Anti-PHF6 Antibody [PSH02-35] - BSA and Azide free

HA750800

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 41 kDa
Clone number:	PSH02-35

Description: This gene is a member of the plant homeodomain (PHD)-like finger (PHF) family. It encodes a protein with two PHD-type zinc finger domains, indicating a potential role in transcriptional regulation, that localizes to the nucleolus. Mutations affecting the coding region of this gene or the splicing of the transcript have been associated with Borjeson-Forssman-Lehmann syndrome (BFLS), a disorder characterized by cognitive disability, epilepsy, hypogonadism, hypometabolism, obesity, swelling of subcutaneous tissue of the face, narrow palpebral fissures, and large ears. Alternate splicing results in multiple transcript variants, encoding different isoforms.

Immunogen: Recombinant protein within human PHF6 aa 1-365 / 365 (Q8IWS0).

Positive control: HeLa cell lysate, HEK-293 cell lysate, K-562 cell lysate, Jurkat cell lysate, A431 cell lysate, HepG2 cell lysate, MCF7 cell lysate, COS-1 cell lysate, NIH/3T3 cell lysate, Neuro-2a cell lysate, RAW264.7 cell lysate, NIH/3T3, HeLa, human ovary tissue, human testis tissue, mouse ovary tissue, rat ovary tissue, rat testis tissue.

Subcellular location: Nucleus, nucleolus, Chromosome, centromere, kinetochore

Database links: SwissProt: Q8IWS0 Human | Q9D4J7 Mouse | D3ZQV8 Rat

Recommended Dilutions:

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

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

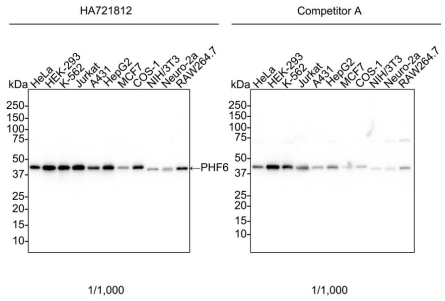


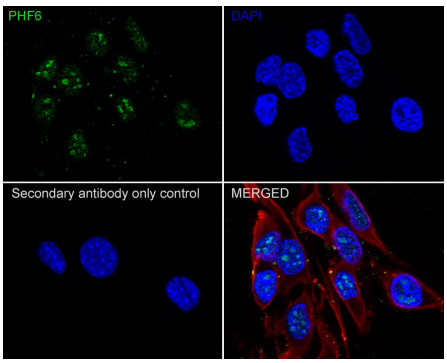
Fig1: Western blot analysis of PHF6 on different lysates with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution and competitor's antibody at 1/1,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: HEK-293 cell lysate (20 µg/Lane)
Lane 3: K-562 cell lysate (20 µg/Lane)
Lane 4: Jurkat cell lysate (20 µg/Lane)
Lane 5: A431 cell lysate (20 µg/Lane)
Lane 6: HepG2 cell lysate (20 µg/Lane)
Lane 7: MCF7 cell lysate (20 µg/Lane)
Lane 8: COS-1 cell lysate (20 µg/Lane)
Lane 9: NIH/3T3 cell lysate (20 µg/Lane)
Lane 10: Neuro-2a cell lysate (20 µg/Lane)
Lane 11: RAW264.7 cell lysate (20 µg/Lane)

Predicted band size: 41 kDa
Observed band size: 41 kDa
Exposure time: 20 seconds; ECL: K1802;
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 (HA750800) at 1/1,000 dilution and competitor's antibody at 1/1,000 dilution were 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 NIH/3T3 cells labeling PHF6 with Rabbit anti-PHF6 antibody (HA750800) 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-PHF6 antibody (HA750800) 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.

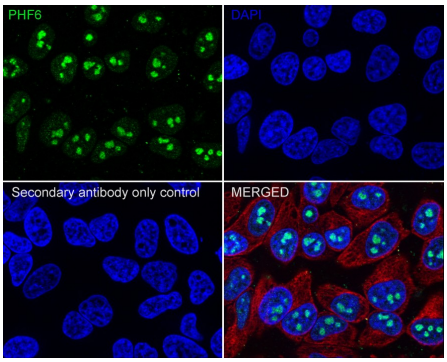


Fig3: Immunocytochemistry analysis of HeLa cells labeling PHF6 with Rabbit anti-PHF6 antibody (HA750800) at 1/100 dilution.

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-PHF6 antibody (HA750800) 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.

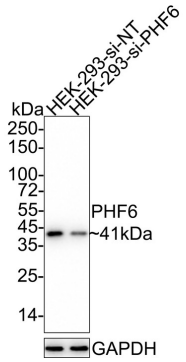


Fig4: Western blot analysis of PHF6 on different lysates with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution.

Lane 1: HEK-293-si NT cell lysate
Lane 2: HEK-293-si PHF6 cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 41 kDa
Observed band size: 41 kDa

Exposure time: 10 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 (HA750800) 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.

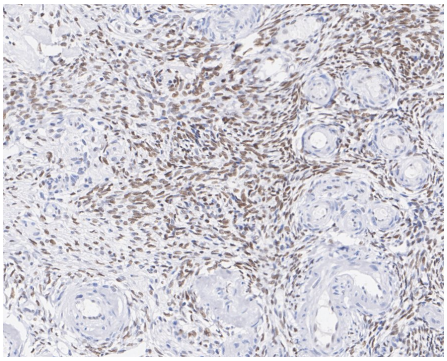


Fig5: Immunohistochemical analysis of paraffin-embedded human ovary tissue with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750800) at 1/1,000 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.

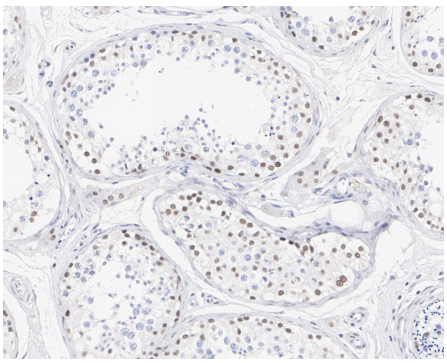


Fig6: Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750800) at 1/1,000 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.

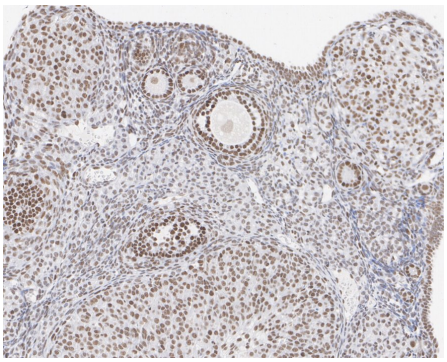


Fig7: Immunohistochemical analysis of paraffin-embedded mouse ovary tissue with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750800) at 1/1,000 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.

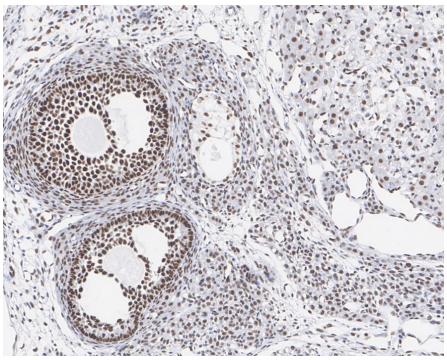


Fig8: Immunohistochemical analysis of paraffin-embedded rat ovary tissue with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750800) at 1/1,000 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.

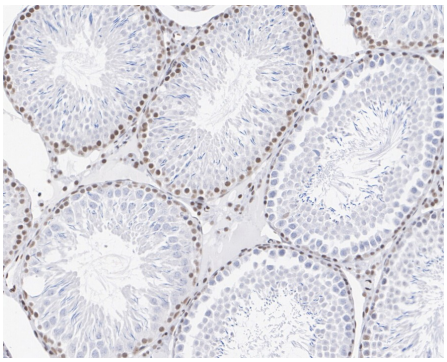


Fig9: Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-PHF6 antibody (HA750800) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750800) at 1/1,000 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. Tsai HI. et al. PHF6 functions as a tumor suppressor by recruiting methyltransferase SUV39H1 to nucleolar region and offers a novel therapeutic target for PHF6-muntant leukemia. Acta Pharm Sin B. 2022 Apr;12(4):1913-1927.
2. Wang X, et al. PHF6 promotes the progression of endometrial carcinoma by increasing cancer cells growth and decreasing T-cell infiltration. J Cell Mol Med. 2023 Mar;27(5):609-621.