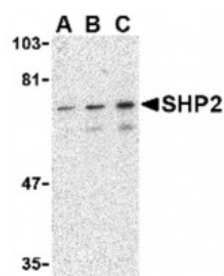




SHP2 Antibody

CATALOG NUMBER: 3901



Western blot analysis of SHP2 in mouse skeletal muscle tissue lysate with SHP2 antibody at (A) 0.5, (B) 1 and (C) 2 ug/mL.

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Chicken: (100%)
TESTED APPLICATIONS:	ELISA, WB
APPLICATIONS:	SHP2 antibody can be used for the detection of SHP2 by Western blot at 0.5 - 2 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1407 - Mouse Skeletal Muscle Tissue Lysate
IMMUNOGEN:	SHP2 antibody was raised against a 14 amino acid synthetic peptide from near the carboxy terminus of human SHP2. The immunogen is located within amino acids 510 - 560 of SHP2.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	SHP2 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	SHP2 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	SHP2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	SHP2 Antibody: CFC, NS1, SHP2, BTP3, PTP2C, PTP-1D, SH-PTP2, SH-PTP3, SHPTP2, Tyrosine-protein phosphatase non-receptor type 11, Protein-tyrosine phosphatase 1D
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ACCESSION NO.:	NP_002825
PROTEIN GI NO.:	33356177
OFFICIAL SYMBOL:	PTPN11
GENE ID:	5781

Background

BACKGROUND: SHP2 Antibody: Src homology-2 domain containing protein (SHP2) is a member of the protein tyrosine phosphatase (PTP) family, a protein family that contains signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. SHP2 contains two tandem Src homology-2 (SH2) domains, which function as phosphotyrosine binding domains either directly or through scaffolding intermediates such as the insulin-receptor substrate 1 (IRS-1). These SH2 domains mediate the interaction of SHP2 with its substrates, allowing SHP2 to dephosphorylate proteins that inhibit signaling kinases such as ERK1 and AKT. SHP2 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. Recent experiments have shown SHP2 plays a significant role in hepatoprotection and liver regeneration.

REFERENCES:

- 1) Yu Z, Ahmad S, Schwartz JL, et al. Protein-tyrosine phosphatase SHP2 is positively linked to proteinase-activated receptor 2-mediated mitogenic pathway. J. Biol. Chem.1997; 272:7519-24.
- 2) Ostman A, Hellberg C, and Bohmer FD. Protein-tyrosine phosphatases and cancer. Nat. Rev. Cancer 2006; 6:307-20.
- 3) Bard-Chapeau EA, Yuan J, Droin N, et al. Concerted functions of Gab1 and Shp2 in liver regeneration and hepatoprotection. Mol/ Cell. Biol. 2006; 26:4664-74.

FOR RESEARCH USE ONLY

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