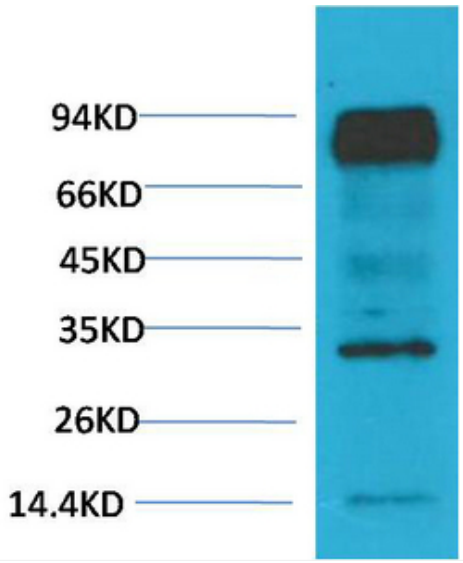
HIF-1 β/ARNT Monoclonal Antibody(4C5)

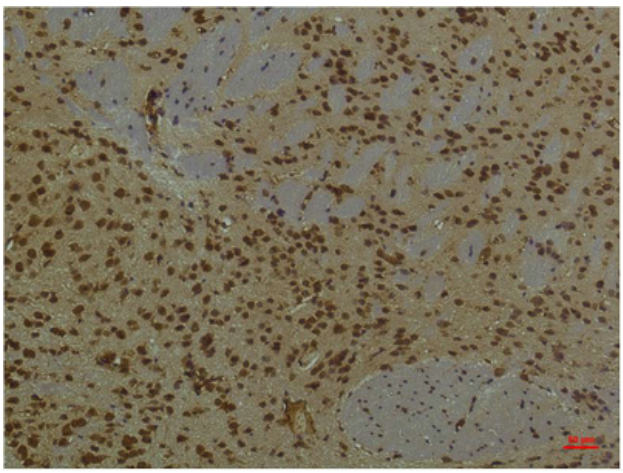
Catalog No	YP-Ab-01161
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF
Gene Name	ARNT
Protein Name	Aryl hydrocarbon receptor nuclear translocator (ARNT protein) (Class E basic helix-loop-helix protein 2) (bHLHe2) (Dioxin receptor, nuclear translocator) (Hypoxia-inducible factor 1-beta) (HIF-1-beta)
Immunogen	Recombinant Protein of HIF-1 β
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
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000, IHC 1:100-200. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	87kD
Cell Pathway	Nucleus.
Tissue Specificity	Aorta endothelial cell,Brain,Kidney,Thalamus,Uterus,
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.,

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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.