

PTPN6 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP2811c

Specification

PTPN6 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P29350

PTPN6 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 5777

Other Names

Tyrosine-protein phosphatase non-receptor type 6, Hematopoietic cell protein-tyrosine phosphatase, Protein-tyrosine phosphatase 1C, PTP-1C, Protein-tyrosine phosphatase SHP-1, SH-PTP1, PTPN6, HCP, PTP1C

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP2811c was selected from the Center region of human PTPN6. 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.

PTPN6 Antibody (Center) Blocking Peptide - Protein Information

Name PTPN6

Synonyms HCP, PTP1C

Function

Modulates signaling by tyrosine phosphorylated cell surface receptors such as KIT and the EGF receptor/EGFR. The SH2 regions may interact with other cellular components to modulate its own phosphatase activity against interacting substrates. Together with MTUS1, induces UBE2V2 expression upon angiotensin II stimulation. Plays a key role in hematopoiesis.

Cellular Location

Cytoplasm. Nucleus. Note=In neurons, translocates into the nucleus after treatment with angiotensin II (By similarity) Shuttles between the cytoplasm and nucleus via its association with



PDPK1.

Tissue Location

Isoform 1 is expressed in hematopoietic cells. Isoform 2 is expressed in non-hematopoietic cells

PTPN6 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

PTPN6 Antibody (Center) Blocking Peptide - Images

PTPN6 Antibody (Center) Blocking Peptide - Background

PTPN6 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. N-terminal part of this PTP contains two tandem Src homolog (SH2) domains, which act as protein phospho-tyrosine binding domains, and mediate the interaction of this PTP with its substrates. This PTP is expressed primarily in hematopoietic cells, and functions as an important regulator of multiple signaling pathways in hematopoietic cells. This PTP has been shown to interact with, and dephosphorylate a wide spectrum of phospho-proteins involved in hematopoietic cell signaling.

PTPN6 Antibody (Center) Blocking Peptide - References

Korporaal, S.J., Arterioscler. Thromb. Vasc. Biol. 29 (3), 372-379 (2009)Cho, Y.S., Am. J. Respir. Cell Mol. Biol. 39 (4), 412-419 (2008)Christophi, G.P., Lab. Invest. 88 (3), 243-255 (2008)Jones, M.L., J. Biol. Chem. 279 (39), 40475-40483 (2004)