

HIF-1β Polyclonal Antibody

Catalog # AP70317

Product Information

ApplicationWB, IHC-PPrimary AccessionP27540

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW86636

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~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

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

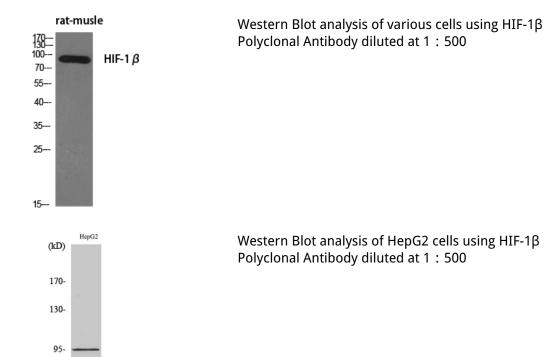
DNA sequence 5'-TGCGTG-3' within the dioxin response element (DRE) of target gene promoters and activates their transcription (PubMed: 28396409).

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

55-



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