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Anti-SHP2 Antibody

Catalog # ABO11168

Product Information

Application	WB
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 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	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(582-597aa RVYENVGLMQQQKSFR), different from the related rat and mouse sequences by one amino acid.
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

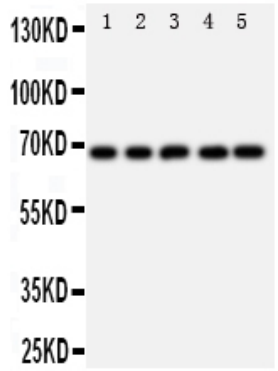
Name	PTPN11
Synonyms	PTP2C, SHPTP2
Function	Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus (PubMed:10655584, PubMed:14739280, PubMed:18559669, PubMed:18829466, PubMed:26742426, PubMed:28074573, 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

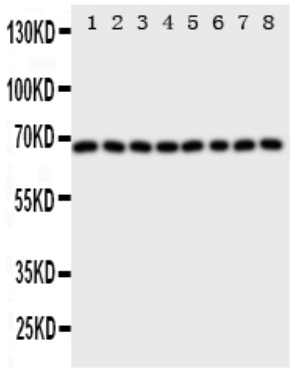
PTPN11(Tyrosine-protein phosphatase non-receptor type 11), also known as protein-tyrosine phosphatase 1D(PTP-1D), protein-tyrosine phosphatase 2C(PTP-2C), TYROSINE PHOSPHATASE SHP2(SHP2), BPTP3, SH-PTP2, SHP-2, SH-PTP3, is an enzyme that in humans is encoded by the PTPN11 gene. PTPN11 is a member of the protein tyrosine phosphatase(PTP) family. The open reading frame consists of 1,779 nucleotides potentially encoding a protein of 593 amino acids with a predicted molecular mass of 68 kD. 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.

Images

Anti-SHP2 antibody, ABO11168, Western blottingAll lanes: Anti SHP2 (ABO11168) at 0.5ug/mlLane 1: Rat Heart Tissue Lysate at 50ugLane 2: Rat Skeletal Muscle Tissue Lysate at 50ugLane 3: Rat Brain Tissue Lysate at 50ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: A549 Whole Cell Lysate at 40ugPredicted bind size: 68KDObserved bind



size: 68KD



Anti-SHP2 antibody, ABO11168, Western blottingLAll lanes: Anti SHP2 (ABO11168) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Kidney Tissue Lysate at 50ugLane 3: Rat Heart Tissue Lysate at 50ugLane 4: Rat Skeletal Muscle Tissue Lysate at 50ugLane 5: A431 Whole Cell Lysate at 40ugLane 6: JURKAT Whole Cell Lysate at 40ugLane 7: HELA Whole Cell Lysate at 40ugLane 8: U87 Whole Cell Lysate at 40ugPredicted bind size: 68KDObserved bind size: 68KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.