

**PTPa Antibody (S180) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8412d****Specification**

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**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**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](#)

### **PTPa Antibody (S180) Blocking Peptide - Images**

### **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).