## For Research Use Only

## HIF-1 alpha Monoclonal antibody, PBS Only



Catalog Number: 66730-1-PBS

**Basic Information** 

Catalog Number: 66730-1-PBS

Size:
1 mg/ml
Source:
Mouse
Isotype:
IgG1

Immunogen Catalog Number:

AG15198

GenBank Accession Number:

BC012527 GeneID (NCBI): 3091 UNIPROT ID: Q16665

hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix

Calculated MW: 826 aa, 93 kDa Observed MW: 120 kDa

transcription factor)

Full Name:

Purification Method: Protein A purification

CloneNo.: 1H3C12

**Applications** 

Tested Applications: WB,Indirect ELISA Species Specificity: Human

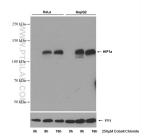
## **Background Information**

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).

Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

## Selected Validation Data



Untreated and cobalt chloride treated HeLa and HepG2 cells were subjected to SDS-PAGE followed by western blot with 66730-1-lg (HIF 1a 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. This data was developed using the same antibody clone with 66730-1-PBS in a different storage buffer formulation.