

Recombinant Hypoxia-inducible factor 1-alpha (HIF-1-alpha)

Source

Species	Human
Accession Number	Q16665
Gene Symbol	HIF1A
Gene ID	3091
Expressed Region	Leu400-Asn826

Synonyms	Hypoxia-inducible factor 1-alpha, HIF-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, Hypoxia Inducible Factor 1, Alpha Subunit, Basic Helix-Loop-Helix Transcription Factor, HIF-1alpha, MOP1, HIF1, ARNT Interacting Protein, Hypoxia-Inducible Factor 1 Alpha Isoform I.3, PASD8, Hypoxia-Inducible Factor1alpha, Member Of PAS Superfamily 1, PAS Domain-Containing Protein 8, BHLHE78, HIF-1A
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Preparation

Expression System	Human Embryonic Kidney 293 Cells
Tag	N-terminal 6x histidine tag
Purification	His-tag affinity purification by immobilized metal ion affinity chromatography (IMAC)
Purity	> 90%
Purity Determined By	SDS-PAGE under reducing conditions and visualized by Coomassie blue staining
Molecular Weight	The recombinant human HIF-1-alpha, C-terminal domain, has a calculated molecular mass of 49 kDa. Due to the abundant post-translation modifications, it migrates as approximately 60-80 kDa protein bands (confirmed by Western blotting) in SDS-PAGE under DTT, beta-mercaptoethanol reducing conditions.

Protein Specifications

Format	Lyophilized powder
Formulation	Lyophilized from a 0.2 um filtered solution in PBS
Concentration	Determined by BCA protein assay kit (Thermo Scientific)
Preservative	None
Endotoxin Level	Not determined
Recommended Applications	ELISA, EIA, protein-protein interaction studies, Western Blotting, Dot Blotting, Immunoprecipitation, Protein Array
Reconstitution	Briefly spin the vial and bring the contents to the bottom prior to opening. It is recommended to reconstitute at 0.5 - 1.0 mg/mL with sterile deionized water or 1x PBS.

SDS-PAGE Image

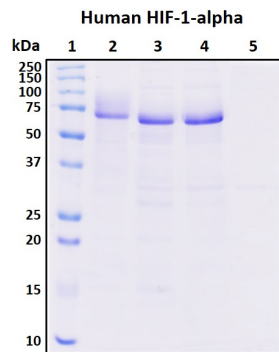


Figure 1. Deglycosylation of purified recombinant proteins. Purified proteins were untreated (Lane 2) or treated with protein deglycosylation enzymes under native (Lane 3) or reducing (Lane 4) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one major band at the expected size, thus indicating that the untreated recombinant protein (Lane 2) was glycosylated.

Lane 1: Protein standard ladder (kDa).

Lane 2: Untreated protein under reducing conditions.

Lane 3: Treated protein with deglycosylation enzymes under native conditions.

Lane 4: Treated protein with deglycosylation enzymes under reducing conditions.

Lane 5: Deglycosylation mixture only without target proteins.

Shipping

Ice packs

Storage/Stability

Upon arrival, the lyophilized protein may be stored for 2 weeks at 4°C. For long term storage, it is recommended to store desiccated below -20 °C in a manual defrost freezer. Following reconstitution, the protein may be stored for 2 weeks under sterile conditions at -20 °C. For long term storage, it is recommended to make appropriate aliquots and store at -80 °C. Avoid repeated freeze-thaw cycles.

This product is furnished for **LABORATORY RESEARCH USE ONLY**.

Not for diagnostic or therapeutic use.