

Summary

Production Name	HIF-1 β /ARNT(4C5)Mouse Monoclonal Antibody	
Description	Mouse Monoclonal Antibody	
Host	Mouse	
Application	WB,IHC	
Reactivity	Human, Mouse, Rat	

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ARNT	
	ARNT; BHLHE2; Aryl hydrocarbon receptor nuclear translocator; ARNT protein; Class	
Alternative Names	basic helix-loop-helix protein 2; bHLHe2; Dioxin receptor, nuclear translocator;	
	Hypoxia-inducible factor 1-beta; HIF-1-beta; HIF1-beta	
Gene ID	405.0	
SwissProt ID	P27540.Recombinant Protein of HIF-1 β	

Application

Dilution Ratio	WB 1:1000-2000, IHC 1:100-200
Molecular Weight	87kD



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: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.,

Research Area

Pathways in cancer;Renal cell carcinoma;

Image Data



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.

Note

For research use only.