

HIF1A

Recombinant Human HIF-1 alpha (aa 530-826)

Catalog No.	CRC143A CRC143B CRC143C	Quantity:	10 µg 50 µg 1.0 mg
Alternate Names:	Hypoxia-Inducible Factor 1 alpha, HIF1A, HIF1, Basic-helix-loop-helix-PAS protein MOP1, MOP1, PASD8		
Description:	<p>Recombinant Human HIF-1 alpha is a single, non-glycosylated polypeptide chain containing 298 amino acids (aa 530-826).</p> <p>Hypoxia-inducible factor-1 (HIF-1) is a transcription factor that responds to changes in available oxygen in the cellular environment, specifically, to decreases in oxygen, or hypoxia. It belongs to the PER-ARNT-SIM (PAS) subfamily of the basic-helix-loop-helix (bHLH) family of transcription factors and is a heterodimer composed of alpha and beta subunits. Under hypoxic conditions, HIF-1 alpha activates the transcription of more than 40 genes, including, erythropoietin, glucose transporters, glycolytic enzymes, VEGF, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. HIF-1 alpha also plays a crucial role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease.</p>		
Concentration:	1 mg/ml		
GeneID:	3091		
Source:	<i>E. coli</i>		
Molecular Weight:	Predicted molecular weight of 32.8 kDa. The recombinant protein migrates as a 40 kDa band on SDS-PAGE		
Formulation:	Sterile filtered liquid solution in 20 mM Tris-HCl, pH 7.5, +1 mM DTT.		
Purity:	> 95.0% as determined by RP-HPLC and SDS-PAGE analyses		
Endotoxin Level:	< 0.1 ng/µg of protein		
Amino Acid Sequence:	MEFKLELVEK LFAEDTEAKN PFSTQDSDL LEMLPYIPM DDDFQLRSFD QLSPLESSSA SPESASPQST VTFVQQTQIQ EPTANATTTT ATTDDELKTVT kDaRMEDIKIL IASPSPTIH KETTSATSSP YRDTQSRTAS PNRAGKGVIE QTEKSHPRSP NVLSVALSQR TTVPEEELNP KILALQNAQR KRKMEHDGSL FQAVGIGTLL QQPDDHAATT SLSWKRKVGK KSSEQNGMEQ KTIILIPSDL ACRLLGQSMDESGLPQLTSY DCEVNAPIQG SRNLLQGEEL LRALDQVN		
Storage & Stability:	Stable for 1 month at 2-4°C. For longer storage, aliquot and freeze at -80°C. Avoid repeated freeze-thaw cycles.		

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