

HIF-1 α Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AD80293**Specification**

HIF-1 α Antibody - Product info

Application	IHC
Primary Accession	Q16665
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	92670

HIF-1 α Antibody - Additional info

Gene ID	3091
Gene Name	HIF1A {ECO:0000303 PubMed:7539918}
Other Names	
Hypoxia-inducible factor 1-alpha, HIF-1-alpha, HIF1-alpha, ARNT-interacting protein, Basic-helix-loop-helix-PAS protein MOP1, Class E basic helix-loop-helix protein 78, bHLHe78, Member of PAS protein 1, PAS domain-containing protein 8, HIF1A {ECO:0000303 PubMed:7539918}	

Dilution

IHC~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

Precautions**HIF-1 α Antibody is for research use only and not for use in diagnostic or therapeutic procedures.****HIF-1 α Antibody - Protein Information****Name** HIF1A {ECO:0000303|PubMed:7539918, ECO:0000312|HGNC:HGNC:4910}**Function****Functions as a master transcriptional regulator of the adaptive response to hypoxia. Under hypoxic conditions, activates the transcription of over 40 genes, including erythropoietin, glucose transporters, glycolytic enzymes, vascular endothelial growth factor, HILPDA, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. Plays an essential role in embryonic vascularization,**

Cellular Location

tumor angiogenesis and pathophysiology of ischemic disease. Heterodimerizes with ARNT; heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters (By similarity). Activation requires recruitment of transcriptional coactivators such as CREBBP and EP300. Activity is enhanced by interaction with both, NCOA1 or NCOA2. Interaction with redox regulatory protein APEX seems to activate CTAD and potentiates activation by NCOA1 and CREBBP. Involved in the axonal distribution and transport of mitochondria in neurons during hypoxia. Cytoplasm. Nucleus Nucleus speckle {ECO:0000250|UniProtKB:Q61221}.

Tissue Location

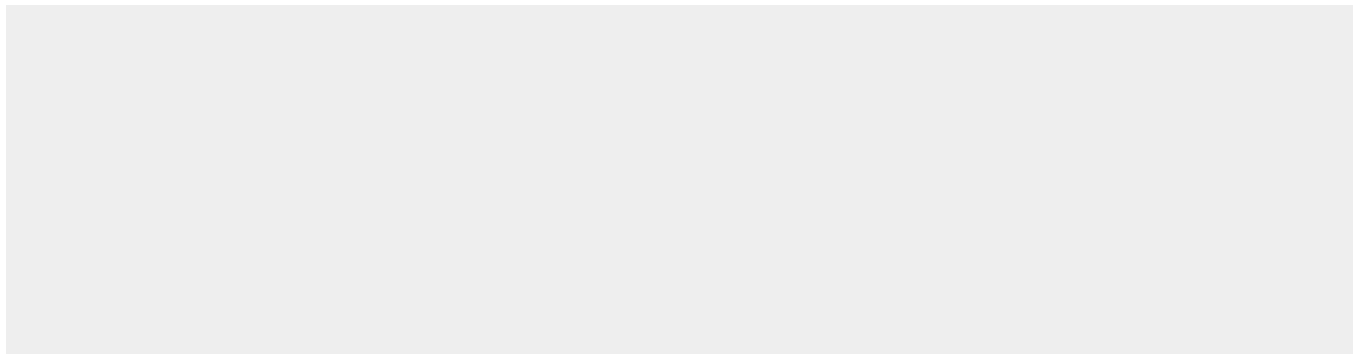
Note=Colocalizes with HIF3A in the nucleus and speckles (By similarity) Cytoplasmic in normoxia, nuclear translocation in response to hypoxia (PubMed:9822602). {ECO:0000250|UniProtKB:Q61221} Expressed in most tissues with highest levels in kidney and heart. Overexpressed in the majority of common human cancers and their metastases, due to the presence of intratumoral hypoxia and as a result of mutations in genes encoding oncoproteins and tumor suppressors. A higher level expression seen in pituitary tumors as compared to the pituitary gland

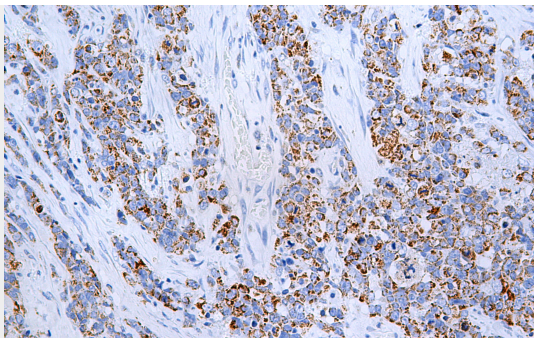
HIF-1 α Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HIF-1 α Antibody - Images





Immunohistochemical analysis of paraffin-embedded breast cancer tissue using AD80293 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a Citrate buffer (pH6.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.