

Rabbit anti-Human, Mouse SHP2 Polyclonal Antibody | anti-PTPN11 antibody

SHP2 Antibody

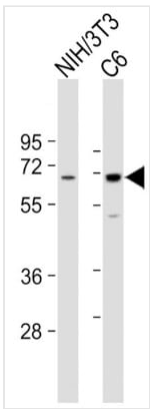
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284833	Rabbit	Human, Mouse	Western Blot, ELISA, Immunofluorescence

PRODUCT SYNONYMS

SHP2; Polyclonal Antibody; SHP2 Antibody; 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; anti-PTPN11 antibody

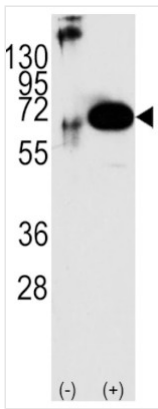
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This SHP2 antibody is generated from rabbits immunized with a recombinant protein of partial human SHP2.
Purity/Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Length	460
Applicable Applications for anti-PTPN11 antibody	WB (Western Blot), ELISA, IF (Immunofluorescence)
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).
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Widely expressed, with highest levels in heart, brain, and skeletal muscle.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



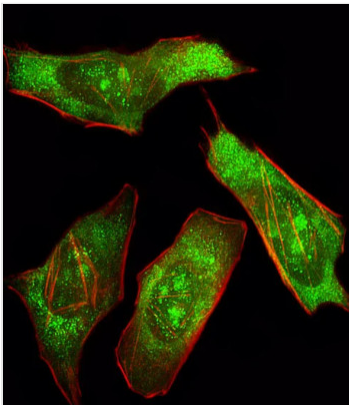
WB (Western Blot)

All lanes : Anti-SHP2 Antibody at 1:1000-2000 dilution Lane 1: NIH/3T3 whole cell lysate Lane 2: C6 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



WB (Western Blot)

Western blot analysis of PTPN11 (arrow) using rabbit polyclonal SHP2 Antibody (RB07283). 293 cell lysates (2 µg/lane) either nontransfected (Lane 1) or transiently transfected with the PTPN11 gene (Lane 2) (Origene Technologies).



IF (Immunofluorescence)

Fluorescent image of HeLa cell stained with SHP2 Antibody. HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with SHP2 primary antibody (1:25, 1 h at 37 degree). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 degree). Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree). SHP2 immunoreactivity is localized to Nucleolus and Cytoplasm significantly and Nucleus weakly.

ADDITIONAL INFORMATION

Related Product Information for anti-PTPN11 antibody	SHP2, also known as PTPN11, 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 the gene are a cause of Noonan syndrome as well as acute myeloid leukemia.
Product Categories/Family for anti-PTPN11 antibody	Neuroscience; Signal Transduction
References	Chan, R.J., et al., Blood 105(9):3737-3742 (2005). Sturla, L.M., et al., J. Biol. Chem. 280(15):14597-14604 (2005). Loh, M.L., et al., Leuk. Res. 29(4):459-462 (2005). Wang, Q., et al., J. Biol. Chem. 280(9):8397-8406 (2005). Niihori, T., et al., J. Hum. Genet. 50(4):192-202 (2005).

NCBI AND UNIPROT INFORMATION

NCBI GI #	33356177
NCBI GeneID	5781
NCBI Accession #	NP_002825.3; NP_542168.1
NCBI GenBank Nucleotide #	NM_002834.3
UniProt Accession #	Q06124; Q96HD7; A8K1D9
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 11 isoform 1
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 11
NCBI Official Symbol	PTPN11
NCBI Official Synonym Symbols	CFC; NS1; SHP2; BTP3; PTP2C; PTP-1D; SH-PTP2; SH-PTP3
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 11
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 11
UniProt Gene Name	PTPN11
UniProt Synonym Gene Names	PTP2C; SHPTP2; PTP-1D; PTP-2C; SHP-2; Shp2
UniProt Entry Name	PTN11_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/shp2-antibody-western-blot-immunofluorescence-elisa/284833>