

SH-PTP2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50017

Product Information

Application	WB, IHC
Primary Accession	Q06124
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	68011

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
Dilution	WB~~ 1:500-1:1000 IHC~~1:50-1:100
Format	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

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.

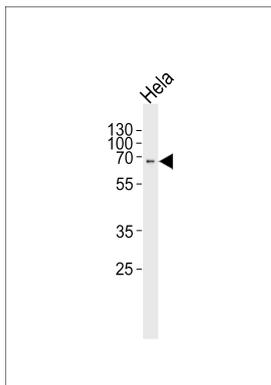
Background

Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. Dephosphorylates ROCK2 at Tyr-722 resulting in stimulation of its RhoA binding activity.

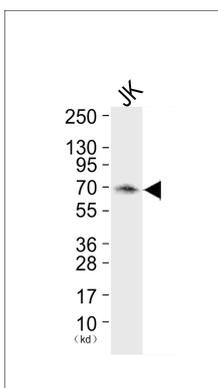
References

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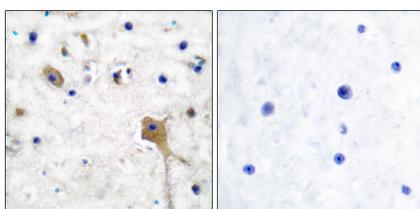
Images



Western blot analysis of lysates from 293, Hela cell line (from left to right), using SH-PTP2 Antibody(C0321). C0321 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Western blot analysis of extracts from JK cells (Lane 2), using SH-PTP2 Antibody. The lane on the left is treated with synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human brain tissue using SH-PTP2 antibody .

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