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Anti-HIF1 Beta Picoband Antibody

Catalog # ABO11830

Product Information

Application	WB
Primary Accession	P27540
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Aryl hydrocarbon receptor nuclear translocator(ARNT) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	405
Other Names	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, ARNT, BHLHE2
Calculated MW	86636
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Nucleus.
Source	Eukaryota
Protein Name	Aryl hydrocarbon receptor nuclear translocator
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human HIF1 beta recombinant protein (Position: V416-E789). Human HIF1 beta shares 86% and 83% amino acid (aa) sequences identity with mouse and rat HIF1 beta, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 1 bHLH (basic helix-loop-helix) domain.

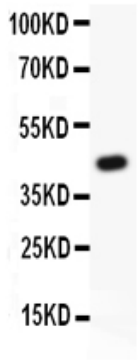
Protein Information

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.

Background

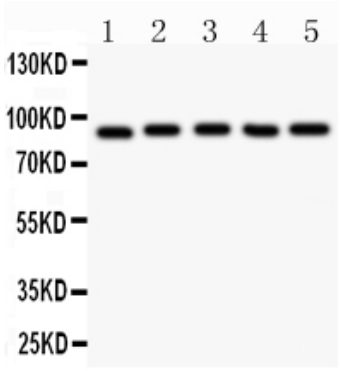
ARNT is also known as HIF1-beta or HIF1B. This gene encodes a protein containing a basic helix-loop-helix domain and two characteristic PAS domains along with a PAC domain. It is mapped to 1q21.3. The encoded protein binds to ligand-bound aryl hydrocarbon receptor and aids in the movement of this complex to the nucleus, where it promotes the expression of genes involved in xenobiotic metabolism. This protein is also a co-factor for transcriptional regulation by hypoxia-inducible factor 1. ARNT is a structural component of the XRE-binding form of the Ah receptor. It also functions in concert with RelB in a CD30-induced negative feedback mechanism.

Images



Anti-HIF1 beta Picoband antibody, ABO11830-1.jpgAll lanes: Anti HIF1 beta (ABO11830) at 0.5ug/mlWB: Recombinant Human HIF1 beta Protein 0.5ngPredicted bind size: 49KDObserved bind size: 49KD

Anti-HIF1 beta Picoband antibody, ABO11830-2.jpgAll lanes: Anti HIF1 beta (ABO11830) at 0.5ug/mlLane 1: Hela Whole Cell Lysate at 40ugLane 2: 293T Whole Cell Lysate at 40ugLane 3: Jurkat Whole Cell Lysate at 40ugLane 4: U87 Whole Cell Lysate at 40ugLane5: Colo320 Whole Cell Lysate at 40ugPredicted bind size: 87KD Observed bind size: 87KD



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