

Phospho-PTPa(S180) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3221a**Specification**

Phospho-PTPa(S180) Antibody Blocking peptide - Product InformationPrimary Accession [P18433](#)**Phospho-PTPa(S180) Antibody 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 [AP3221a](/product/products/AP3221a) was selected from the region of human Phospho-PTPa-S180. 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.

Phospho-PTPa(S180) Antibody 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}

Phospho-PTPa(S180) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-PTPa(S180) Antibody Blocking peptide - Images

Phospho-PTPa(S180) Antibody 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.

Phospho-PTPa(S180) Antibody Blocking peptide - References

Kapp, K., et al., Biochem. Biophys. Res. Commun. 311(2):361-364 (2003). Zhang, X.Q., et al., Oncogene 22(43):6704-6716 (2003). Yahiro, K., et al., J. Biol. Chem. 278(21):19183-19189 (2003). Pettiford, S.M., et al., Leukemia 17(2):366-378 (2003). van der Wijk, T., et al., J. Biol. Chem. 278(16):13968-13974 (2003).