

HIF-1 β/ARNT Monoclonal Antibody(4C5)

Catalog No: YM3584

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF

Target: HIF-1β

Fields: >>HIF-1 signaling pathway;>>Cushing syndrome;>>Pathways in

cancer;>>Chemical carcinogenesis - receptor activation;>>Chemical carcinogenesis - reactive oxygen species;>>Renal cell carcinoma

Gene Name: ARNT

Protein Name: 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)

Human Gene Id: 405

Human Swiss Prot P27540

No:

Mouse Swiss Prot

No:

Immunogen: Recombinant Protein of HIF-1 β

P53762

Specificity: HIF-1 β/ARNT protein detects endogenous levels of HIF-1 β/ARNT

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution : WB 1:1000-2000, IHC 1:100-200, IF 1:50-200

Purification: The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Concentration: 1 mg/ml



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 87kD

Cell Pathway: Pathways in cancer; Renal cell carcinoma;

Background: This gene encodes a protein containing a basic helix-loop-helix domain and two

characteristic PAS domains along with a PAC domain. 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. Chromosomal translocation of this locus with the ETV6 (ets variant 6) gene on chromosome 12 have been described in leukemias. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Oct 2013],

Function: function: 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 with HIF1A or EPAS1/HIF2A

functions as a transcriptional regulator of the adaptive response to

hypoxia.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,similarity:Contains 1 PAC (PAS-associated C-terminal)

domain., similarity: Contains 2 PAS (PER-ARNT-SIM) domains., subunit: Efficient

DNA binding requires dimerization with another bHLH protein. Forms a

heterodimer with AHR, AHRR, HIF1A and EPAS1/HIF2A as well as with other bHLH proteins. Interacts with TACC3 (By similarity). Interacts with NOCA7.,

Subcellular Location :

Nucleus.

Expression: Aorta endothelial cell,Brain,Kidney,Thalamus,Uterus,

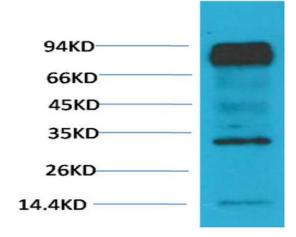
Sort: 7353

No4: 1

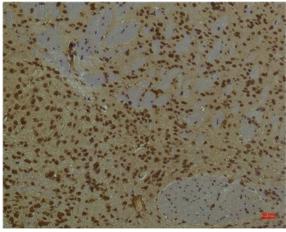
Host: Mouse

Modifications: Unmodified

Products 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.