

SH-PTP2 Polyclonal Antibody

Catalog # AP72477

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q06124
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68011

Additional Information

Gene ID	5781
Other Names	PTPN11; PTP2C; SHPTP2; 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
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

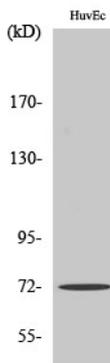
Tissue Location

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

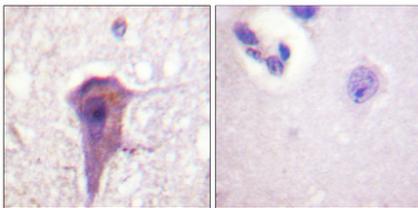
Background

Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. 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. Dephosphorylates CDC73 (PubMed:[26742426](#)).

Images



Western Blot analysis of various cells using SH-PTP2 Polyclonal Antibody diluted at 1 : 1000



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

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