Recombinant Human HIF1A Protein (E2-N826), Tag Free

Cat. No. HIF1A-0486H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human (GG)-HIF1α(E2-N826 end) Protein was expressed in Insect cell.
Species	Human
Source	Insect Cells
ProteinLength	E2-N826
Description	Functions as a master transcriptional regulator of the adaptive response to hypoxia. Under hypoxic conditions, activates the transcription of over 40 genes, including erythropoietin, glucose transporters, glycolytic enzymes, vascular endothelial growth factor, HILPDA, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. Plays an essential role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease. Heterodimerizes with ARNT; heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters. Activation requires recruitment of transcriptional coactivators such as CREBBP and EP300 (). Activity is enhanced by interaction with NCOA1 and/or NCOA2. Interaction with redox regulatory protein APEX1 seems to activate CTAD and potentiates activation by NCOA1 and CREBBP. Involved in the axonal distribution and transport of mitochondria in neurons during hypoxia.
Form	Liquid
Endotoxin	< 0.01 EU per

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	μg of the protein
Purity	90%
Stability	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Storage Buffer	Supplied as sterile 50 mM Tris-HCl (pH7.5), 200 mM NaCl, 20% glycerol
Shipping	It is shipped out with blue ice.

GENE INFORMATION

Gene Name	HIF1A hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) [Homo sapiens (human)]
Official Symbol	HIF1A
Synonyms	HIF1A; hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor); hypoxia-inducible factor 1-alpha; bHLHe78; HIF 1alpha; HIF1; MOP1; PASD8; HIF-1-alpha; member of PAS protein 1; ARNT interacting protein; ARNT-interacting protein; member of PAS superfamily 1; PAS domain-containing protein 8; basic-helix-loop-helix-PAS protein MOP1; class E basic helix-loop-helix protein 78; hypoxia-inducible factor 1 alpha isoform I.3; hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor); HIF-1alpha; HIF1-ALPHA;
Gene ID	3091

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mRNA Refseq	NM_001243084
Protein Refseq	NP_001230013
MIM	603348
UniProt ID	Q16665

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