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SHP2 (11I13) Rabbit Monoclonal Antibody

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Catalog # AP93779

Product Information

Application	WB, IP
Primary Accession	P35235
Reactivity	Rat, Mouse
Clonality	Monoclonal
Calculated MW	68035

Additional Information

Gene ID	19247
Other Names	Tyrosine-protein phosphatase non-receptor type 11, 3.1.3.48, Protein-tyrosine phosphatase SYP, SH-PTP2, SHP-2, Shp2, Ptpn11
Dilution	WB~~1:1000 IP~~N/A
Storage Conditions	-20℃

Protein Information

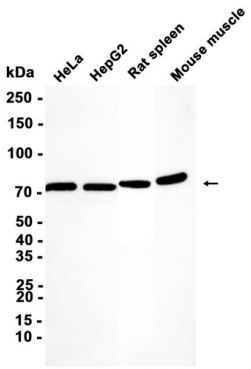
Name	Ptpn11
Function	Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus (PubMed:14967142). Positively regulates MAPK signal transduction pathway (By similarity). Dephosphorylates GAB1, ARHGAP35 and EGFR (By similarity). Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity (By similarity). Dephosphorylates CDC73 (By similarity). Dephosphorylates SOX9 on tyrosine residues, leading to inactivate SOX9 and promote ossification (PubMed:29644115). Dephosphorylates tyrosine-phosphorylated NEDD9/CAS-L (By similarity).
Cellular Location	Cytoplasm.
Tissue Location	Highly expressed in brain, heart and kidney.

Background

Enables cell adhesion molecule binding activity; protein tyrosine phosphatase activity; and signaling receptor binding activity. Involved in negative regulation of chondrocyte differentiation; positive regulation of cytokine production; and positive regulation of ossification. Acts upstream of or within several processes,

including cell surface receptor signaling pathway; myeloid cell differentiation; and regulation of hormone secretion. Predicted to be located in several cellular components, including mitochondrion; plasma membrane raft; and stress fiber. Predicted to be part of protein-containing complex. Is expressed in several structures, including alimentary system; brain; genitourinary system; hemolymphoid system gland; and liver and biliary system. Used to study several diseases, including Noonan syndrome 1; Noonan syndrome with multiple lentigines; hepatocellular adenoma; intrinsic cardiomyopathy (multiple); and juvenile myelomonocytic leukemia. Human ortholog(s) of this gene implicated in several diseases, including Noonan syndrome (multiple); Noonan syndrome with multiple lentigines 1; atrophic gastritis; juvenile myelomonocytic leukemia; and metachondromatosis. Orthologous to human PTPN11 (protein tyrosine phosphatase non-receptor type 11). [provided by Alliance of Genome Resources, Apr 2022]

Images



Western blot analysis of extracts from HeLa,HepG2 cells and Rat spleen,Mouse muscle tissue using AP93779 at 1:1000.