For Research Use Only

Recombinant Human HIF-1 alpha/HIF1A protein (His Tag)



Catalog Number: Eg0939

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: N-His

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human HIF-1 alpha protein Arg575-Asn826 (Accession# Q16665-1) with a His tag at the Nterminus.

GeneID:

3091

Accession:

Q16665-1

Predicted Molecular Mass:

28.3 kDa

SDS-PAGE:

34-60 kDa, reducing (R) condition

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

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.

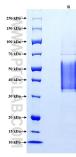
References

1.J E Albina, et al. (2001) Am J Physiol Cell Physiol. 281 (6):C1971-7. 2.Wang GL, et al. (1995) Proc Natl Acad Sci U S A.92 (12):5510-4. 3.Kubis HP, et al. (2005) Biochim Biophys Acta. 1745 (2):187-95.

Synonyms

HIF1A, ARNT interacting protein, ARNT-interacting protein, Basic-helix-loop-helix-PAS protein MOP1, Class E basic helix-loop-helix protein 78

Selected Validation Data



Purity of Recombinant Human HIF-1 alpha was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) stained using Coomassie blue.