Hypoxia-inducible factor 1-alphaPolyclonal Antibody

Catalog No: #42562

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Description

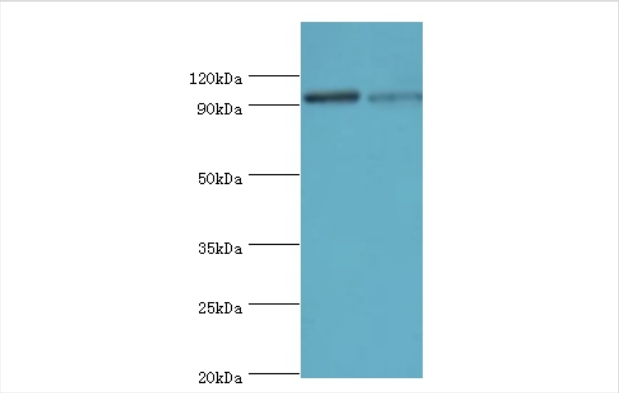
Product Name	Hypoxia-inducible factor 1-alphaPolyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Caprylic Acid Ammonium Sulfate Precipitation purified
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total Hypoxia-inducible factor 1-alphapolyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human Hypoxia-inducible factor 1-alpha
Target Name	Hypoxia-inducible factor 1-alphaPolyclonal Antibody
Other Names	ARNT-interacting protein, Basic-helix-loop-helix-PAS protein MOP1, Class E basic helix-loop-helix protein 78, Member of PAS protein 1, PAS domain-containing protein 8.HIF1A, BHLHE78, MOP1, PASD8
Accession No.	Swiss-Prot#: Q16665
Uniprot	Q16665
GeneID	3091;
Calculated MW	93kd
Formulation	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Storage	Store at -20°C

Application Details

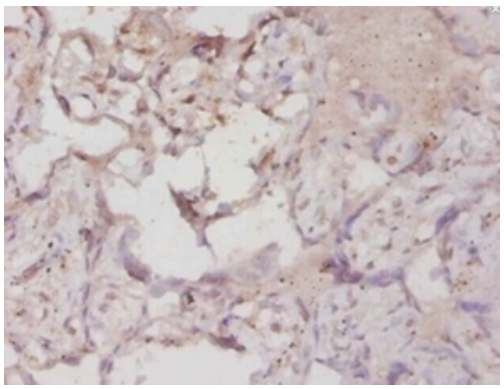
Western blotting: 1:500 - 1:1000

Immunohistochemistry: 1:20 - 1:200

Images



All lanes:Hypoxia-inducible factor 1-alpha antibody at 2ug/ml
Lane 1:HGC27 whole cell lysate
Lane 2:A549 whole cell lysate
secondary
Goat polyclonal to rabbit at 1/10000 dilution
predicted band size :93kDa
observed band size :93kDa



Immunohistochemical analysis of paraffin-embedded human placenta using #42562 at dilution of 1:50.

Background

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, tumor angiogenesis and pathophysiology of ischemic disease. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Activation requires recruitment of transcriptional coactivators such as CREBPB 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.

References

[1]Hypoxia-inducible factor 1 is a basic-helix-loop-helix-PAS heterodimer regulated by cellular O2 tension.Wang G.L., Jiang B.-H., Rue E.A., Semenza G.L.Proc. Natl. Acad. Sci. U.S.A. 92:5510-5514(1995) [2]Characterization of a subset of the basic-helix-

Note: This product is for in vitro research use only