

PTPN11 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6856b

Specification

PTPN11 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

Q06124

PTPN11 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 5781

Other Names

Tyrosine-protein phosphatase non-receptor type 11, Protein-tyrosine phosphatase 1D, PTP-1D, Protein-tyrosine phosphatase 2C, PTP-2C, SH-PTP2, SHP-2, Shp2, SH-PTP3, PTPN11, PTP2C, SHPTP2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6856b was selected from the C-term region of human PTPN11. 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.

PTPN11 Antibody (C-term) Blocking Peptide - Protein Information

Name PTPN11

Synonyms PTP2C, SHPTP2

Function

Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus (PubMed:<a

 $href="http://www.uniprot.org/citations/10655584"\ target="_blank">10655584, PubMed:<a https://www.uniprot.org/citations/10655584" target="_blank">10655584, PubMed:<a https://www.uniprot.org/citations/10655584" target="_blank">10655584, PubMed:<a https://www.uniprot.org/citations/10655584" target="_blank">10655584, PubMed:$

href="http://www.uniprot.org/citations/18559669" target="_blank">18559669, PubMed:18829466, PubMed:26742426, PubMed:28074573). Positively regulates MAPK signal transduction pathway (PubMed:28074573).



Dephosphorylates GAB1, ARHGAP35 and EGFR (PubMed:28074573). Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity (PubMed:18559669). Dephosphorylates CDC73 (PubMed:26742426). Dephosphorylates SOX9 on tyrosine residues, leading to inactivate SOX9 and promote ossification (By similarity). Dephosphorylates tyrosine-phosphorylated NEDD9/CAS-L (PubMed:19275884).

Cellular Location Cytoplasm. Nucleus

Tissue Location

Widely expressed, with highest levels in heart, brain, and skeletal muscle.

PTPN11 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

PTPN11 Antibody (C-term) Blocking Peptide - Images

PTPN11 Antibody (C-term) Blocking Peptide - Background

PTPN11 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 ansformation. This PTP contains two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of this PTP with its substrates.

PTPN11 Antibody (C-term) Blocking Peptide - References

Rikova, K., et.al., Cell 131 (6), 1190-1203 (2007)