Anti-HIF-1 beta Antibody [ST05-25] - BSA and Azide free

HA750187

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 87 kDa
Clone number:	ST05-25

Description: AhR, Arnt 1, Arnt 2 and BMAL1 are members of a family of transcription factors that contain a basic helix-loop-helix motif and a common “PAS” motif. The aromatic (aryl) hydrocarbon receptor, AhR, is a ligand dependent transcription factor that interacts with specific DNA sequences termed xenobiotic responsive elements (XREs) to activate several genes including CYP1A1, glutathione S-transferase Ya subunit and DT-diaphorase. The Ah receptor nuclear translocator proteins (Arnt 1 or Arnt 2) are required for ligand-dependent nuclear translocation of the Ah receptor and are also necessary for Ah receptor binding to the XRE element. Arnt 2 (aryl hydrocarbon receptor nuclear translocator 2), also known as Hif-2b or bHLHe1, is a 712 amino acid nuclear protein that is exclusively expressed in adult brain and kidney. Containing a basic helix-loop-helix (bHLH) domain, a PAC (PAS-associated C-terminal) domain and two PAS (PER-ARNT-SIM) domains, Arnt 2 specifically recognizes the xenobiotic response element (XRE).

Immunogen: Recombinant protein within Human HIF-1 beta aa 479-789 / 789.

Positive control: A549 cell lysate, Jurkat cell lysate, mouse testis tissue lysate, rat testis tissue lysate, human liver tissue, human fallopian tube tissue, human placenta tissue, human uterus tissue.

Subcellular location: Nucleus.

Database links: SwissProt: P27540 Human | P53762 Mouse | P41739 Rat

Recommended Dilutions:

WB	1:2,000-1:5,000
IHC-P	1:50-1:200

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

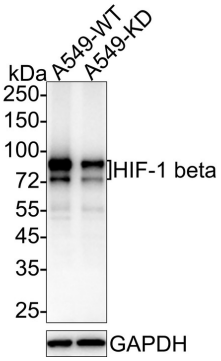

Fig1: Western blot analysis of HIF-1 beta on different lysates with Rabbit anti-HIF-1 beta antibody (HA750187) at 1/5,000 dilution.

Lane 1: A549-si NT cell lysate
Lane 2: A549-si HIF-1 beta cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 87 kDa
Observed band size: 72/87 kDa

Exposure time: 1 minute 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 (HA750187) at 1/5,000 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.

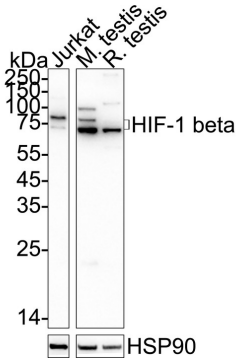

Fig2: Western blot analysis of HIF-1 beta on different lysates with Rabbit anti-HIF-1 beta antibody (HA750187) at 1/2,000 dilution.

Lane 1: Jurkat cell lysate (10 µg/Lane)
Lane 2: Mouse testis tissue lysate (20 µg/Lane)
Lane 3: Rat testis tissue lysate (20 µg/Lane)

Predicted band size: 87 kDa
Observed band size: 72/87 kDa

Exposure time: 1 minute; 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 (HA750187) 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.

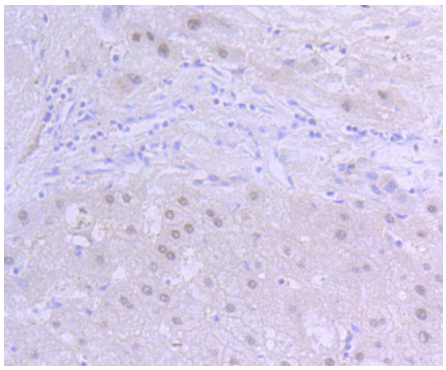

Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-HIF-1 beta antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750187, 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.

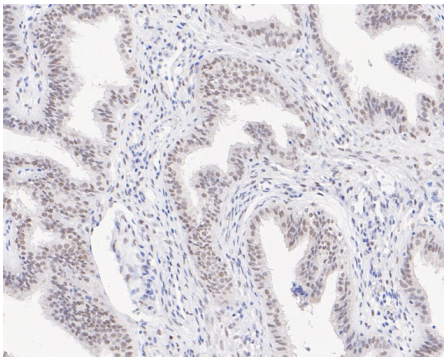

Fig4: Immunohistochemical analysis of paraffin-embedded human fallopian tube tissue using anti-HIF-1 beta antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750187, 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.

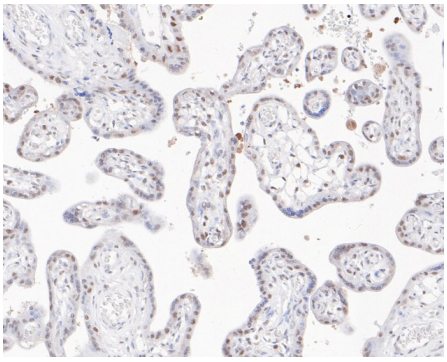

Fig5: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-HIF-1 beta antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750187, 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.

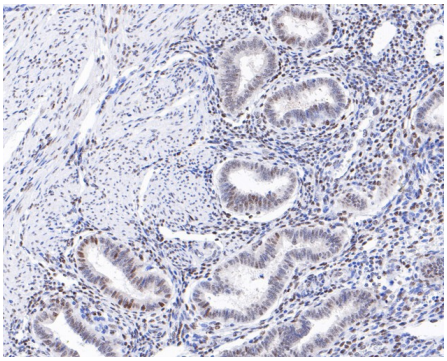

Fig6: Immunohistochemical analysis of paraffin-embedded human uterus tissue using anti-HIF-1 beta antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA750187, 1/200) 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. Bian Y., et al. An enzyme assisted RP-RPLC approach for in-depth analysis of human liver phosphoproteome. J. Proteomics 96:253-262(2014).
2. Van Damme P., et al. N-terminal acetylome analyses and functional insights of the N-terminal acetyltransferase NatB. Proc. Natl. Acad. Sci. U.S.A. 109:12449-12454(2012).