

KD-Validated Anti-HIF 1 β Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI2380

Specification

KD-Validated Anti-HIF 1 β Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC
Primary Accession
Reactivity Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 87 kDa; Observed, 87 kDa KDa

Gene Name ARNT

Aliases ARNT; Aryl Hydrocarbon Receptor Nuclear

Translocator; BHLHe2; HIF-1beta; Class E Basic Helix-Loop-Helix Protein 2; Hypoxia Inducible Factor 1; Subunit Beta; Dioxin

Receptor, Nuclear Translocator; HIF-1-Beta; HIF1-Beta; ARNT1;

Hypoxia-Inducible Factor 1, Beta Subunit; Hypoxia-Inducible Factor 1-Beta; ARNT Protein; HIF1BETA; BHLHE2; HIF1B; TANGO

Immunogen A synthesized peptide derived from human

HIF-1 beta

KD-Validated Anti-HIF 1 β Rabbit Monoclonal 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 (HGNC:700), BHLHE2

KD-Validated Anti-HIF 1 β Rabbit Monoclonal 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).

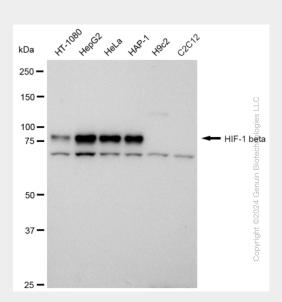
Cellular Location Nucleus.

KD-Validated Anti-HIF 1 β Rabbit Monoclonal Antibody - Protocols

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

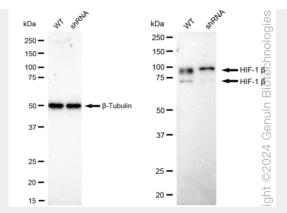
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-HIF 1 β Rabbit Monoclonal Antibody - Images

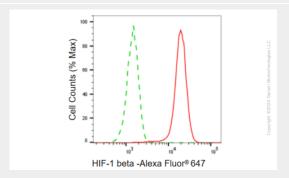


Western blotting analysis using anti-HIF 1 β antibody (Cat#AGI2380). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-HIF 1 β antibody (Cat#AGI2380, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

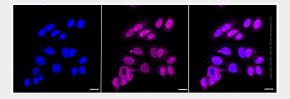




Western blotting analysis using anti-HIF-1 beta antibody (Cat#AGI2380).HIF-1 beta expression in wild type (WT) and HIF-1 beta shRNA knockdown (KD) HT-1080 cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-HIF-1 beta antibody (Cat#AGI2380,1:5,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.



Flow cytometric analysis of HIF-1 beta expression in HepG2 cells using anti-HIF-1 beta antibody (Cat#AGI2380,1:2,000). Green, isotype control; red, HIF-1 beta.



Immunocytochemical staining of HepG2 cells with HIF-1 beta antibody (Cat#AGI2380, 1:1,000). Nuclei were stained blue with DAPI; HIF-1 beta was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.