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## Recombinant human HIF-1 alpha/HIF1A protein

Catalog Number: HIF0501

#### PRODUCT INFORMATION

## **Expression system**

E.coli

#### **Domain**

530-826aa

#### **UniProt No.**

016665

#### **NCBI Accession No.**

NP 001521

#### **Alternative Names**

Hypoxia inducible factor 1 subunit alpha, Hypoxia-inducible factor 1-alpha, HIF1-alpha, ARNT-interacting protein, Basic-helix-loop-helix-PAS protein MOP1, Class E basic helix-loop-helix protein 78, bHLHe78, Member of PAS protein 1, PAS domain-containing protein 8, PASD8, MOP1

#### **PRODUCT SPECIFICATION**

### **Molecular Weight**

32.8 kDa (298aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

#### Concentration

1mg/ml (determined by Bradford assay)

### **Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 1mM DTT

### **Purity**

> 90% by SDS-PAGE

## Tag

Non-Tagged

## **Application**

SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## **BACKGROUND**

## **Description**

Hypoxia-inducible factor-1 (HIF-1), identified as one of the transcription factors, has been found to play an essential role in oxygen homeostasis. HIF-1 is a heterodimer composed of HIF-1beta subunit and one of three subunits (Hif-1alpha, Hif-2 or Hif-3). The activation of Hif-1 is closely associated with a variety of tumors and oncogenic pathways. Hif-1alpha consists of DNA binding domain (DBD domain), Dimerization domain and C-



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terminla regulatiory domains, including two transactivation domains (TAD), an oxygen-dependent degradation (ODD) domain, and inhibitory domains. Hif-1 alpha (530-826 residues) contains two TAD and inhibitory domain. Recombinant Hif-1 alpha (530-826 residues) was expressed in E. coli and purified by using conventional chromatography techniques.

## **Amino acid Sequence**

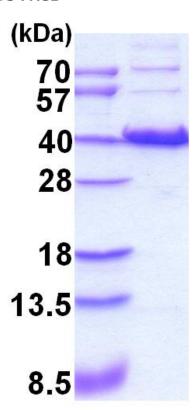
MEFKLELVEK LFAEDTEAKN PFSTQDTDLD LEMLAPYIPM DDDFQLRSFD QLSPLESSSA SPESASPQST VTVFQQTQIQ EPTANATTTT ATTDELKTVT KDRMEDIKIL IASPSPTHIH KETTSATSSP YRDTQSRTAS PNRAGKGVIE QTEKSHPRSP NVLSVALSQR TTVPEEELNP KILALQNAQR KRKMEHDGSL FQAVGIGTLL QQPDDHAATT SLSWKRVKGC KSSEQNGMEQ KTIILIPSDL ACRLLGQSMD ESGLPQLTSY DCEVNAPIQG SRNLLQGEEL LRALDQVN

#### **General References**

Okuyama H. et al., (2006) J. Biol Chem. 281(22):15554-63 Berra E. et al., (2006) EMBO.7(1):41-5

## DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

