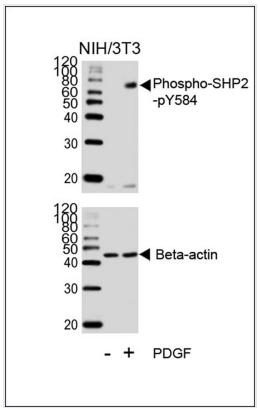
SHP2 Antibody – Rabbit Polyclonal

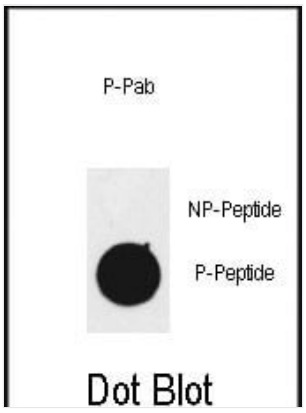
PRODUCT OVERVIEW

Product Name	SHP2, Polyclonal Antibody
Full Product Name	Phospho-SHP2 (Y584) Antibody
Product Gene Name	anti-SHP2 antibody
Product Synonym Gene Name	PTPN11
Product Synonym Names	PTPN11; PTP2C; SHPTP2; Tyrosine-protein phosphatase non-receptor type 11; Protein-tyrosine phosphatase 1D; Protein-tyrosine phosphatase 2C; SH-PTP2; SH-PTP3
Clonality	Polyclonal
Isotype	Ig
Host	Rabbit
Species Reactivity	Human
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Specificity	This SHP2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y584 of human SHP2.
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Molecular Weight	Calculated MW: H=45 kDa
OMIM	151100
3D Structure	ModBase 3D Structure for Q06124
Antigen Source	Human
Antigen Region	574-590
Antigen Type	Synthetic Peptide
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:18559669, PubMed:18829466, PubMed:26742426, PubMed:28074573). 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).
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Widely expressed, with highest levels in heart, brain, and skeletal muscle.
Product Categories/Family for anti-SHP2 antibody	Antibody Collections; Phospho Antibodies
Applications Tested/Suitable for anti-SHP2 antibody	Western Blot (WB), Dot Blot (DB), ELISA (EIA)
Application Notes for anti-SHP2 antibody	WB: 1:1000 DB: 1:500

Related Product Information for anti-SHP2 antibody	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab) SHP2 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.
Product References and Citations for anti-SHP2 antibody	Carver, K.C., et al. J. Biol. Chem. 285(11):8003-8012(2010). Pierpont, E.I., et al. Am. J. Med. Genet. A 152A (3), 591-600 (2010). Rani, D.S., et al. Mitochondrion 10(2):166-173(2010). Bakken, T., et al. Virology 397(2):379-388(2010).
Other Notes	Small volumes of anti-SHP2 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 SHP2 purchase	MBS9231797 is an antibody targeting SHP2. Also known as Phospho-SHP2 (Y584) Antibody. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-SHP2 antibody
Western blot analysis of lysates from mouse NIH/3T3 cell line,untreated or treated with PDGF,using Phospho-SHP2-pY584 (upper) or Beta-actin (lower).



Dot Blot (DB) of anti-SHP2 antibody
Dot blot analysis of anti-Phospho-SHP2-pY584 Phospho-specific Pab on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SHP2. It may not necessarily be applicable to this product.

NCBI GI #	33356177
NCBI GeneID	5781
NCBI Accession #	NP_002825.3
NCBI Related Accession #	NP_542168.1
UniProt Primary Accession #	Q06124
UniProt Secondary Accession #	P41499; P35235
UniProt Related Accession #	Q06124
GenBank Nucleotide #	NP_002825.3
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	Signaling threshold-regulating transmembrane adapter
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 SHP2	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]
UniProt Comments for SHP2	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; cytosol; nucleus Molecular Function: protein domain specific binding; protein binding; phospholipase binding; SH3/SH2 adaptor activity; peptide hormone receptor binding; insulin receptor substrate binding; non-membrane spanning protein tyrosine phosphatase activity; protein tyrosine phosphatase activity; receptor tyrosine kinase binding; phosphoprotein phosphatase activity; D1 dopamine receptor binding; insulin receptor binding Biological Process: axon guidance; nerve growth factor receptor signaling pathway; hormone-mediated signaling; activation of MAPK activity; heart development; platelet-derived growth factor receptor signaling pathway; positive regulation of mitotic cell cycle; reproductive process in a multicellular organism; glucose homeostasis; regulation of protein export from nucleus; negative regulation of insulin secretion; regulation of cell adhesion mediated by integrin; ephrin receptor signaling pathway; abortive mitotic cell cycle; inner ear development; negative regulation of cell adhesion mediated by integrin; negative regulation of growth hormone secretion; epidermal growth factor receptor signaling pathway; integrin-mediated signaling pathway; 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 SHP2	**1.** Mechanism of Folding and Binding of the N-Terminal SH2 Domain from SHP2
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.

Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/shp2/9231797