

AR51907PU-N

Human ALDH6A1 / MMSDH (34-535, His-tag) - Purified

Alternate names:

Aldehyde dehydrogenase family 6 member A1, Malonate-semialdehyde dehydrogenase [acylating], Methylmalonate-semialdehyde dehydrogenase [acylating] mitochondrial

Quantity:

0.1 mg

Concentration:

0.25 mg/ml (determined by bradford assay)

Background:

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.

Uniprot ID:

[Q02252](#)

NCBI:

[NP_005580](#)

GenelD:

[4329](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >85% by SDS - PAGE

Buffer System: Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT.

Description:

Recombinant human ALDH6A1, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGSSSSVPTV KFIGGKFVE SKSDKWIDIH NPATNEVIGR
VPQATKAEMD AAIASCKRAF PAWADTSVLS RQQVLLRYQQ LIKENLKEIA KLITLEQGKT
LADAEGDVFR GLQVVEHACS VTSLMMGETM PSITKDMPLY SYRLPLGVCA GIAPFNFPAM
IPLWMFPAM VCGNTFLMKP SERVPGATML LAKLLQDSGA PDGTLNIIHG QHEAVNFICD
HPDIKAISFV GSNKAGEYIF ERGSRHGKRV QANMGAKNHG VVMPDANKEN TLNQLVGAFA
GAAGQRCMAL STAVLVGEAK KWLPELVEHA KNLRVNAGDQ PGADLGPLIT PQAKERVCNL
IDSGTKEGAS ILLDGRKIKV KGYENGNFVG PTIISNVKPN MTCYKEEIFG PVLVVLETET
LDEAIQIVNN NPYGNGTAIF TTNGATARKY AHLVDVGQVG VNVPIPVPLP MFSFTGSRSS
FRGDTNFGYK QGIQFYTLK TITSQWKEED ATLSSPAVVM PTMGR

Molecular weight: 56.8 kDa (525aa)

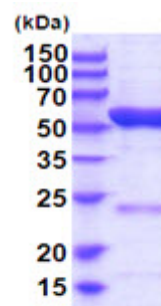
Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

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

Pictures:



15% SDS-PAGE (3ug)