PRODUCT INFORMATION

Expression system E.coli

Domain 39-296aa

UniProt No. Q9H3L0

NCBI Accession No. NP_056517

Alternative Names

Methylmalonic aciduria and homocystinuria type D protein, Metabolism of cobalamin associated D, CL25022, cbID, C2orf25

PRODUCT SPECIFICATION

Molecular Weight

31 kDa (281aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

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

MMADHC is a mitochondrial protein that is involved in an early step of vitamin B12 metabolism. Vitamin B12 (cobalamin) is essential for normal development and survival in humans. Mutations in this gene cause methylmalonic aciduria and homocystinuria type cbID (MMADHC), a disorder of cobalamin metabolism that is characterized by decreased levels of the coenzymes adenosylcobalamin and methylcobalamin. Recombinant human MMADHC protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using



conventional chromatography techniques.

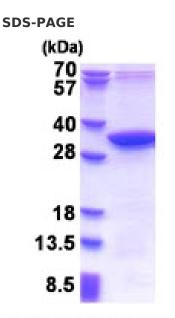
Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSSDESHVA AAPPDICSRT VWPDETMGPF GPQDQRFQLP GNIGFDCHLN GTASQKKSLV HKTLPDVLAE PLSSERHEFV MAQYVNEFQG NDAPVEQEIN SAETYFESAR VECAIQTCPE LLRKDFESLF PEVANGKLMI LTVTQKTKND MTVWSEEVEI EREVLLEKFI NGAKEICYAL RAEGYWADFI DPSSGLAFFG PYTNNTLFET DERYRHLGFS VDDLGCCKVI RHSLWGTHVV VGSIFTNATP DSHIMKKLSG N

General References

Coelho D, Suormala T, et al. (2008). N Engl J Med. 358(14):1454-64.

DATA



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

15% SDS-PAGE (3ug)