

Anti-HIF1AN Antibody [JG37-66]

ET7108-50



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	40 kDa
Clone number:	JG37-66

Description: Factor inhibiting HIF-1 (FIH-1) exists as a homodimer and binds to HIF-1 α . Specifically, FIH-1 operates as an asparaginyl hydroxylase. It catalyzes the hydroxylation of the β -carbon of Asparagine residue 803 within the carboxy terminal transactivation domain of HIF-1 α . This hydroxylation event blocks the association of HIF-1 α with co-activators. FIH-1 also binds to von Hippel-Lindau (VHL) tumor suppressor protein, which represses transcriptional activity of HIF-1 α . In transiently transfected human osteosarcoma cells, FIH-1 localizes to the cytoplasm. The structure of FIH-1 includes a jellyroll-like β -barrel containing ferrous-binding triad residues. The gene encoding human FIH-1 maps to chromosome 10q24.

Immunogen: Synthetic peptide within Human HIF1AN aa 1-50 / 349.

Positive control: A549 cell lysate, Jurkat cell lysate, LOVO, SiHa, human prostate carcinoma tissue.

Subcellular location: Nucleus. Cytoplasm.

Database links: SwissProt: Q9NWT6 Human

Recommended Dilutions:

WB	1:1,000-1:2,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

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

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

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

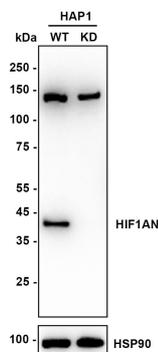
华安生物
HUABIO
www.huabio.cn

Images

Fig1: Western blot analysis of HIF1AN on different lysates with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/1,000 dilution.

Lane 1: HAP1-parental cell lysate

Lane 2: HAP1-HIF1AN KD cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 40 kDa

Observed band size: 40 kDa

Exposure time: 40 seconds; ECL: K1801;

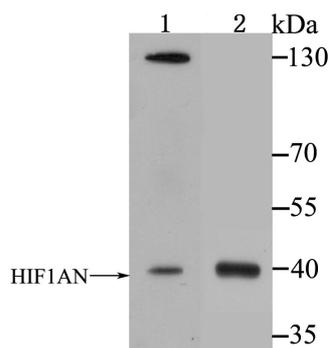
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET7108-50) at 1/1,000 dilution was used in K1803 at 4°C 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 HIF1AN on different lysates with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/500 dilution.

Lane 1: A549 cell lysates

Lane 2: Jurkat cell lysates



Lysates/proteins at 10 µg/Lane.

Predicted band size: 40 kDa

Observed band size: 40 kDa

Exposure time: 2 minutes;

10% 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 (ET7108-50) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 5,000 dilution was used for 1 hour at room temperature.

Hangzhou Huaan Biotechnology Co., Ltd.

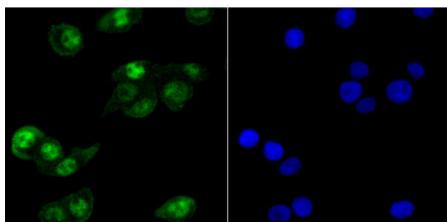
Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

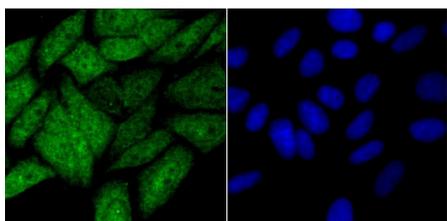
华安生物
HUABIO
www.huabio.cn

Fig3: Immunocytochemistry analysis of LOVO cells labeling HIF1AN with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/50 dilution.



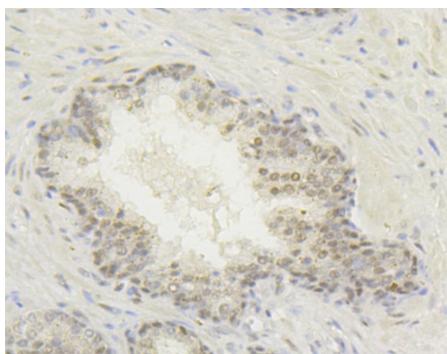
Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/50 dilution in 2% negative goat serum overnight at 4 °C. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Fig4: Immunocytochemistry analysis of SiHa cells labeling HIF1AN with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/50 dilution.



Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/50 dilution in 2% negative goat serum overnight at 4 °C. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Fig5: Immunohistochemical analysis of paraffin-embedded human prostate carcinoma tissue with Rabbit anti-HIF1AN antibody (ET7108-50) at 1/50 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 ddH₂O and PBS, and then probed with the primary antibody (ET7108-50) at 1/50 dilution for 0.5 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.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Lando D et al. FIH-1 is an asparaginyl hydroxylase enzyme that regulates the transcriptional activity of hypoxia-inducible factor. *Genes Dev* 16:1466-1471 (2002).
2. Zheng X et al. Interaction with factor inhibiting HIF-1 defines an additional mode of cross-coupling between the Notch and hypoxia signaling pathways. *Proc Natl Acad Sci USA* 105:3368-3373 (2008).

Hangzhou Huan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
H U A B I O
www.huabio.cn