

Anti-Phospho-SHP2 (Y542) Antibody [SN61-01]



ET1611-22

| | |
|----------------------------|---|
| Product Type: | Recombinant Rabbit monoclonal IgG, primary antibodies |
| Species reactivity: | Mouse, Human |
| Applications: | WB, IF-Cell, IP |
| Molecular Wt: | Predicted band size: 68 kDa |
| Clone number: | SN61-01 |

Description: Tyrosine-protein phosphatase non-receptor type 11 (PTPN11) also known as protein-tyrosine phosphatase 1D (PTP-1D), Src homology region 2 domain-containing phosphatase-2 (SHP-2), or protein-tyrosine phosphatase 2C (PTP-2C) is an enzyme that in humans is encoded by the PTPN11 gene. PTPN11 is a protein tyrosine phosphatase (PTP) Shp2. PTPN11 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.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Tyr542 of Human SHP2 aa 511-560 / 593.

Positive control: NIH/3T3 treated with 40ng/ml PDGF for 40 minutes whole cell lysate, B16F1.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: Q06124 Human | P35235 Mouse

Recommended Dilutions:

| | |
|----------------|--|
| WB | 1:2,000 |
| IF-Cell | 1:50-1:200 |
| IP | Use at an assay dependent concentration. |

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% SodiumAzide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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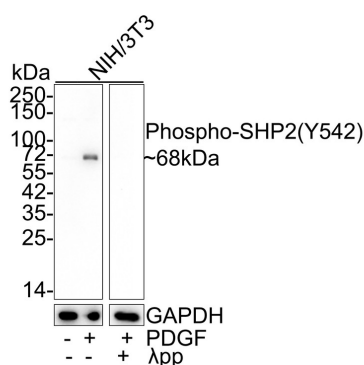


Fig1: Western blot analysis of Phospho-SHP2 (Y542) on different lysates with Rabbit anti-Phospho-SHP2 (Y542) antibody (ET1611-22) at 1/2,000 dilution.

Lane 1: NIH/3T3 whole cell lysate

Lane 2: NIH/3T3 treated with 40ng/mL PDGF for 40 minutes whole cell lysate

Lane 3: NIH/3T3 treated with 40ng/mL PDGF for 40 minutes then treated with λpp for 1 hour whole cell lysate

Lysates/proteins at 20 μg/Lane.

Predicted band size: 68 kDa

Observed band size: 68 kDa

Exposure time: 1 minute 30 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (ET1611-22) at 1/2,000 dilution was used in 5% NFDm/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:50,000 dilution was used for 1 hour at room temperature.

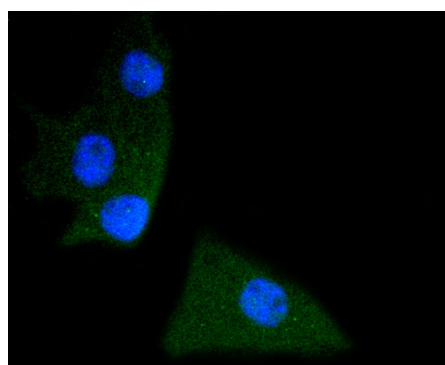


Fig2: ICC staining of Phospho-SHP2 (Y542) in B16F1 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1611-22, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Tsang YH et al. Novel Functions of the Phosphatase SHP2 in the DNA Replication and Damage Checkpoints. PLoS One 7:e49943 (2012).
2. Banes-Berceli AK et al. Angiotensin II and endothelin-1 augment the vascular complications of diabetes via JAK2 activation. Am J Physiol Heart Circ Physiol 293:H1291-9 (2007).

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