

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AG1274

Specification

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody - Product Information

Application	WB, FC, ICC
Primary Accession	Q06124
Reactivity	Rat, Human, Mouse
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; BTPP3; 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

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody - Additional Information

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

KD-Validated Anti-PTPN11 Rabbit Monoclonal 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: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

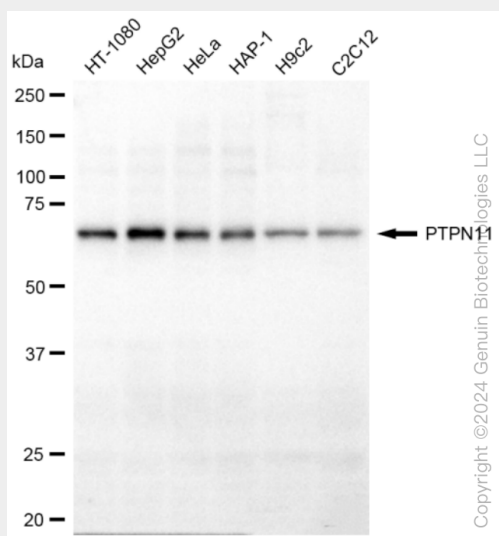
Widely expressed, with highest levels in heart, brain, and skeletal muscle.

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody - Protocols

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

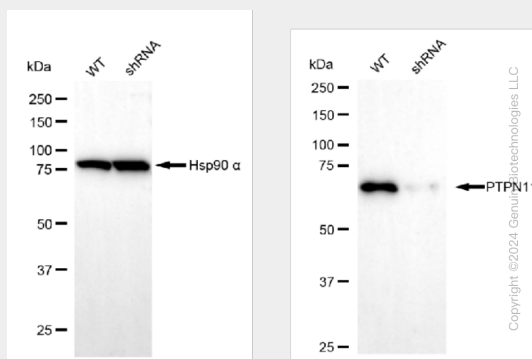
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody - Images

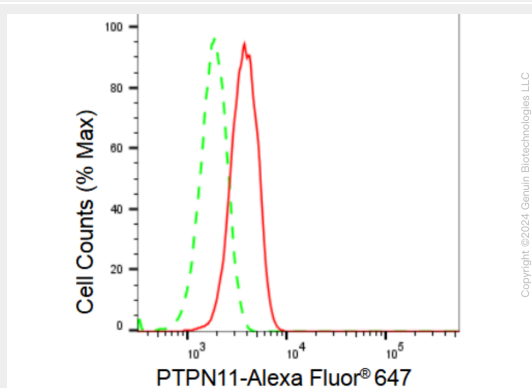


Western blotting analysis using anti-PTPN11 antibody (Cat#AGI1274). Total cell lysates (30 µg)

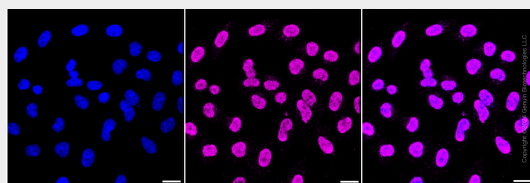
from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PTPN11 antibody (Cat#AGI1274, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-PTPN11 antibody (Cat#AGI1274). PTPN11 expression in wild type (WT) and PTPN11 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-PTPN11 antibody (Cat#AGI1274, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of PTPN11 expression in HepG2 cells using PTPN11 antibody (Cat#AGI1274, 1:2,000). Green, isotype control; red, PTPN11.



Immunocytochemical staining of HepG2 cells with PTPN11 antibody (Cat#AGI1274, 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: Low. Scale bar: 20 µm.