

PTPa Antibody (S180) Blocking Peptide
Synthetic peptide
Catalog # BP8412d**Specification****PTPa Antibody (S180) Blocking Peptide - Product Information**Primary Accession [P18433](#)**PTPa Antibody (S180) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP8412d](/products/AP8412d) was selected from the S180 region of human PTPa. 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.

PTPa Antibody (S180) Blocking Peptide - Protein Information**Name** PTPRA**PTPa Antibody (S180) Blocking Peptide - 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.

PTPa Antibody (S180) Blocking Peptide - References

Deloukas, P., et al., Nature 414(6866):865-871 (2001). 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).

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}

PTPa Antibody (S180) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)