

PTPN11 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM1920b**Specification**

PTPN11 Antibody - Product Information

Application	WB,E
Primary Accession	Q06124
Other Accession	NP_002825.3
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Calculated MW	68011

PTPN11 Antibody - 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

This PTPN11 monoclonal antibody is generated from mouse immunized with PTPN11 recombinant protein.

Dilution

WB~~1:100

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PTPN11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PTPN11 Antibody - 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:[10655584](#), PubMed:[14739280](#), PubMed:[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

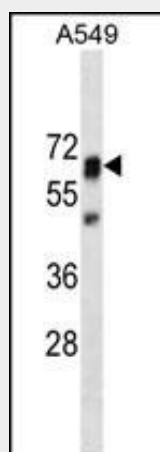
Widely expressed, with highest levels in heart, brain, and skeletal muscle.

PTPN11 Antibody - Protocols

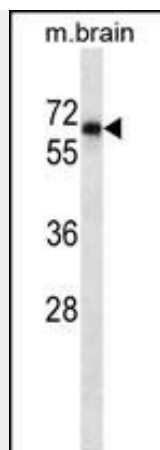
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PTPN11 Antibody - Images



PTPN11 Antibody (Cat. #AM1920b) western blot analysis in A549 cell line lysates (35µg/lane). This demonstrates the PTPN11 antibody detected the PTPN11 protein (arrow).



PTPN11 Antibody (Cat. #AM1920b) western blot analysis in mouse brain tissue lysates (35µg/lane). This demonstrates the PTPN11 antibody detected the PTPN11 protein (arrow).

PTPN11 Antibody - Background

The protein encoded by this gene 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 two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of this PTP with its substrates. This PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events that are important for a diversity of cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration. Mutations in this gene are a cause of Noonan syndrome as well as acute myeloid leukemia.

PTPN11 Antibody - References

Yang, X., et al. Mol. Cell. Biol. 30(22):5306-5317(2010)
Kikkawa, N., et al. Br. J. Cancer 103(6):877-884(2010)
Meng, S., et al. J Mol Cell Biol 2(4):223-230(2010)
Demir, K., et al. Turk. J. Pediatr. 52(3):321-324(2010)
Tang, C., et al. Zhongguo Fei Ai Za Zhi 13(2):98-101(2010)