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PTPa Antibody (S180)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8412D

Product Information

Application	WB, E
Primary Accession	P18433
Other Accession	Q03348, P18052
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36355
Calculated MW	90719
Antigen Region	169-196

Additional Information

Gene ID	5786
Other Names	Receptor-type tyrosine-protein phosphatase alpha, Protein-tyrosine phosphatase alpha, R-PTP-alpha, PTPRA, PTPA, PTPRL2
Target/Specificity	This PTPa antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 169-196 amino acids from human PTPa.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	PTPa Antibody (S180) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PTPRA
Synonyms	PTPA, PTPRL2

Function	Tyrosine protein phosphatase which is involved in integrin- mediated focal adhesion formation (By similarity). Following integrin engagement, specifically recruits BCAR3, BCAR1 and CRK to focal adhesions thereby promoting SRC-mediated phosphorylation of BRAC1 and the subsequent activation of PAK and small GTPase RAC1 and CDC42 (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell junction, focal adhesion {ECO:0000250|UniProtKB:P18052}. Note=Localizes to focal adhesion sites following integrin engagement. {ECO:0000250|UniProtKB:P18052}

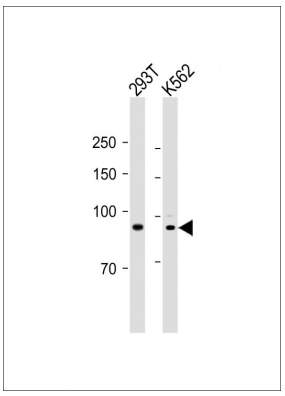
Background

PTPa 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 contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. This PTP has been shown to dephosphorylate and activate Src family tyrosine kinases, and is implicated in the regulation of integrin signaling, cell adhesion and proliferation.

References

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Kaplan, R., et al., Proc. Natl. Acad. Sci. U.S.A. 87(18):7000-7004 (1990).
Krueger, N.X., et al., EMBO J. 9(10):3241-3252 (1990).
Sap, J., et al., Proc. Natl. Acad. Sci. U.S.A. 87(16):6112-6116 (1990).
Jirik, F.R., et al., FEBS Lett. 273 (1-2), 239-242 (1990).

Images



All lanes: Anti-PTPa Antibody (S180) at 1:1000 dilution Lane 1: K562 whole cell lysate Lane 2: 293T whole cell 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: 90. 7 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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