

Anti-HIF-1 alpha Antibody [5H7]

RT1278



Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IHC-P, IF-Cell
Molecular Wt:	132 kDa
Clone number:	5H7

Description: Cell growth and viability is compromised by oxygen deprivation (hypoxia). Hypoxia-inducible factors, including HIF-1 α , HIF-1 β (also designated Arnt 1), EPAS-1 (also designated HIF-2 α) and HIF-3 α , induce glycolysis, erythropoiesis and angiogenesis in order to restore oxygen homeostasis. Hypoxia-inducible factors are members of the Per-Arnt-Sim (PAS) domain transcription factor family. In response to hypoxia, HIF-1 α is upregulated and forms a heterodimer with Arnt 1 to form the HIF-1 complex. The HIF-1 complex recognizes and binds to the hypoxia responsive element (HRE) of hypoxia-inducible genes, thereby activating transcription. Hypoxia-inducible expression of some genes, such as Glut-1, p53, p21 or Bcl-2, is HIF-1 α dependent, whereas expression of others, such as p27, GADD 153 or HO-1, is HIF-1 α independent. EPAS-1 and HIF-3 α have also been shown to form heterodimeric complexes with Arnt 1 in response to hypoxia.

Immunogen:	Synthetic peptide.
Positive control:	293T.
Subcellular location:	Cytoplasm, Nucleus, Nucleus speckle
Database links:	SwissProt: Q16665 Human

Recommended Dilutions:

WB	1:1,000
IP	1-2 μ g per 100-500 μ g of total protein
IHC-P	1:50-500
IF-Cell	1:50-500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4 $^{\circ}$ C.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

Technical: 0086-571-89986345

Service mail: support@huabio.cn

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Images

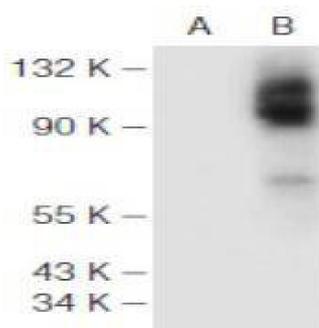


Fig1: A. Western blot analysis of HIF-1 expression in non-transfected (A) and mouse HIF-1 transfected (B) 293T whole cell lysates.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Yang, Q.C., et al. 2007. Overexpression of hypoxia-inducible factor-1 α in human osteosarcoma: correlation with clinicopathological parameters and survival outcome. *Jpn. J. Clin. Oncol.* 37: 127-134.
2. De Spiegelaere, W., et al. 2010. Localization of erythropoietin in and around growing cartilage. *Mol. Cell. Biochem.* 337: 287-291.
3. Foti, R., et al. 2010. Parkinson's disease-associated DJ-1 is required for the expression of the glial cell line-derived neurotrophic factor receptor RET in human neuroblastoma cells. *J. Biol. Chem.* 285: 18565-18574.

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