

**HIF-1  $\beta$ /ARNT Monoclonal Antibody(4C5)**

<b>Catalog No :</b>	YM3584
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF
<b>Target :</b>	HIF-1 $\beta$
<b>Fields :</b>	>>HIF-1 signaling pathway;>>Cushing syndrome;>>Pathways in cancer;>>Chemical carcinogenesis - receptor activation;>>Chemical carcinogenesis - reactive oxygen species;>>Renal cell carcinoma
<b>Gene Name :</b>	ARNT
<b>Protein Name :</b>	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)
<b>Human Gene Id :</b>	405
<b>Human Swiss Prot No :</b>	P27540
<b>Mouse Swiss Prot No :</b>	P53762
<b>Immunogen :</b>	Recombinant Protein of HIF-1 $\beta$
<b>Specificity :</b>	HIF-1 $\beta$ /ARNT protein detects endogenous levels of HIF-1 $\beta$ /ARNT
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:1000-2000, IHC 1:100-200, IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Concentration :</b>	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;

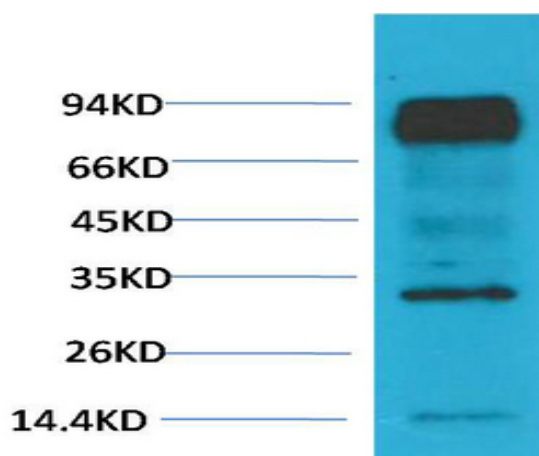
**Background :** This gene encodes a protein containing a basic helix-loop-helix domain and two characteristic PAS domains along with a PAC domain. The encoded protein binds to ligand-bound aryl hydrocarbon receptor and aids in the movement of this complex to the nucleus, where it promotes the expression 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.,

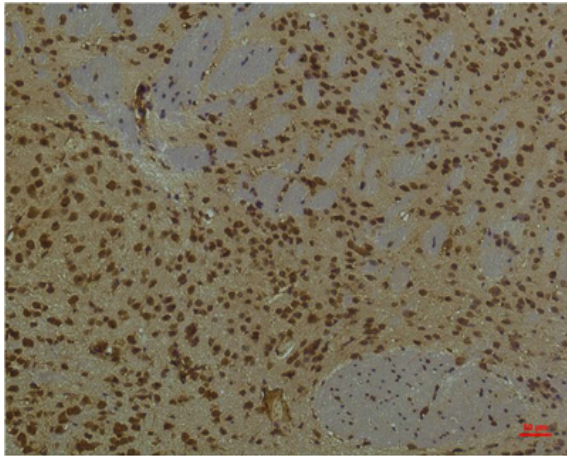
**Subcellular Location :** Nucleus.

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

## Products Images



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



Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using HIF-1  $\beta$ /ARNT Mouse mAb diluted at 1:200.