

[KO]SHP2 Rabbit mAb

Catalog # AP74848

Product Information

Application	WB, IHC-P, FC, IP
Primary Accession	Q06124
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	68011

Additional Information

Gene ID	5781
Other Names	PTPN11
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:20-1:50 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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

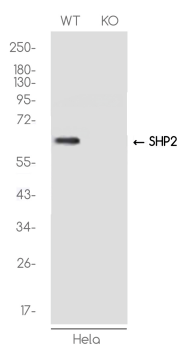
Tissue Location

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

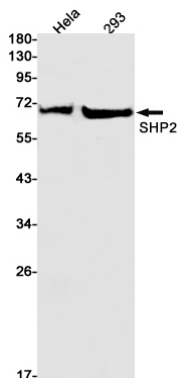
Background

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.

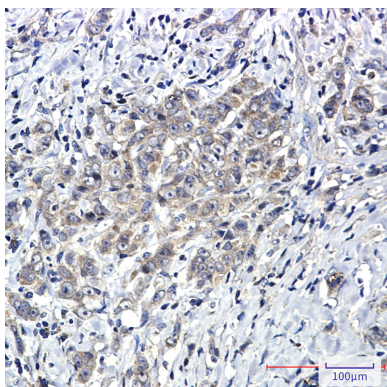
Images



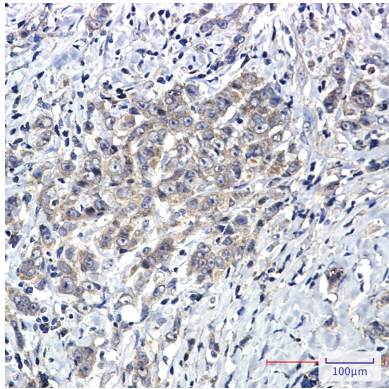
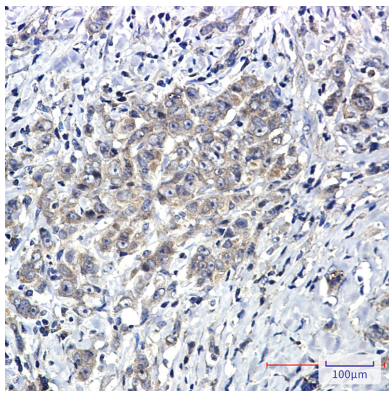
Western blot analysis of SHP2 in HeLa(WT) and SHP2-Knockout HeLa(KO) using SHP2 antibody.



Western blot analysis of SHP2 in HeLa, 293 lysates using SHP2 antibody.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using SHP2 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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