



SH-PTP2 Polyclonal Antibody

Catalog No	YP-Ab-14994
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	PTPN11
Immunogen	The antiserum was produced against synthesized peptide derived from human SH-PTP2. AA range:321-370
Specificity	SH-PTP2 Polyclonal Antibody detects endogenous levels of SH-PTP2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CFC;NS1;JMML;SHP2;BPTP3;PTP2C;METCDS;PTP-1D;SH-PTP2;SH-PTP3;P2;PTPN11;Tyrosine-protein phosphatase non-receptor type 11;SHPTP2;Protein-tyrosine phosphatase 1D;Protein-tyrosine phosphatase 2C;PTP-2C;SHP-2
Observed Band	68kD
Calculated Molecular Weight	68kD
Cell Pathway	Cytoplasm . Nucleus .
Tissue Specificity	Widely expressed, with highest levels in heart, brain, and skeletal muscle.
Function	catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,disease:Defects in PTPN11 are a cause of juvenile myelomonocytic leukemia (JMML) [MIM:607785]. JMML is a pediatric myelodysplastic syndrome that constitutes approximately 30% of childhood cases of myelodysplastic syndrome (MDS) and 2% of leukemia. It is characterized by leukocytosis with tissue infiltration and in vitro hypersensitivity of myeloid progenitors to granulocyte-macrophage colony stimulating factor.,disease:Defects in PTPN11 are a cause of Noonan-like syndrome [MIM:163955]; also known as Noonan-like/multiple giant cell lesion syndrome. It is an autosomal dominant disorder



characterized by Noonan features associates with giant cell lesions of bone and soft tissue.,disease:Defects in PTPN11 are the cause of LEOPARD syndrome [MIM:151100]. It is an autosomal dominant disorder allelic with Noonan

Background

The protein encoded by this gene 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 this gene are a cause of Noonan syndrome as well as acute myeloid leukemia. [provided by RefSeq, Aug 2016],

matters needing attention

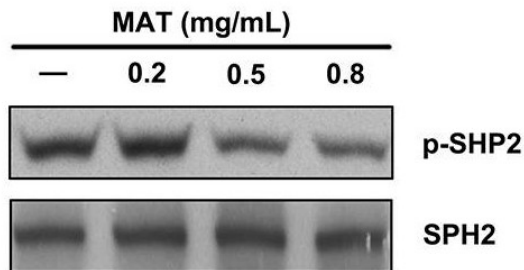
Avoid repeated freezing and thawing!

Usage suggestions

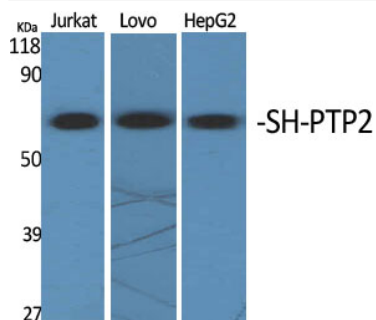
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



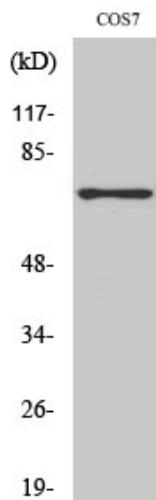
Products Images



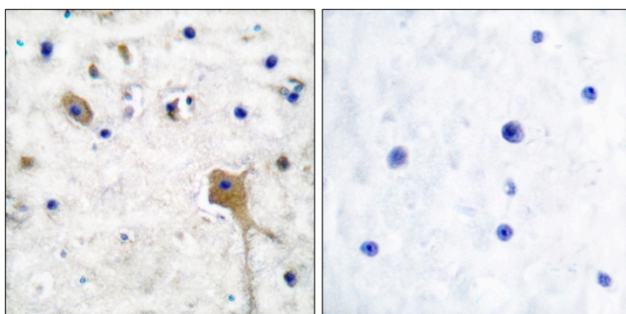
Ma, Lingdi, et al. "Matrine inhibits BCR/ABL mediated ERK/MAPK pathway in human leukemia cells." *Oncotarget* 8.65 (2017): 108880.



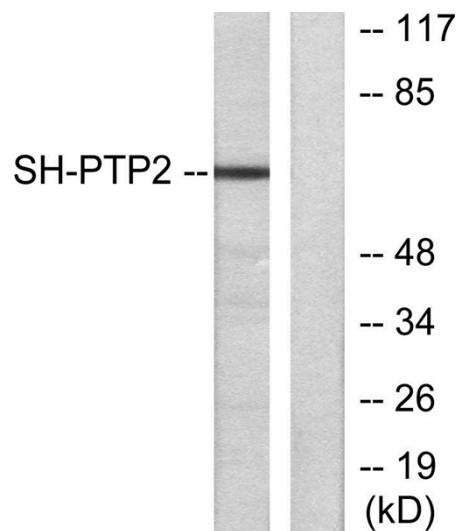
Western Blot analysis of various cells using SH-PTP2 Polyclonal Antibody diluted at 1:2000



Western Blot analysis of COS7 cells using SH-PTP2 Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using SH-PTP2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COS7 cells, using SH-PTP2 Antibody. The lane on the right is blocked with the synthesized peptide.