

Phospho-SHP2 (Y542) Antibody

Rabbit mAb

Catalog # AP90642

Product Information

Application	WB, IF, ICC, IP
Primary Accession	Q06124
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	BPTP3; CFC; MGC14433; NS1; PTN11; PTP-1D; PTP-2C; PTP2C; PTPN11; SH-PTP2; SH-PTP3; SHP-2; Shp2; SHPTP2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	68011

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Phospho-SHP2 (Y542)
Description	SHP-2 a SH2-containing a ubiquitously expressed tyrosine-specific protein phosphatase. It participates in signaling events downstream of receptors for growth factors, cytokines, hormones, antigens and extracellular matrices in the control of cell growth, differentiation, migration, and death.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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 , PubMed: 32184441). 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). Acts as an effector of PDCD1-mediated inhibition of

T-cell response: recruited by phosphorylated PDCD1, mediating dephosphorylation of key T-cell receptor (TCR) proximal signaling molecules, leading to TCR signaling inhibition (PubMed:[32184441](#)).

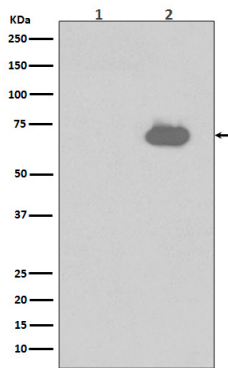
Cellular Location

Cytoplasm. Nucleus

Tissue Location

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

Images



Western blot analysis of Phospho-SHP2 (Y542) expression in (1) NIH/3T3 cell lysates; (2) NIH/3T3 cell lysates treated with PDGF.

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