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HIF-1 beta Antibody

Rabbit mAb
Catalog # AP90541

Product Information

Application	WB, IHC
Primary Accession	P27540
Reactivity	Human
Clonality	Monoclonal
Other Names	ARNT;HIF-1beta;HIF1B;HIF1BETA;TANGO;bHLHe2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	86636

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human HIF-1 beta
Description	HIF-1β is also known as AhR nuclear translocator (ARNT) due to its ability to partner with the aryl hydrocarbon receptor (AhR) to form a heterodimeric transcription factor complex. Together with AhR, HIF-1β plays an important role in xenobiotics metabolism. In addition, a chromosomal translocation leading to a TEL-ARNT fusion protein is associated with acute myeloblastic leukemia. Studies also found that ARNT/HIF-1β expression levels decrease significantly in pancreatic islets from patients with type 2 diabetes, suggesting that HIF-1β plays an important role in pancreatic β-cell function.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

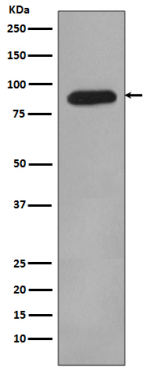
Protein Information

Name	ARNT (HGNC:700)
Synonyms	BHLHE2
Function	Transcription factor that functions as an obligate heterodimerization partner for several basic helix-loop-helix PER-ARNT- SIM (bHLH-PAS) proteins. Forms heterodimers with the aryl hydrocarbon receptor (AHR) to mediate the transcriptional response to xenobiotics by binding xenobiotic response elements (XREs) or dioxin response elements (DREs) in target gene promoters (PubMed:28396409, PubMed:34521881). Also heterodimerizes with hypoxia-inducible factor alpha subunits (HIF1A, EPAS1, NPAS1 or NPAS3) to form hypoxia-inducible transcription factors that bind hypoxia response elements (HREs) and activate genes involved in cellular and systemic

responses to hypoxia, including angiogenesis, erythropoiesis, and metabolic adaptation (PubMed:16181639, PubMed:20699359). Plays a central role in environmental sensing and developmental and physiological regulation of gene expression (PubMed:34521881).

Cellular Location Nucleus.

Images



Western blot analysis of HIF-1 beta expression in Human fetal kidney lysate.

Image not found : 202311/AP90541-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human colon, using HIF-1 beta Antibody .

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