10320 Camino Santa Fe, Suite G
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HIF-1 β/ARNT Monoclonal Antibody(4C5)

Catalog # AP63712

Specification

HIF-1 β/ARNT Monoclonal Antibody(4C5) - Product Information

Application	**WB, IHC-P**
Primary Accession	P27540
Reactivity	**Mouse**
Host	**Mouse**
Clonality	**Monoclonal**

HIF-1 β/ARNT Monoclonal Antibody(4C5) - 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 1:100-200
IHC-P~~N/A

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

Storage Conditions
-20℃

HIF-1 β/ARNT Monoclonal Antibody(4C5) - 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:<a

href="http://www.uniprot.org/citations/28396409" target="_blank">28396409).

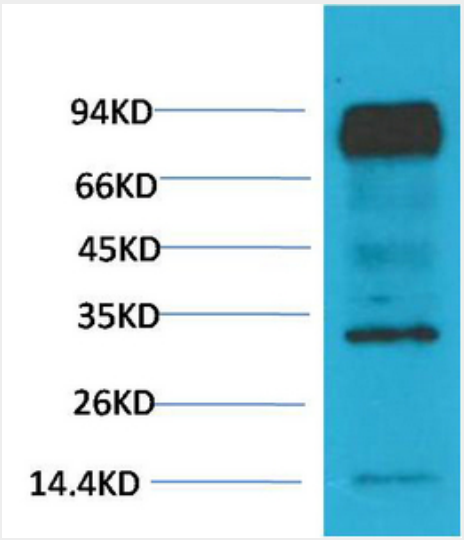
Cellular Location
Nucleus.

HIF-1 β/ARNT Monoclonal Antibody(4C5) - Protocols

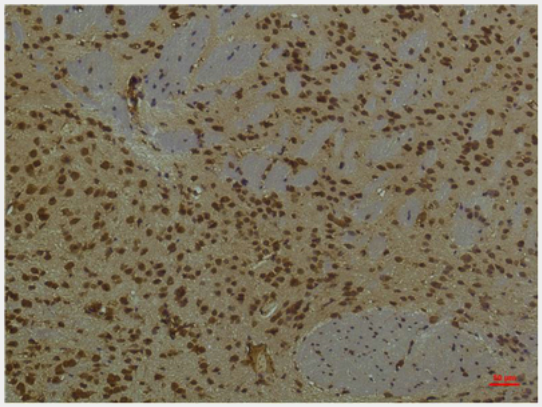
Provided below are standard protocols that you may find useful for product applications.

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

HIF-1 β/ARNT Monoclonal Antibody(4C5) - Images



Western blot analysis of Mouse Brain Tissue with HIF-1 β/ARNT Mouse mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Mouse BrainTissue using HIF-1 β/ARNT Mouse mAb diluted at 1:200.

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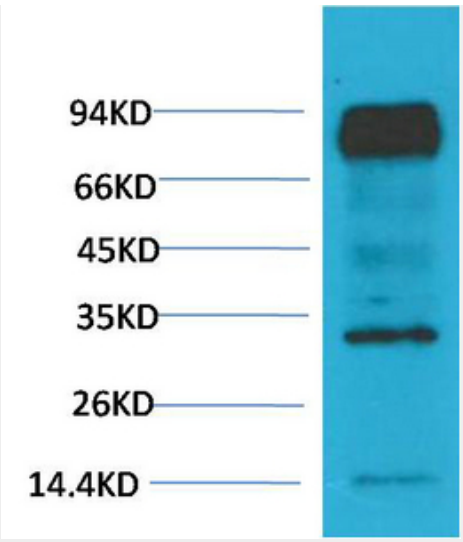
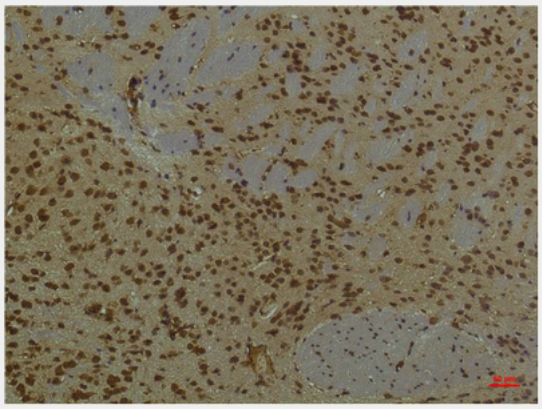


Western blot analysis of Mouse Brain Tissue with HIF-1 β/ARNT Mouse mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Mouse BrainTissue using HIF-1 β/ARNT Mouse mAb diluted at 1:200.

HIF-1 β/ARNT Monoclonal Antibody(4C5) - 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).