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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

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

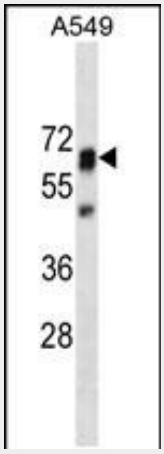
Tissue Location
Widely expressed, with highest levels in heart, brain, and skeletal muscle.

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 Cytomety
- 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).

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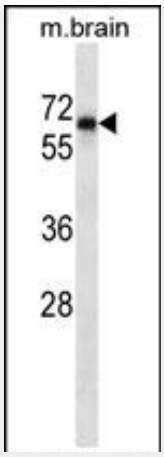

PTPN11 Antibody (Cat. #AM1920b) western blot analysis in mouse brian tissue lysates (35µg/lane).This demonstrates the PTPN11 antibody detected the PTPN11 protein (arrow).

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)