Synaptopodin Recombinant Antibody [PSH10-45] - Rat IgG1 (Chimeric)

HA601402

Product Type:	Recombinant Chimeric Antibody, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IHC-Fr, IHC-P, WB
Molecular Wt:	Predicted band size: 100 kDa
Clone number:	PSH10-45

Description: Synaptopodin is a protein that in humans is encoded by the SYNPO gene. Synaptopodin is an actin-associated protein that may play a role in actin-based cell shape and motility. The name synaptopodin derives from the protein's associations with postsynaptic densities and dendritic spines and with renal podocytes.

Immunogen: Recombinant protein within Mouse Synaptopodin aa 1-929.

Positive control: Human kidney tissue, mouse brain tissue, mouse kidney tissue, rat striatum tissue, Mouse brain tissue lysate, Rat brain tissue lysate.

Subcellular location: Cytoplasm, cytoskeletonm Cell junction, tight junctionm Perikaryonm Cell projection, dendritic spinem Postsynaptic densitym Synapse, Cytoplasm, cytosol.

Database links: SwissProt: Q8N3V7 Human | Q8CC35 Mouse | Q9Z327 Rat

Recommended Dilutions:

IHC-Fr	1:500
IHC-P	1:200-1:500
WB	1:2,000

Storage Buffer: PBS (pH7.4), 0.1% 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

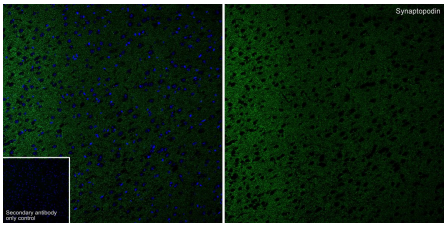

Fig1: Immunofluorescence analysis of frozen mouse brain tissue with Rat anti-Synaptopodin antibody (HA601402) at 1/500 dilution.

The section was pre-treated using 1% SDS buffer (in PBS, pH 7.4) for 5 minutes at room temperature.

The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA601402, green) at 1/500 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rat IgG H&L (iFluor™ 488, HA1133) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

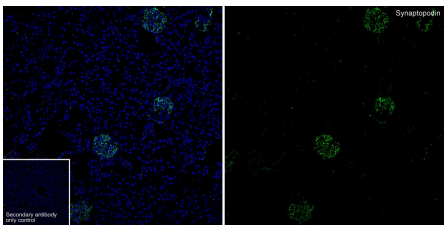

Fig2: Immunofluorescence analysis of frozen mouse kidney tissue with Rat anti-Synaptopodin antibody (HA601402) at 1/500 dilution.

The section was pre-treated using 1% SDS buffer (in PBS, pH 7.4) for 5 minutes at room temperature.

The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA601402, green) at 1/500 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rat IgG H&L (iFluor™ 488, HA1133) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

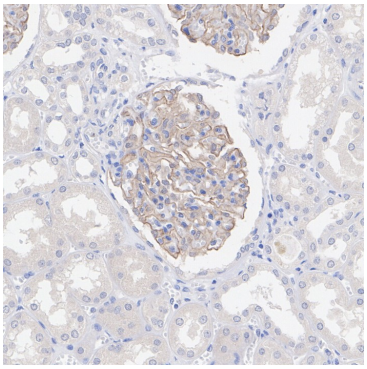

Fig3: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rat anti-Synaptopodin antibody (HA601402) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA601402) at 1/200 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.

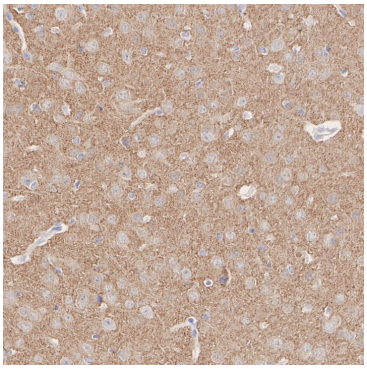

Fig4: Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rat anti-Synaptopodin antibody (HA601402) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA601402) 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.

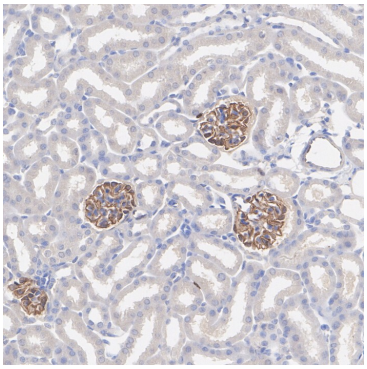

Fig5: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue with Rat anti-Synaptopodin antibody (HA601402) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA601402) at 1/200 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.

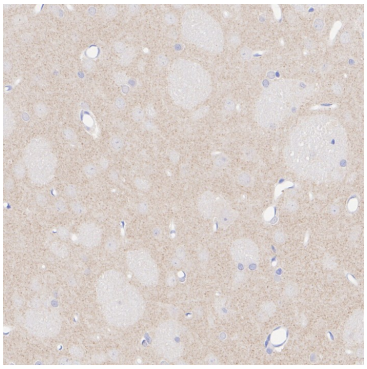

Fig6: Immunohistochemical analysis of paraffin-embedded rat striatum tissue with Rat anti-Synaptopodin antibody (HA601402) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA601402) 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.

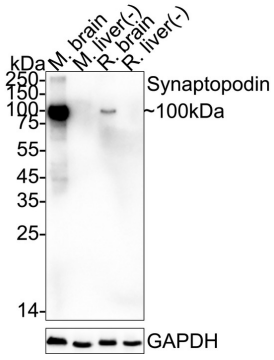

Fig7: Western blot analysis of Synaptopodin on different lysates with Rat anti-Synaptopodin antibody (HA601402) at 1/2,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Mouse liver tissue lysate (negative)
Lane 3: Rat brain tissue lysate
Lane 4: Rat liver tissue lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 100 kDa
Observed band size: 100 kDa

Exposure time: 46 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 (HA601402) at 1/2,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rat IgG H&L - HRP Secondary Antibody (HA1023) at 1/5,000 dilution was used for 1 hour at room temperature.

Background References

1. Wu PY et al. Synaptopodin: a key regulator of Hebbian plasticity. Front Cell Neurosci. 2024 Nov
2. Kruse P et al. Synaptopodin Regulates Denervation-Induced Plasticity at Hippocampal Mossy Fiber Synapses. Cells. 2024 Jan