

Recombinant human ALDH6A1 protein

Catalog Number: ATGP3087

PRODUCT INFORMATION

Expression system

E.coli

Domain

34-535aa

UniProt No.

Q02252

NCBI Accession No.

NP_005580

Alternative Names

Methylmalonate-semialdehyde dehydrogenase acylating mitochondrial isoform 1, MMSADHA, MMSDH

PRODUCT SPECIFICATION

Molecular Weight

56.8 kDa (525aa)

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol, 1mM DTT

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

ALDH6A1 also known as Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial. ALDH6A1 is a mitochondrial methylmalonate semialdehyde dehydrogenase that plays a role in the valine and pyrimidine catabolic pathways. This protein catalyzes the irreversible oxidative decarboxylation of malonate and methylmalonate semialdehydes to acetyl- and propionyl-CoA. ALDH6A1 deficiency is characterized by elevated beta-alanine, 3-hydroxypropionic acid, and both isomers of 3-amino and 3-hydroxyisobutyric acids in urine organic acids. Recombinant human ALDH6A1, fused to His-tag at N-terminus, was expressed in E. coli and

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purified by using conventional chromatography techniques.

Amino acid Sequence

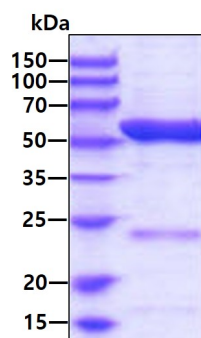
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PSITKDMPLY SYRLPLGVCA GIAPFNFPAM IPLWMFPMAM VCGNTFLMKP SERVPGATML LAKLLQDSGA PDGTLNIIHG
QHEAVNFICD HPDIKAISFV GSNKAGEYIF ERGSRHGKRV QANMGAKNHG VVMPDANKEN TLNQLVGAAF GAAGQRCMAL
STAVLVGEAK KWLPELVEHA KNLRVNAGDQ PGADLGPLIT PQAKERVCNL IDSGTKEGAS ILLDGRKIKV KGYENGNFVG
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MFSFTGSRSS FRGDTNFGYK QGIQFYTQLK TITSQWKEED ATLLSPAVVM PTMGR

General References

Sass JO., et al. (2012) J. Inherit. Metab. Dis. 35 (3), 437-442

DATA

SDS-PAGE



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