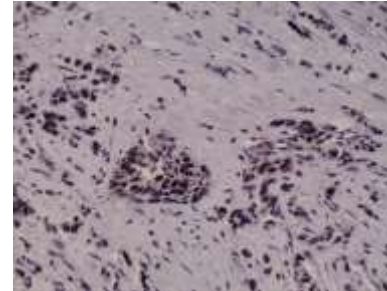
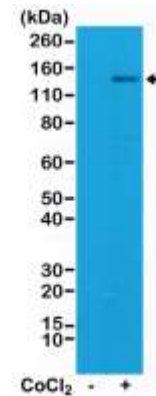


Anti-HIF-1-alpha, Rabbit Monoclonal Antibody

CATALOG NO:	A1128-50
ALTERNATIVE NAMES:	ARNT-interacting protein, Basic-helix-loop-helix-PAS protein MOP1, Class E basic helix-loop-helix protein 78, Hypoxia-inducible factor 1-alpha, bHLHe78, Member of PAS protein 1
AMOUNT:	50 µl
CLONE:	RM242
IMMUNOGEN:	A peptide corresponding to Hypoxia-inducible factor 1-alpha
MOLECULAR WEIGHT:	~120 kDa
HOST/ISOTYPE:	Rabbit IgG
SPECIES REACTIVITY:	Human
PURIFICATION:	Protein A affinity purified from an animal origin-free culture supernatant
FORM:	Liquid
FORMULATION:	50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
SPECIFICITY:	This antibody reacts to human HIF-1-alpha (Hypoxia-inducible factor 1-alpha)
STORAGE CONDITIONS:	For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles
DESCRIPTION:	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 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.
APPLICATION:	IHC: 1:500 -1:1000 dilution; WB: 1:1000 - 1:2000 dilution Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



Immunohistochemical staining of formalin fixed and paraffin embedded human breast cancer tissue sections using Anti-HIF-1-alpha monoclonal antibody at a 1:1000 dilution.



Western Blot of Jurkat cell lysate, nontreated or treated with Cobalt(II) chloride (CoCl₂), using Anti-HIF-1-alpha monoclonal antibody at a 1:1000 dilution, showed that HIF-1- alpha (~120 kDa) expression was induced by CoCl₂ in Jurkat cells.

RELATED PRODUCTS:

- CD73/NT5E Antibody (CT) (Cat. No. 6802-100)
- ADFP Antibody (Cat. No. 3837-100)
- Visfatin Antibody (Cat. No. 5907R-100)

FOR RESEARCH USE ONLY! Not to be used on humans.