



Rabbit Anti-Phospho-SHP2 (Tyr580) antibody

SL3405R

Product Name:	Phospho-SHP2 (Tyr580)
Chinese Name:	磷酸化蛋白酪氨酸磷酸酶2抗体
Alias:	SHP2 (phospho Y580); p-SHP2 (phospho Y580); PTPN11(Phospho-Tyr580); PTPN11; PTN11_HUMAN; BPTP 3; BPTP3; CFC; MGC14433; SHP 2; Noonan syndrome 1; Noonan syndrome 1 protein tyrosine phosphatase 2C; NS 1; NS1; Protein tyrosine phosphatase 2C; Protein Tyrosine Phosphatase Non receptor Type 11; PTP 1D; PTP 2C; PTP1D; PTP2C; PTPN 11; SAP2; SH PTP2; SH PTP3; SH2 domain containing protein tyrosine phosphatase 2; SHIP2; SHP 2; SHP-2; SHPTP 2; SHPTP2; SHPTP3; SIT protein precursor; Syp; Tyrosine protein phosphatase non receptor type 11; Src homology 2 (SH2) domain containing phosphotyrosinephosphatase 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	66kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human PTPN11 around the phosphorylation site of Tyr584:RV(p-Y)E
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>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]</p> <p>Function: Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. Dephosphorylates ROCK2 at Tyr-722 resulting in stimulation of its RhoA binding activity.</p> <p>Subunit: Interacts with phosphorylated LIME1 and BCAR3. Interacts with SHB and INPP5D/SHIP1. Interacts with MILR1 (tyrosine-phosphorylated). Interacts with FLT1 (tyrosine-phosphorylated), FLT3 (tyrosine-phosphorylated), FLT4 (tyrosine-phosphorylated), KIT and GRB2. Interacts with PDGFRA (tyrosine phosphorylated). Interacts (via SH2 domain) with TEK/TIE2 (tyrosine phosphorylated) (By similarity). Interacts with PTPNS1 and CD84. Interacts with phosphorylated SIT1 and MPZL1. Interacts with FCRL3, FCRL4, FCRL6 and ANKHD1. Interacts with KIR2DL1; the interaction is enhanced by ARRB2. Interacts with GAB2. Interacts with TERT; the interaction retains TERT in the nucleus. Interacts with PECAM1 and FER. Interacts with EPHA2 (activated); participates in PTK2/FAK1 dephosphorylation in EPHA2 downstream signaling. Interacts with ROS1; mediates PTPN11 phosphorylation. Interacts with PDGFRB (tyrosine phosphorylated); this interaction increases the PTPN11 phosphatase activity.</p> <p>Subcellular Location: Cytoplasm.</p> <p>Tissue Specificity: Widely expressed, with highest levels in heart, brain, and skeletal muscle.</p> <p>Post-translational modifications: Phosphorylated on Tyr-546 and Tyr-584 upon receptor protein tyrosine kinase activation; which creates a binding site for GRB2 and other SH2-containing proteins. Phosphorylated upon activation of the receptor-type kinase FLT3. Phosphorylated upon activation of the receptor-type kinase PDGFRA (By similarity). Phosphorylated by</p>

activated PDGFRB.

Similarity:

Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily.

Contains 2 SH2 domains.

Contains 1 tyrosine-protein phosphatase domain.

SWISS:

Q06124

Gene ID:

5781

Database links:

[Entrez Gene: 5781](#) Human

[Entrez Gene: 19247](#) Mouse

[Entrez Gene: 25622](#) Rat

[Omim: 176876](#) Human

[SwissProt: Q06124](#) Human

[SwissProt: P35235](#) Mouse

[SwissProt: P41499](#) Rat

[Unigene: 506852](#) Human

[Unigene: 474046](#) Mouse

[Unigene: 8681](#) Mouse

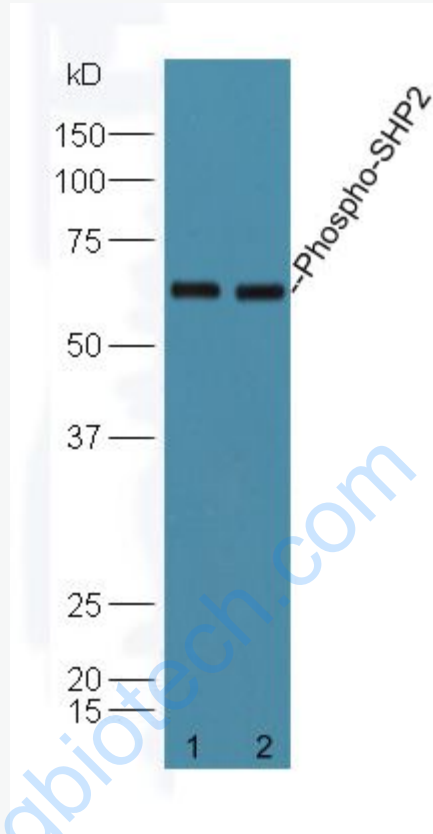
[Unigene: 98209](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SHP2(SH-PTP2)参与多种细胞内信号传导 如MAP kinase、PI3k等途径, SHP2也是许多其他原癌基因信号通路的重要组成部分, 在细胞的增殖及分化等过程扮演重要的角色.

Picture:



Sample:

Lane1: Brain(Mouse) lysate at 30ug;

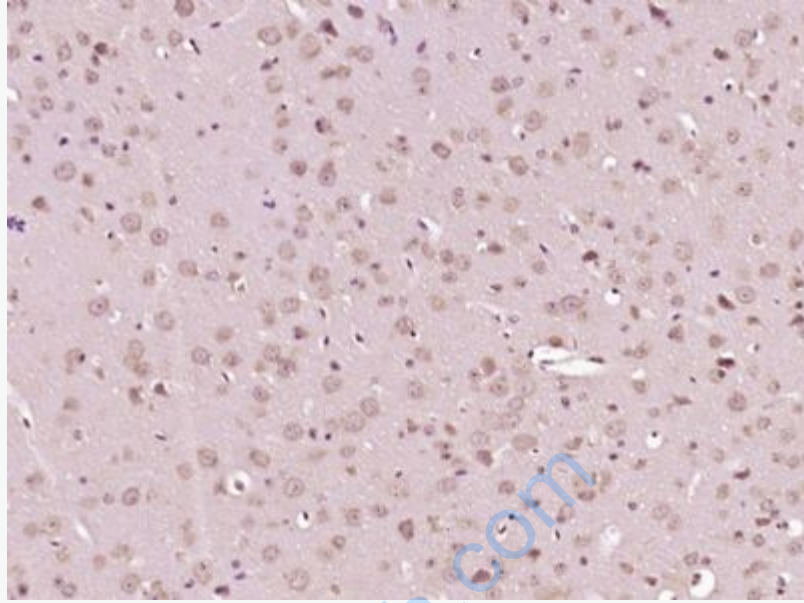
Lane2: Muscle(Mouse) lysate at 30ug;

Primary: Anti-Phospho-SHP2 (SL3405R) at 1:300 dilution;

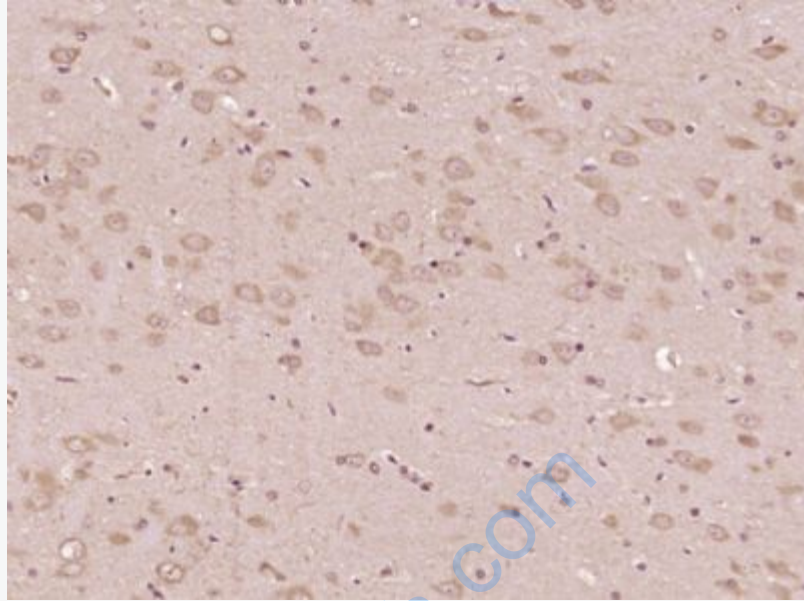
Secondary: HRP conjugated Goat-Anti-Rabbit IgG(bse-0295G-HRP) at 1:5000 dilution;

Predicted band size: 66 kD

Observed band size: 66 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-SHP2 (Tyr580)) Polyclonal Antibody, Unconjugated (SL3405R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-SHP2 (Tyr580)) Polyclonal Antibody, Unconjugated (SL3405R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.