Anti-Plexin B2 Antibody [PSH03-48] - BSA and Azide free

HA750882

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 205 kDa
Clone number:	PSH03-48

Description: Members of the B class of plexins, such as PLXNB2 are transmembrane receptors that participate in axon guidance and cell migration in response to semaphorins. Cell surface receptor for SEMA4C, SEMA4D and SEMA4G that plays an important role in cell-cell signaling. Plays a role in glutamatergic synapse development and is required for SEMA4A-mediated excitatory synapse development. Binding to class 4 semaphorins promotes downstream activation of RHOA and phosphorylation of ERBB2 at 'Tyr-1248'. Required for normal differentiation and migration of neuronal cells during brain corticogenesis and for normal embryonic brain development. Regulates the migration of cerebellar granule cells in the developing brain. Plays a role in RHOA activation and subsequent changes of the actin cytoskeleton 1. Plays a role in axon guidance, invasive growth and cell migration. May modulate the activity of RAC1 and CDC42.

Immunogen: Recombinant protein within human Plexin B2 aa 1-1,250 / 1,838.

Positive control: LNCaP cell lysate, 293T cell lysate, HeLa cell lysate, U-87 MG cell lysate, HepG2 cell lysate, K-562 cell lysate, Jurkat cell lysate, MCF7 cell lysate, HeLa, human colon cancer tissue, human liver tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: O15031 Human

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:100
IHC-P	1:2,000

Storage Buffer: 1*PBS (pH7.4).

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

Purity: Protein A affinity purified.

Images

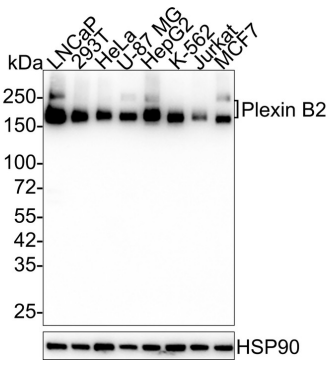

Fig1: Western blot analysis of Plexin B2 on different lysates with Rabbit anti-Plexin B2 antibody (HA750882) at 1/2,000 dilution.

Lane 1: LNCaP cell lysate
Lane 2: 293T cell lysate
Lane 3: HeLa cell lysate
Lane 4: U-87 MG cell lysate
Lane 5: HepG2 cell lysate
Lane 6: K-562 cell lysate
Lane 7: Jurkat cell lysate
Lane 8: MCF7 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 205 kDa
Observed band size: 170/240 kDa

Exposure time: 43 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 (HA750882) at 1/2,000 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.

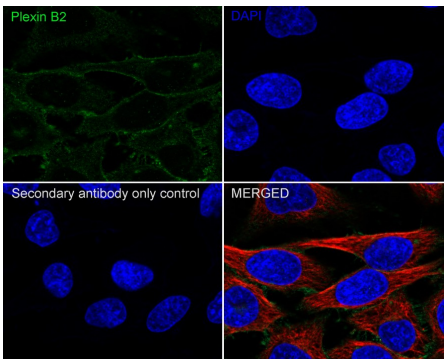

Fig2: Immunocytochemistry analysis of HeLa cells labeling Plexin B2 with Rabbit anti-Plexin B2 antibody (HA750882) at 1/100 dilution.

Cells were fixed in 100% precooled methanol for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Plexin B2 antibody (HA750882) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

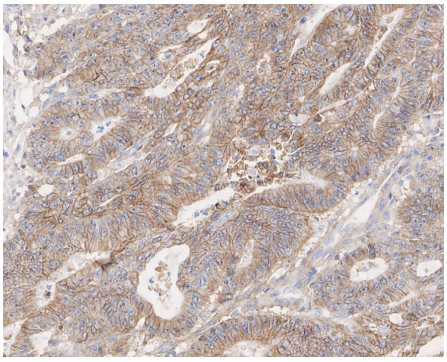

Fig3: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with Rabbit anti-Plexin B2 antibody (HA750882) at 1/2,000 dilution.

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 (HA750882) at 1/2,000 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.

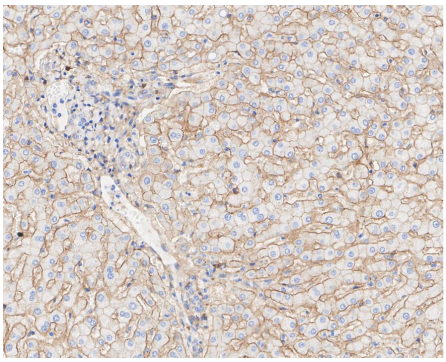

Fig4: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-Plexin B2 antibody (HA750882) at 1/2,000 dilution.

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 (HA750882) at 1/2,000 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. Zhou X et al. Microglia and macrophages promote corralling, wound compaction and recovery after spinal cord injury via Plexin-B2. Nat Neurosci. 2020 Mar
2. Li Y et al. Macrophages facilitate peripheral nerve regeneration by organizing regeneration tracks through Plexin-B2. Genes Dev. 2022 Feb