

Rabbit HIF1 alpha Polyclonal Antibody | anti-HIF1alpha antibody

Anti-HIF1 alpha Antibody

CATALOG # AAA292477	HOST Rabbit	REACTIVITY Human, Mouse, Rat, Bovine, Dog	APPLICATIONS Immunohistochemistry, Western Blot
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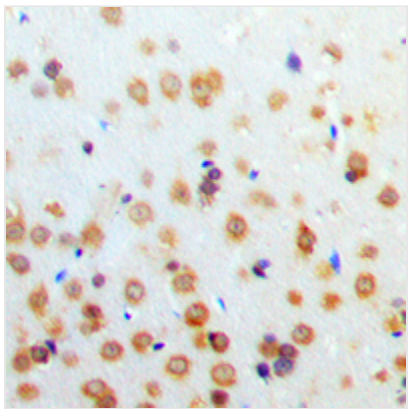
PRODUCT SYNONYMS

HIF1 alpha; Polyclonal Antibody; Anti-HIF1 alpha Antibody; BHLHE78; MOP1; PASD8; 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; anti-HIF1alpha antibody

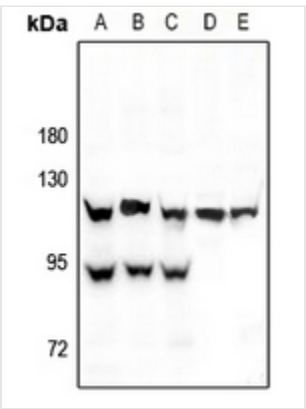
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Dog
Clonality	Polyclonal
Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human HIF1 alpha. The exact sequence is proprietary
Form/Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Applicable Applications for anti-HIF1alpha antibody	IHC (Immunohistochemistry), WB (Western Blot)
Function	Functions as a master transcriptional regulator of the adaptive response to hypoxia (PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed:). 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 (PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed:). Plays an essential role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease (PubMed:). 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 (PubMed: , PubMed:). Activity is enhanced by interaction with NCOA1 and/or NCOA2 (PubMed:). Interaction with redox regulatory protein APEX1 seems to activate CTAD and potentiates activation by NCOA1 and CREBBP (PubMed: , PubMed:). Involved in the axonal distribution and transport of mitochondria in neurons during hypoxia (PubMed:).
Cellular Location	Cytoplasm. Nucleus. Nucleus speckle {ECO:0000250 UniProtKB:Q61221}. 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, ECO:0000269 PubMed:9822602}
Tissue Location	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.
Preparation and Storage	Store at -20°C.

IMAGES



IHC (Immunohiostchemistry)
Dilution: WB: (1/500 - 1/1000), IH (1/100 - 1/200)Immunohistochemical analysis of HIF1 alpha staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



WB (Western Blot)
Dilution: WB (1/500 - 1/1000), IH (1/100 - 1/200)Western blot analysis of HIF1 alpha expression in HEK293T (A), A549 (B), MCF7 (C), H9C2 (D), SP20 (E) whole cell lysates.

ADDITIONAL INFORMATION

Related Product Information for anti-HIF1alpha antibody	Rabbit polyclonal antibody to HIF1 alpha KLH-conjugated synthetic peptide encompassing a sequence within the center region of human HIF1 alpha. The exact sequence is proprietary.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504385
NCBI GeneID	3091
NCBI Accession #	NP_001521.1
NCBI GenBank Nucleotide #	NM_001530.3
UniProt Accession #	Q16665; Q53XP6; Q96PT9; Q9UPB1; C0LZJ3
NCBI Official Full Name	hypoxia-inducible factor 1-alpha isoform 1
NCBI Official Synonym Full Names	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)
NCBI Official Symbol	HIF1A
NCBI Official Synonym Symbols	HIF1; MOP1; PASD8; HIF-1A; bHLHe78; HIF-1alpha; HIF1-ALPHA
NCBI Protein Information	hypoxia-inducible factor 1-alpha; HIF-1-alpha; member of PAS protein 1; ARNT interacting protein; ARNT-interacting protein; member of PAS superfamily 1; hypoxia-inducible factor1alpha; PAS domain-containing protein 8; basic-helix-loop-helix-PAS protein MO
UniProt Protein Name	Hypoxia-inducible factor 1-alpha
UniProt Gene Name	HIF1A
UniProt Synonym Gene Names	BHLHE78; MOP1; PASD8; HIF-1-alpha; HIF1-alpha; bHLHe78
UniProt Entry Name	HIF1A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.