For Research Use Only

HIF-1 alpha Monoclonal antibody

Catalog Number:66730-1-Ig 42 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
66730-1-Ig

Size:
150ul , Concentration: 1819 μg/ml by Nanodrop and 1000 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG15198

GenBank Accession Number:
BC012527

GeneID (NCBI):
3091

UNIPROT ID:
Q16665

Full Name:
hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)

Calculated MW:
826 aa, 93 kDa

Observed MW:
120 kDa

Purification Method:
Protein A purification

CloneNo.:
1H3C12

Recommended Dilutions:
WB 1:2000-1:10000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB, IP, IF, IHC, ChIP

Species Specificity:
Human

Cited Species:
human

Positive Controls:

WB : HeLa cells, Cobalt Chloride treated HeLa cells, Cobalt Chloride treated HepG2 cells

Background Information

HIF1a, the major regulator of the cellular responses to hypoxia, consists of an oxygen-sensitive subunit, HIF1 alpha (HIF1A), and an oxygen-insensitive subunit, HIF1 beta (arylhydrocarbon receptor nuclear transporter [ARNT]). Under normal oxygen conditions, HIF1a is continuously produced and destroyed, in a process involving hydroxylation, interaction with von Hippel-Lindau (VHL) protein, polyubiquitylation and subsequent proteasomal degradation. Under hypoxic conditions, hydroxylation is impaired and HIF1a is stabilized. HIF1a localizes in cytoplasm in normoxia, but it can translocate into nuclear in response to hypoxia. The calculated molecular weight of HIF1a is 93 kDa, but the modified protein HIF1a is about 110-120kDa (PMID: 11698256, .PMID: 7539918). .

Notable Publications

Author	Pubmed ID	Journal	Application
Bin Zhang	32987196	Int J Biochem Cell Biol	WB
Jingjing Zheng	32978798	Ann N Y Acad Sci	WB
Wenjian Liu	34542841	Tissue Eng Regen Med	WB

Storage

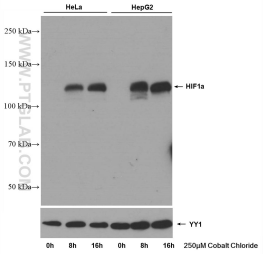
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Untreated and cobalt chloride treated HeLa and HepG2 cells were subjected to SDS-PAGE followed by western blot with 66730-1-Ig (HIF1a antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with YY1 antibody as loading control.