

HIF-1 β Polyclonal Antibody

Catalog # AP63505

Product Information

Application	WB, IHC-P
Primary Accession	P27540
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	86636

Additional Information

Gene ID	405
Other Names	ARNT; BHLHE2; Aryl hydrocarbon receptor nuclear translocator; ARNT protein; Class E basic helix-loop-helix protein 2; bHLHe2; Dioxin receptor, nuclear translocator; Hypoxia-inducible factor 1-beta; HIF-1-beta; HIF1-beta
Dilution	WB~~WB: 1:1000-2000 IHC: 1:200-500 IHC-P~~WB: 1:1000-2000 IHC: 1:200-500
Format	PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.
Storage Conditions	-20°C

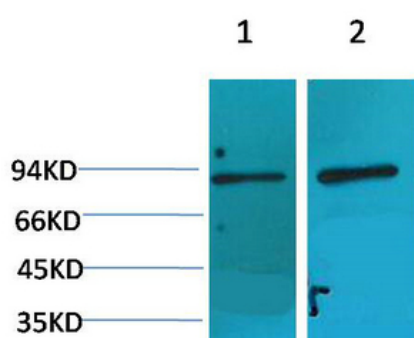
Protein Information

Name	ARNT (HGNC:700)
Synonyms	BHLHE2
Function	Required for activity of the AHR. Upon ligand binding, AHR translocates into the nucleus, where it heterodimerizes with ARNT and induces transcription by binding to xenobiotic response elements (XRE). Not required for the ligand-binding subunit to translocate from the cytosol to the nucleus after ligand binding (PubMed: 34521881). The complex initiates transcription of genes involved in the regulation of a variety of biological processes, including angiogenesis, hematopoiesis, drug and lipid metabolism, cell motility and immune modulation (Probable). The heterodimer binds to core DNA sequence 5'- TACGTG-3' within the hypoxia response element (HRE) of target gene promoters and functions as a transcriptional regulator of the adaptive response to hypoxia (By similarity). The heterodimer ARNT:AHR binds to core DNA sequence 5'-TGCGTG-3' within the dioxin response element (DRE) of target gene promoters and activates their transcription (PubMed: 28396409).

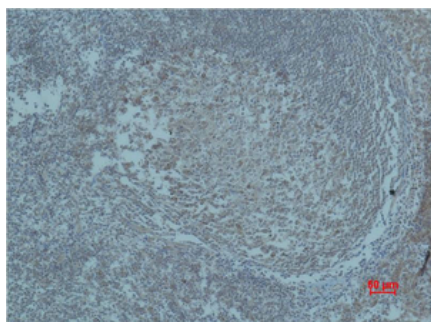
Background

Required for activity of the Ah (dioxin) receptor. This protein is required for the ligand-binding subunit to translocate from the cytosol to the nucleus after ligand binding. The complex then initiates transcription of genes involved in the activation of PAH procarcinogens. The heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters and functions as a transcriptional regulator of the adaptive response to hypoxia (By similarity). The heterodimer ARNT:AHR binds to core DNA sequence 5'-TGCGTG-3' within the dioxin response element (DRE) of target gene promoters and activates their transcription (PubMed:[28396409](#)).

Images



Western blot analysis of 1) Mouse Brain, 2) Rat Brain using HIF-1 β Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human Tonsil Tissue using HIF-1 β Polyclonal Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.