PRODUCT INFORMATION

Expression system E.coli

Domain 1-239aa

UniProt No. Q9H6Z9

NCBI Accession No. NP_071356

Alternative Names Egl nine homolog 3, HIFPH3, PHD3

PRODUCT SPECIFICATION

Molecular Weight 29.8 kDa (263aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 50% glycerol, 0.3M NaCl, 5mM DTT, 2mM EDTA

Purity

> 90% by SDS-PAGE

Tag His-Tag

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

EGLN3, a member of the EGLN family of prolyl hydroxylases, has been shown to catalyze hydroxylation of the alpha subunit of hypoxia-inducible factor-alpha, which targets hypoxia-inducible factor-alpha for ubiquitination by a ubiquitin ligase complex containing the von Hippel-Lindau (VHL) tumor suppressor. EGLN3 is the most important isozyme in limiting physiological activation of HIFs (particularly HIF2A) in hypoxia. Also hydroxylates PKM2 in hypoxia, limiting glycolysis. under normoxia, hydroxylates and regulates the stability of ADRB2. Recombinant human EGLN3 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by



using conventional chromatography.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSH>MPLGHI MRLDLEKIAL EYIVPCLHEV GFCYLDNFLG EVVGDCVLER VKQLHCTGAL RDGQLAGPRA GVSKRHLRGD QITWIGGNEE GCEAISFLLS LIDRLVLYCG SRLGKYYVKE RSKAMVACYP GNGTGYVRHV DNPNGDGRCI TCIYYLNKNW DAKLHGGILR IFPEGKSFIA DVEPIFDRLL FFWSDRRNPH EVQPSYATRY AMTVWYFDAE ERAEAKKKFR NLTRKTESAL TED

General References

Epstein A.C.R., et al. (2001) Cell. 107:43-54 Lee S., et al. (2000) Cancer Cell. 8:155-167

DATA

SDS-PAGE



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