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

PTP epsilon Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8416a

Product Information

Application	WB, E
Primary Accession	P23469
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0551
Calculated MW	80642
Antigen Region	558-589

Additional Information

Gene ID	5791
Other Names	Receptor-type tyrosine-protein phosphatase epsilon, Protein-tyrosine phosphatase epsilon, R-PTP-epsilon, PTPRE
Target/Specificity	This PTP epsilon antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 558-589 amino acids from the C-terminal region of human PTP epsilon.
Dilution	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	PTP epsilon Antibody (C-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).

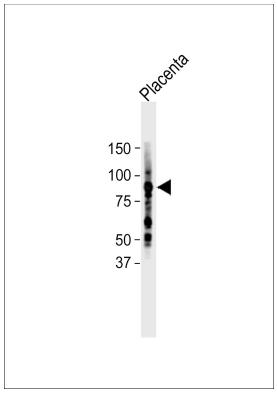
Background

PTPepsilon 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 the 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.

References

Toledano-Katchalski, H., et al., Mol. Cell. Biol. 23(15):5460-5471 (2003).
Blanchetot, C., et al., J. Biol. Chem. 277(49):47263-47269 (2002).
Wabakken, T., et al., Scand. J. Immunol. 56(3):276-285 (2002).
Wabakken, T., et al., Scand. J. Immunol. 56(2):195-203 (2002).
Tanuma, N., et al., J. Biol. Chem. 275(36):28216-28221 (2000).

Images



All lanes: Anti-PTP epsilon Antibody (C-term) at 1:1000 dilution + Placenta lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 80 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Apoptosis of estrogen-receptor negative breast cancer and colon cancer cell lines by PTP alpha and src RNAi.