Anti-Gli1 Antibody [JF09-08] - BSA and Azide free

HA750361

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 118 kDa
Clone number:	JF09-08

Description: Zinc finger protein GLI1 also known as glioma-associated oncogene is a protein that in humans is encoded by the GLI1 gene. It was originally isolated from human glioblastoma cells. The Gli proteins are the effectors of Hedgehog (Hh) signaling and have been shown to be involved in cell fate determination, proliferation and patterning in many cell types and most organs during embryo development. In the developing spinal cord the target genes of Gli proteins, that are themselves transcription factors, are arranged into a complex gene regulatory network that translates the extracellular concentration gradient of Sonic hedgehog into different cell fates along the dorsoventral axis. The Gli transcription factors activate/inhibit transcription by binding to Gli responsive genes and by interacting with the transcription complex. The Gli transcription factors have DNA binding zinc finger domains which bind to consensus sequences on their target genes to initiate or suppress transcription.

Immunogen: Synthetic peptide within Human Gli1 aa 38-82 / 1106.

Positive control: K-562 cell lysate, HeLa cell lysate, Mouse brain tissue lysate, Rat brain tissue lysate, HeLa, Neuro-2a, C6, mouse fallopian tissue, rat testis tissue.

Subcellular location: Nucleus, Cytoplasm.

Database links: SwissProt: P08151 Human | P47806 Mouse
Entrez Gene: 140589 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:50-1:200
IF-Cell	1:100

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

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

Purity: Protein A affinity purified.

Images

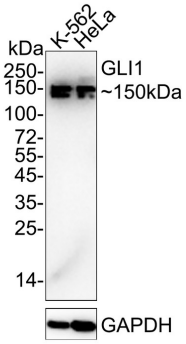

Fig1: Western blot analysis of Gli1 on different lysates with Rabbit anti-Gli1 antibody (HA750361) at 1/1,000 dilution.

Lane 1: K-562 cell lysate
Lane 2: HeLa cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 118 kDa
Observed band size: 150 kDa

Exposure time: 59 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 (HA750361) 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.

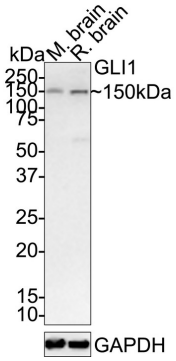

Fig2: Western blot analysis of Gli1 on different lysates with Rabbit anti-Gli1 antibody (HA750361) at 1/1,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Rat brain tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 118 kDa
Observed band size: 150 kDa

Exposure time: 1 minute 22 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 (HA750361) 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.

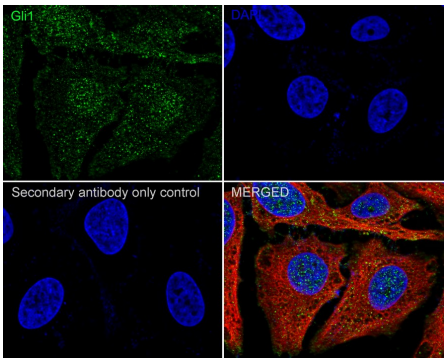

Fig3: Immunocytochemistry analysis of HeLa cells labeling Gli1 with Rabbit anti-Gli1 antibody (HA750361) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS 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-Gli1 antibody (HA750361) 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.

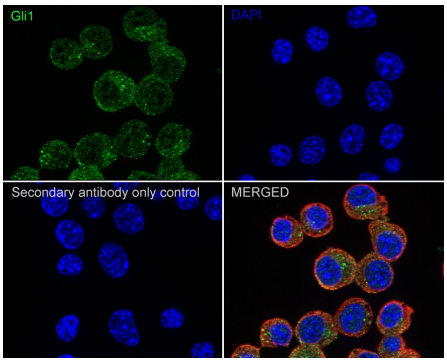

Fig4: Immunocytochemistry analysis of Neuro-2a cells labeling Gli1 with Rabbit anti-Gli1 antibody (HA750361) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS 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-Gli1 antibody (HA750361) 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.

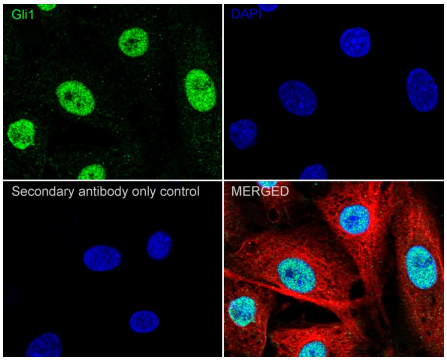

Fig5: Immunocytochemistry analysis of C6 cells labeling Gli1 with Rabbit anti-Gli1 antibody (HA750361) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS 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-Gli1 antibody (HA750361) 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.

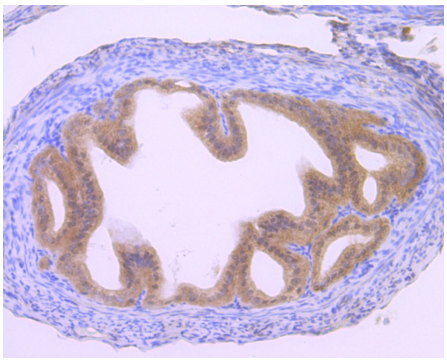

Fig6: Immunohistochemical analysis of paraffin-embedded mouse fallopian tissue using anti-Gli1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750361, 1/50) for 30 minutes 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.

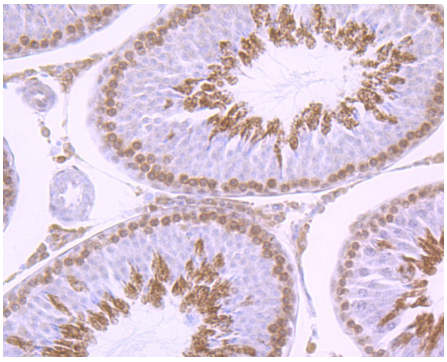

Fig7: Immunohistochemical analysis of paraffin-embedded rat testis tissue using anti-Gli1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750361, 1/50) for 30 minutes 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. Li P et al. Nestin Mediates Hedgehog Pathway Tumorigenesis. Cancer Res 76:5573-83 (2016).
2. Smirnova NF et al. Detection and quantification of epithelial progenitor cell populations in human healthy and IPF lungs. Respir Res 17:83 (2016).