PRODUCT INFORMATION

Expression system E.coli

Domain 40-393aa

UniProt No. P51553

NCBI Accession No. NP_004126

Alternative Names

Isocitrate dehydrogenase [NAD] subunit gamma mitochondrial, Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial, H-IDHG

PRODUCT SPECIFICATION

Molecular Weight

41.1 kDa (375aa) 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, 0.2M NaCl, 5mM DTT, 2mM EDTA

Purity > 85% 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

IDH3G, also known as isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial, belongs to the isocitrate and isopropylmalate dehydrogenases family. Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. IDH3G is a gamma subunit of one isozyme of isocitrate dehydrogenase that belongs to a distinct subclass, which utilizes NAD (+) as the electron acceptor, and is localised to the mitochondrial matrix. Recombinant human IDH3G protein, fused to His-tag at N-terminus, was expressed in E.



coli and purified by using conventional chromatography.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH M>FSEQTIPPS AKYGGRHTVT MIPGDGIGPE LMLHVKSVFR HACVPVDFEE VHVSSNADEE DIRNAIMAIR RNRVALKGNI ETNHNLPPSH KSRNNILRTS LDLYANVIHC KSLPGVVTRH KDIDILIVRE NTEGEYSSLE HESVAGVVES LKIITKAKSL RIAEYAFKLA QESGRKKVTA VHKANIMKLG DGLFLQCCRE VAARYPQITF ENMIVDNTTM QLVSRPQQFD VMVMPNLYGN IVNNVCAGLV GGPGLVAGAN YGHVYAVFET ATRNTGKSIA NKNIANPTAT LLASCMMLDH LKLHSYATSI RKAVLASMDN ENMHTPDIGG QGTTSEAIQD VIRHIRVING RAVEA

General References

Kim Y.-O., et al. (1999) J. Biol. Chem. 274:36866-36875 Brenner V., et al. (1997) Genomics. 44:8-14

DATA

SDS-PAGE



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