

Specification

Application	WB, FC, ICC
Primary Accession	Q06124
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 68 kDa, observed, 68 kDa KDa
Gene Name	PTPN11
Aliases	PTPN11; Protein Tyrosine Phosphatase Non-Receptor Type 11; SH-PTP2; PTP2C; BPTP3; SHP-2; SHP2; SH2
	Domain-Containing Protein Tyrosine Phosphatase 2; Tyrosine-Protein Phosphatase Non-Receptor Type 11; Protein-Tyrosine Phosphatase 1D; Protein-Tyrosine Phosphatase 2C; EC 3.1.3.48; SH-PTP3; PTP-1D; NS1; Protein Tyrosine Phosphatase, Non-Receptor Type 11; Noonan Syndrome 1; METCDS; SHPTP2; PTP-2C; JMML; Shp2; CFC
Immunogen	A synthesized peptide derived from human SHP2

Gene ID	5781
Other Names	
Tyrosine-protein phosphatase non-receptor type 11, 3.1.3.48, Protein-tyrosine phosphatase 1D, PTP-1D, Protein-tyrosine phosphatase 2C, PTP-2C, SH-PTP2, SHP-2, Shp2, SH-PTP3, PTPN11, PTP2C, SHPTP2	

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:18559669).

[18829466](http://www.uniprot.org/citations/18829466), PubMed: [26742426](http://www.uniprot.org/citations/26742426), PubMed: [28074573](http://www.uniprot.org/citations/28074573)). Positively regulates MAPK signal transduction pathway (PubMed: [28074573](http://www.uniprot.org/citations/28074573)). Dephosphorylates GAB1, ARHGAP35 and EGFR (PubMed: [28074573](http://www.uniprot.org/citations/28074573)). Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity (PubMed: [18559669](http://www.uniprot.org/citations/18559669)). Dephosphorylates CDC73 (PubMed: [26742426](http://www.uniprot.org/citations/26742426)). Dephosphorylates SOX9 on tyrosine residues, leading to inactivate SOX9 and promote ossification (By similarity). Dephosphorylates tyrosine-phosphorylated NEDD9/CAS-L (PubMed: [19275884](http://www.uniprot.org/citations/19275884)).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

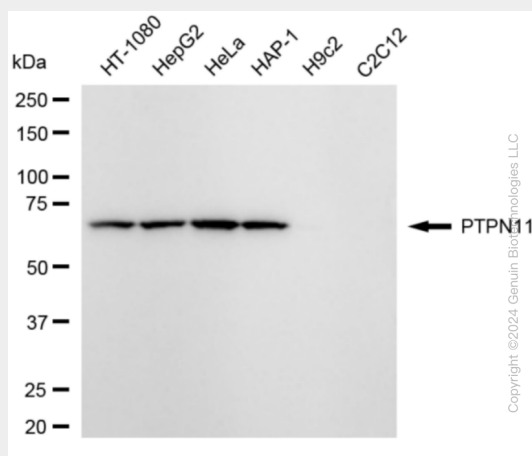
Widely expressed, with highest levels in heart, brain, and skeletal muscle.

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody - Protocols

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

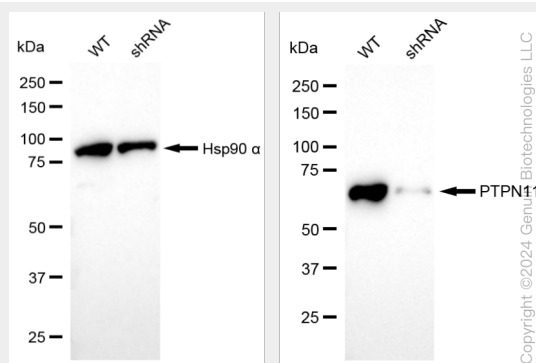
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody - Images

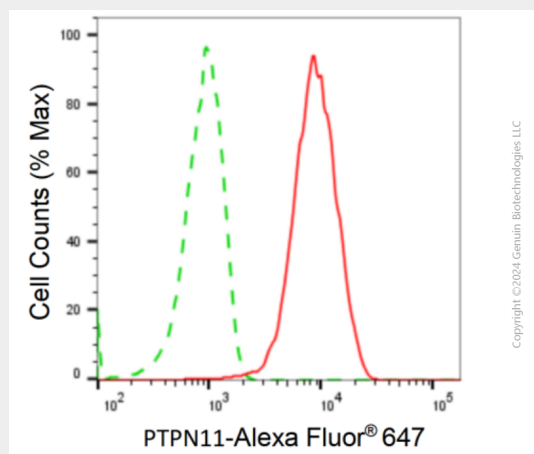


Western blotting analysis using anti-PTPN11 antibody (Cat#AGI1877). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PTPN11 antibody (Cat#AGI1877, 1:5,000) and HRP-conjugated goat anti-rabbit secondary

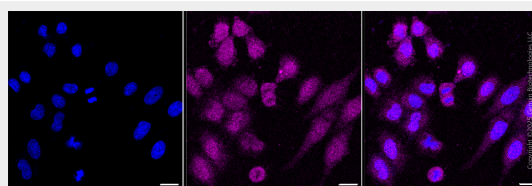
antibody respectively.



Western blotting analysis using anti-PTPN11 antibody (Cat#AGI1877). PTPN11 expression in wild type (WT) and PTPN11 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-PTPN11 antibody (Cat#AGI1877, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of PTPN11 expression in HepG2 cells using anti-PTPN11 antibody (Cat#AGI1877, 1:2,000). Green, isotype control; red, PTPN11.



Immunocytochemical staining of HepG2 cells with anti-PTPN11 protein antibody (Cat #AGI1877, 1:1,000). Nuclei were stained blue with DAPI; PTPN11 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.