 3 (8), E2907 (2008) :

Images



PTPRE Antibody (N-term) (Cat. #AP14405a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the PTPRE antibody detected the PTPRE protein (arrow).



PTPRE Antibody (N-term) (AP14405a)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PTPRE Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.