Recombinant human IVD protein

Catalog Number: ATGP0487

PRODUCT INFORMATION

Expression system
E.coli

Domain
33-426aa

UniProt No.
P26440

NCBI Accession No.
NP_002216.2

Alternative Names
Isovaleryl-CoA dehydrogenase mitochondrial, ACAD2, Isovaleryl-CoA dehydrogenase, mitochondrial Isovaleryl CoA dehydrogenase, Isovaleryl CoA dehydrogenase, mitochondrial, isovaleryl Coenzyme A dehydrogenase.

PRODUCT SPECIFICATION

Molecular Weight
45.3 kDa (415aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

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
IVD (Isovaleryl Coenzyme A dehydrogenase) is a mitochondrial matrix enzyme that belongs to the acyl-CoA dehydrogenase family. IVD is a homotetrameric flavoenzyme which catalyzes the conversion of isovaleryl-CoA to 3-methylcrotonyl-CoA. Defects of the IVD gene lead to ineffective isoforms that are the underlying cause of isovaleric acidemia. Recombinant human IVD protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

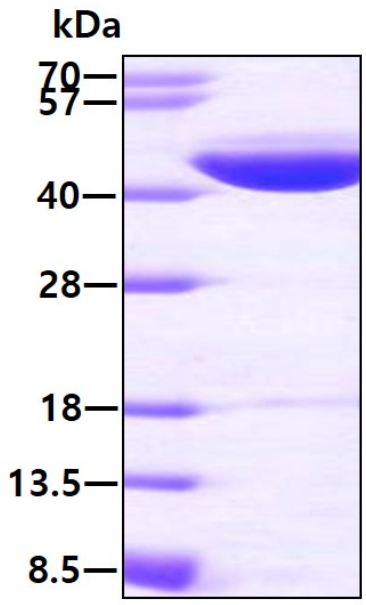
<MGSSHHHHHH SSGLVPRGSH> MHSLLPVDDA INGLSEEQRQ LRQTMAKFLQ EHLAPKAQEI DRSNEFKNLR EFWKQLGNLG VLGITAPVQY GGSGLGYLEH VLVMEEISRA SGAVGLSYGA HSNLCINQLV RNGNEAQKEK YLPKLISGEY IGALAMSEPN AGSDVVSMKL KAEKKGNHYI LNGNKFWITN GPDADVLIVY AKTDLAAVPA SRGITAFIVE KGMPGFSTSK KLDKLGMRGS NTCELIFEDC KIPAANILGH ENKGVYVLMS GLDLERLVLA GGPLGLMQAV LDHTIPYLHV REAFGQKIGH FQLMQGKMAD MYTRLMACRQ YVYNVAKACD EGHCTAKDCA GVILYSAECA TQVALDGIQC FGGNGYINDF PMGRFLRDAK LYEIGAGTSE VRRLVIGRAF NADFH

General References

Hodges PW., et al. (2009) Eur J Neurosci. 29(7):1490-500.
Rohini R., et al. (2009) Eur J Med Chem. 44(8):3330-9.

DATA

SDS-PAGE



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