Anti-SHP2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R010916

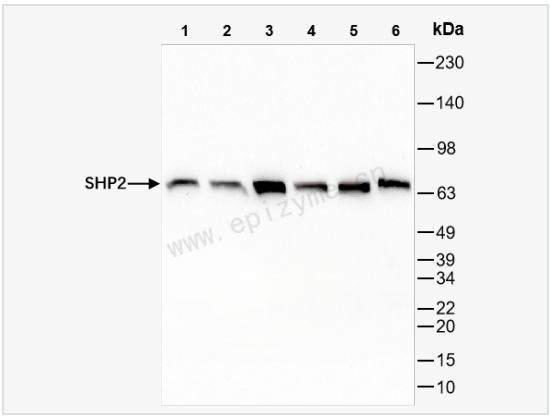
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	59K71L12
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human SHP2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-SHP2 Rabbit mAb [59K71L12] is for research use only and not for use in diagnostic or therapeutic procedures.

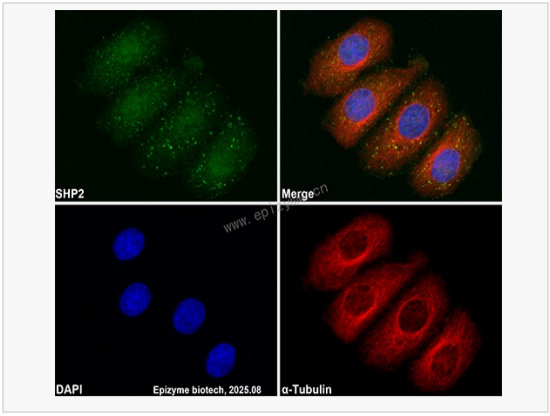
Protein Information

Synonyms	PTP2C; SHPTP2; PTPN11; Tyrosine-protein phosphatase non-receptor type 11; Protein-tyrosine phosphatase 1D; Protein-tyrosine phosphatase 2C; SH-PTP2; SH-PTP3; PTP-1D; PTP-2C; SHP-2; Shp2.
Calculated MW	Calculated MW: 68 kDa; Observed MW: 68 kDa
Uniprot ID	Q06124
Gene ID	5781
Background	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]
Cellular Location	Cytoplasm.Nucleus.
Tissue Location	Widely expressed, with highest levels in heart, brain, and skeletal muscle.

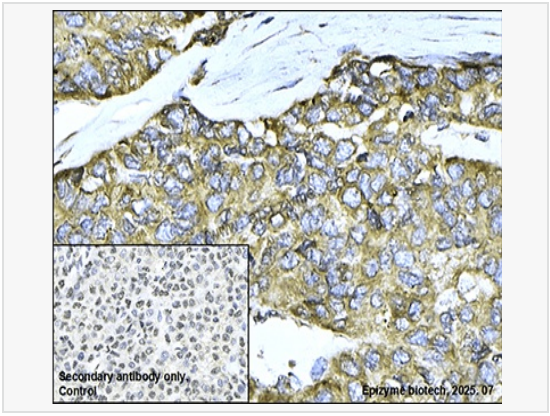
Validation Images



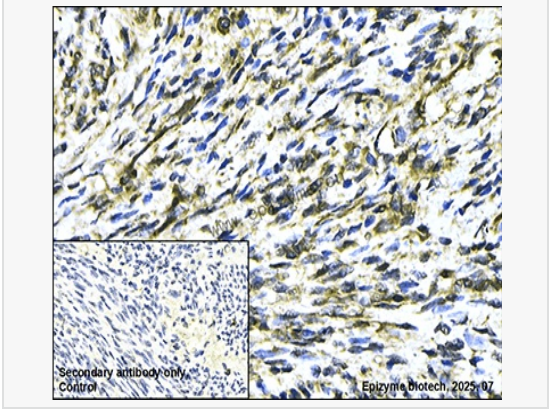
Western Blot - Anti-SHP2 Rabbit mAb [59K71L12]
All lanes: R010916 at 1:2,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: 293T (Human embryonic kidney cell) whole cell lysates
Lane 5: K562 (Human chronic myeloid leukemia cell) whole cell lysates
Lane 6: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 68 kDa
Observed band size: 68 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-SHP2 Rabbit mAb [59K71L12]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R010916 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-SHP2 Rabbit mAb [59K71L12]
Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R010916 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-SHP2 Rabbit mAb [59K71L12]
Sample: Paraformaldehyde-fixed, paraffin embedded human endometrial carcinoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R010916 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.