10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-HIF1 Beta Picoband Antibody

Catalog # ABO11830

Specification

Anti-HIF1 Beta Picoband Antibody - 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.

Anti-HIF1 Beta Picoband Antibody - 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 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Nucleus.

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.

Anti-HIF1 Beta Picoband Antibody - 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).

Cellular Location
Nucleus.

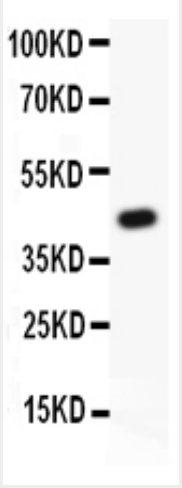
Anti-HIF1 Beta Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

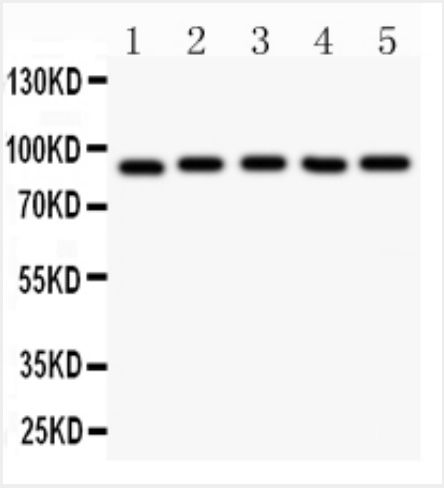
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-HIF1 Beta Picoband Antibody - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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

Anti-HIF1 Beta Picoband Antibody - 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.