Anti-SHP2 Antibody [SN72-02]

ET1611-35

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IHC-P
Molecular Wt:	Predicted band size: 68 kDa
Clone number:	SN72-02

Description: Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus .Positively regulates MAPK signal transduction pathway.Dephosphorylates GAB1, ARHGAP35 and EGFR.Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity.Dephosphorylates CDC73.Dephosphorylates SOX9 on tyrosine residues, leading to inactivate SOX9 and promote ossification.

Immunogen: Synthetic peptide within N-terminal human SHP2.

Positive control: K-562 cell lysate, 293T cell lysate, NIH/3T3 cell lysate, mouse brain tissue lysate, mouse heart tissue lysate, rat brain tissue lysate, rat heart tissue lysate, human tonsil tissue, mouse testis tissue, rat testis tissue.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: Q06124 Human | P35235 Mouse | P41499 Rat

Recommended Dilutions:

WB	1:1,000-1:5,000
IP	Use at an assay dependent concentration.
IHC-P	1:500

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

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

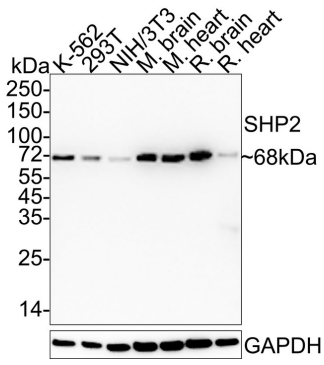

Fig1: Western blot analysis of SHP2 on different lysates with Rabbit anti-SHP2 antibody (ET1611-35) at 1/1,000 dilution.

Lane 1: K-562 cell lysate (20 µg/Lane)
Lane 2: 293T cell lysate (20 µg/Lane)
Lane 3: NIH/3T3 cell lysate (20 µg/Lane)
Lane 4: Mouse brain tissue lysate (40 µg/Lane)
Lane 5: Mouse heart tissue lysate (40 µg/Lane)
Lane 6: Rat brain tissue lysate (40 µg/Lane)
Lane 7: Rat heart tissue lysate (40 µg/Lane)

Predicted band size: 68 kDa
Observed band size: 68 kDa

Exposure time: 1 minute;

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 (ET1611-35) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

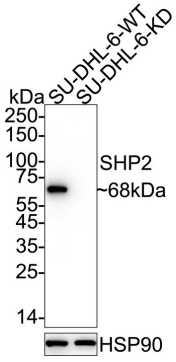

Fig2: Western blot analysis of SHP2 on different lysates with Rabbit anti-SHP2 antibody (ET1611-35) at 1/2,000 dilution.

Lane 1: SU-DHL-6-si NT cell lysate
Lane 2: SU-DHL-6-si SHP2 cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 68 kDa
Observed band size: 68 kDa

Exposure time: 30 seconds; ECL: K1801;

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 (ET1611-35) at 1/2,000 dilution was used in primary antibody dilution at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

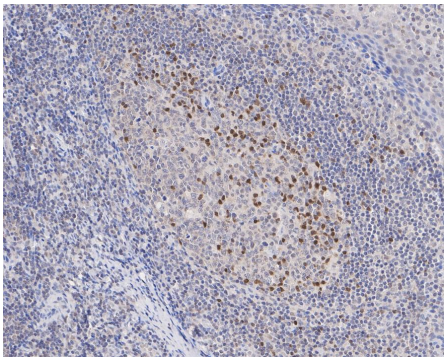

Fig3: Immunohistochemical analysis of paraffin-embedded human tonsil tissue with Rabbit anti-SHP2 antibody (ET1611-35) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-35) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

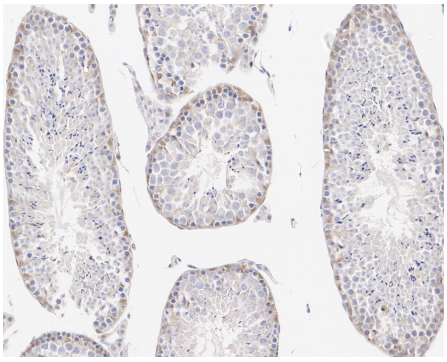

Fig4: Immunohistochemical analysis of paraffin-embedded mouse testis tissue with Rabbit anti-SHP2 antibody (ET1611-35) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-35) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

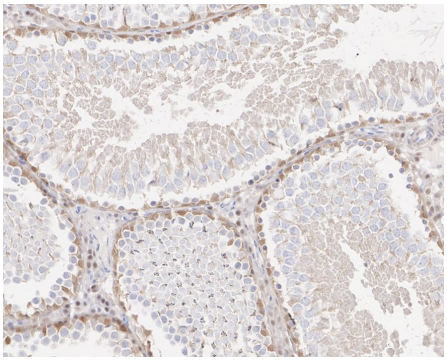

Fig5: Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-SHP2 antibody (ET1611-35) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-35) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Soong, J. et al. 2013. Plexin B1 inhibits MET through direct association and regulates Shp2 expression in melanocytes. J. Cell. Sci. 126: 688-695.
2. Edwards J.J., et al. 2014. A PTPN11 allele encoding a catalytically impaired SHP2 protein in a patient with a Noonan syndrome phenotype. Am. J. Med. Genet. A 164:2351-2355.