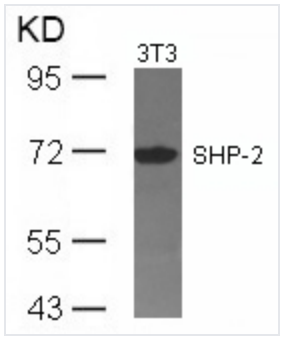
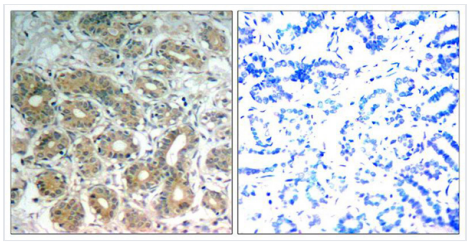
SHP-2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

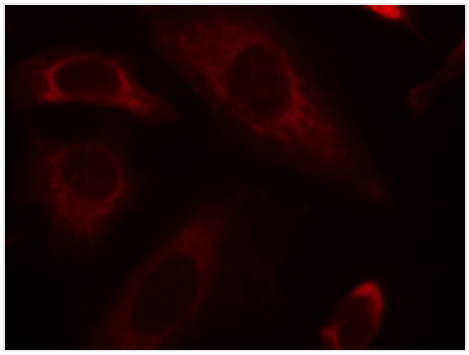
Product Name	SHP-2, Polyclonal Antibody
Full Product Name	SHP-2 (Ab-542) Antibody
Product Gene Name	anti-SHP-2 antibody
Product Synonym Names	Protein-tyrosine phosphatase 2C
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Concentration	1.0 mg/ml (lot specific)
Specificity	The antibody detects endogenous level of total SHP-2 protein.
Preparation and Storage	Store at -20 degree C for long term preservation (recommended). Store at 4 degree C for short term use.
Molecular Weight	52,828 Da
OMIM	151100
3D Structure	ModBase 3D Structure for Q06124
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa. 540~544 (H-E-Y-T-N) derived from Human SHP-2.
Target Name	SHP-2
Product Categories/Family for anti-SHP-2 antibody	Total protein Ab
Applications Tested/Suitable for anti-SHP-2 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)
Application Notes for anti-SHP-2 antibody	Western blotting: 1:500~1:1000 Immunohistochemistry: 1:50~1:100 Immunofluorescence: 1:100~1:200
Related Product Information for anti-SHP-2 antibody	Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus.
Other Notes	Small volumes of anti-SHP-2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for SHP-2 purchase	MBS9407334 is an antibody targeting SHP-2. Also known as SHP-2 (Ab-542) Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



Western Blot (WB) of anti-SHP-2 antibody
Western blot analysis of extracts from 3T3 cells using SHP-2(Ab-542) Antibody.



Immunohistochemistry (IHC) of anti-SHP-2 antibody
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SHP-2(Ab-542) Antibody (left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence (IF) of anti-SHP-2 antibody
Immunofluorescence staining of methanol-fixed Hela cells using SHP-2(Ab-542) Antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SHP-2. It may not necessarily be applicable to this product.

NCBI GI #	33356177
NCBI GeneID	5781
NCBI Accession #	NP_002825.3
UniProt Primary Accession #	Q06124
UniProt Secondary Accession #	Q96HD7; A8K1D9
UniProt Related Accession #	Q06124
GenBank Nucleotide #	NM_002834.3
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 11 isoform 1
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 11
NCBI Official Symbol	PTPN11
NCBI Official Synonym Symbols	CFC; NS1; JMML; SHP2; BPTP3; PTP2C; METCDS; PTP-1D; SH-PTP2; SH-PTP3
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 11
UniProt Synonym Protein Names	Protein-tyrosine phosphatase 1D; PTP-1D; Protein-tyrosine phosphatase 2C; PTP-2C; SH-PTP2; SHP-2; Shp2; SH-PTP3
Protein Family	Tyrosine-protein phosphatase non-receptor
UniProt Gene Name	PTPN11
UniProt Synonym Gene Names	PTP2C; SHPTP2; PTP-1D; PTP-2C; SHP-2; Shp2
UniProt Entry Name	PTN11_HUMAN

NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 11
NCBI Summary for SHP-2	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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]
UniProt Comments for SHP-2	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. Activation of SHP-2 and its association with Gab1 is critical for sustained Erk activation downstream of several growth factor receptors and cytokines. Protein type: EC 3.1.3.48; Protein phosphatase, tyrosine (non-receptor); Motility/polarity/chemotaxis Chromosomal Location of Human Ortholog: 12q24 Cellular Component: protein complex; mitochondrion; cytoplasm; nucleus; cytosol Molecular Function: protein domain specific binding; protein binding; phospholipase binding; peptide hormone receptor binding; SH3/SH2 adaptor activity; insulin receptor substrate binding; non-membrane spanning protein tyrosine phosphatase activity; protein tyrosine phosphatase activity; receptor tyrosine kinase binding; D1 dopamine receptor binding; phosphoprotein phosphatase activity; insulin receptor binding Biological Process: axon guidance; hormone-mediated signaling; nerve growth factor receptor signaling pathway; activation of MAPK activity; heart development; platelet-derived growth factor receptor signaling pathway; reproductive process in a multicellular organism; positive regulation of mitotic cell cycle; glucose homeostasis; negative regulation of insulin secretion; regulation of protein export from nucleus; regulation of cell adhesion mediated by integrin; ephrin receptor signaling pathway; abortive mitotic cell cycle; negative regulation of cell adhesion mediated by integrin; inner ear development; epidermal growth factor receptor signaling pathway; integrin-mediated signaling pathway; negative regulation of growth hormone secretion; phosphoinositide-mediated signaling; fibroblast growth factor receptor signaling pathway; cytokine and chemokine mediated signaling pathway; positive regulation of hormone secretion; regulation of multicellular organism growth; negative regulation of cortisol secretion; organ growth; genitalia development; triacylglycerol metabolic process; DNA damage checkpoint; T cell costimulation; insulin receptor signaling pathway; innate immune response; hormone metabolic process; brain development; platelet formation; blood coagulation; leukocyte migration Disease: Metachondromatosis; Noonan Syndrome 1; Juvenile Myelomonocytic Leukemia; Leopard Syndrome 1
Research Articles on SHP-2	**1.** PD-1/SHP-2 has a role in inhibiting Tc1/Th1 phenotypic responses and the activation of T cells in the tumor microenvironment
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