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Anti-SHP2 Antibody

Catalog # ABO10572

Product Information

Application	WB, IHC-P
Primary Accession	Q06124
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tyrosine-protein phosphatase non-receptor type 11(PTPN11) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5781
Other Names	Tyrosine-protein phosphatase non-receptor type 11, 3.1.3.48, Protein-tyrosine phosphatase 1D, PTP-1D, Protein-tyrosine phosphatase 2C, PTP-2C, SH-PTP2, SHP-2, Shp2, SH-PTP3, PTPN11, PTP2C, SHPTP2
Calculated MW	68011
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm.
Tissue Specificity	Widely expressed, with highest levels in heart, brain, and skeletal muscle. .
Source	Eukaryota
Protein Name	Tyrosine-protein phosphatase non-receptor type 11
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SHP2(578-592aa EDSARVYENVGLMQQ), identical to the related rat and mouse sequences.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily.

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.

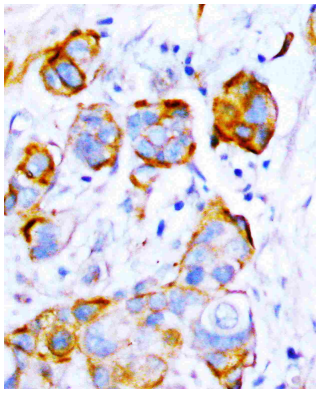
Background

The tyrosine phosphatase Shp2 is recruited into tyrosine-kinase signalling pathways through binding of its two amino-terminal SH2 domains to specific phosphotyrosine motifs, concurrent with its re-localization and stimulation of phosphatase activity. Shp2 can potentiate signalling through the MAP-kinase pathway and is required during early mouse development for gastrulation. Shp2 is specifically required in mesenchyme cells of the progress zone(PZ), directly beneath the distal ectoderm of the limb bud. Rather than integrating proliferative signals, Shp2 probably exerts its effects on limb development by influencing cell shape, movement or adhesion. Furthermore, the branchial arches, which also use Fgfs during bud outgrowth, similarly require Shp2. Thus, Shp2 regulates phosphotyrosine-signalling events during the complex ectodermal-mesenchymal interactions that regulate mammalian budding morphogenesis.

Images

Anti-SHP2 antibody, ABO10572, Western blottingWB:
JURKAT Cell Lysate





Anti-SHP2 antibody, ABO10572, IHC(P)IHC(P): Human Thyroid Cancer Tissue

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