

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

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**PTPN11 Antibody - Product Information**

|                   |                             |
|-------------------|-----------------------------|
| Application       | WB,E                        |
| Primary Accession | <a href="#">Q06124</a>      |
| Other Accession   | <a href="#">NP_002825.3</a> |
| 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:[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

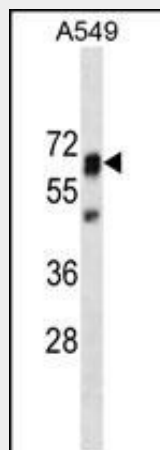
**Tissue Location**

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

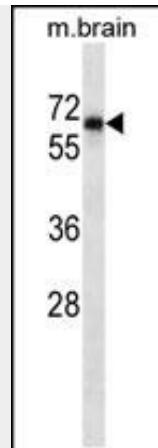
**PTPN11 Antibody - Protocols**

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)