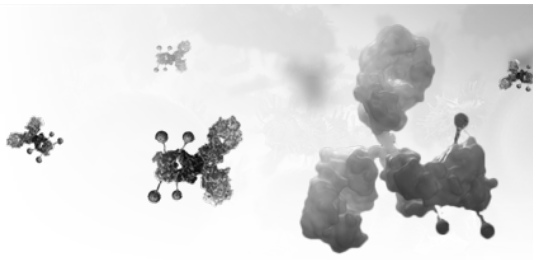

Anti-HIF1A monoclonal antibody, clone Halpha111a (CABT-50492MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Mouse anti Human HIF1 alpha antibody, clone Halpha111a recognizes human Hypoxia-inducible factor 1-alpha otherwise known as HIF1 alpha (HIF1A) or ARNT interacting protein, a widely expressed bHLH-PAS transcription factor, which acts as a critical regulatory protein in the host response to hypoxia. HIF1A and HIF1B form the highly-conserved heterodimeric HIF-1 transcriptional complex. During hypoxic conditions, HIF1A accumulates in the nucleus and activates the transcription of many genes encoding proteins involved in the production of oxygen delivery and metabolic adaptation, such as vascular endothelial growth factor and glucose transporters. Under normal oxygen conditions, HIF1A is targeted by HIF prolyl-hydroxylases, followed by rapid protease degradation, which is inhibited during hypoxia. Overexpression of HIF1A occurs in many common human cancers, including pancreatic, bladder and renal carcinomas. Mouse anti Human HIF1α, clone Halpha111a has been successfully used for the identifcation of HIF1α in human samples by both immunohistochemistry and Western blotting.
Specificity	HIF1 ALPHA
Immunogen	Recombinant human HIF1 alpha
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	Halpha111a
Conjugate	Unconjugated
Applications	IHC-P

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Format	Purified IgG - liquid
Size	200 µg
Preservative	0.09% Sodium Azide
Storage	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	HIF1A hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) [Homo sapiens (human)]
Official Symbol	HIF1A
Synonyms	HIF1A; hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor); HIF1; MOP1; PASD8; HIF-1A; bHLHe78; HIF-1alpha; HIF1-ALPHA; hypoxia-inducible factor 1-alpha; HIF-1-alpha; member of PAS protein 1; ARNT interacting protein; A
Entrez Gene ID	3091
Protein Refseq	NP_001230013
UniProt ID	Q16665
Chromosome Location	14q23.2
Pathway	AGE/RAGE pathway; Adipogenesis; Angiogenesis; Cellular response to hypoxia; Cellular responses to stress; Central carbon metabolism in cancer; Choline metabolism in cancer; Circadian Clock;
Function	Hsp90 protein binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in positive regulation of transcription; RNA polymerase II distal enhancer sequence-specific DNA binding transcription factor activity; contributes_to RNA polymerase II distal enhancer sequence-specific DNA binding transcription factor activity; RNA polymerase II transcription factor binding transcription factor activity; enzyme binding; histone acetyltransferase binding; histone deacetylase binding; nuclear hormone receptor binding; protein binding; protein heterodimerization activity; protein kinase binding; contributes_to sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; signal transducer activity; transcription factor binding; transcription factor binding transcription factor activity; ubiquitin protein ligase binding;

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