

# Recombinant human HMGCL protein

Catalog Number: ATGP1345

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

28-325aa

### UniProt No.

P35914

### NCBI Accession No.

NP\_000182

### Alternative Names

Hydroxymethylglutaryl-CoA lyase, 3-hydroxy-3-methylglutarate-CoA lyase, HL, HMG-CoA lyase, Hydroxymethylglutaryl-CoA lyase mitochondrial

## PRODUCT SPECIFICATION

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### Molecular Weight

34.2 kDa (323aa)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea

### 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

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### Description

HMGCL, also known as hydroxymethylglutaryl-CoA lyase, is a mitochondrial matrix protein that belongs to the HMG-CoA lyase family. It exists as a homodimer and participates in leucine catabolism and ketogenesis, the hepatic synthesis of ketone bodies that, during fasting, provide a major source of energy for heart, brain and kidney. More specifically, it catalyzes the final step of these processes, the cleavage of 3-hydroxy-3-methylglutaryl-CoA to acetoacetic acid and acetyl-CoA. Recombinant human HMGCL protein, fused to His-tag at

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N-terminus, was expressed in E. coli.

## Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MGSHTLPKR VKIVEVGPRD GLQNEKNIVS TPVKIKLIDM LSEAGLSVIE TTSFVSPKWW  
PQMGDHTTEVL KGIQKFPGIN YPVLTPNLKG FEAAVAAGAK EVVIFGAASE LFTKKNINCS IEESFQRFDA ILKAAQSANI  
SVRGYVSCAL GCPYEGKISP AKVAEVTKKF YSMGCYEISL GDTIGVGTPG IMKDMLSAVM QEVPLAALAV HCHDTYGQAL  
ANTLMALQMG VSVVDSSVAG LGGCPYAQGA SGNLATEDLV YMLEGLGIHT GVNQLKLEA GNFCQALNR KTSSKVAQAT  
CKL

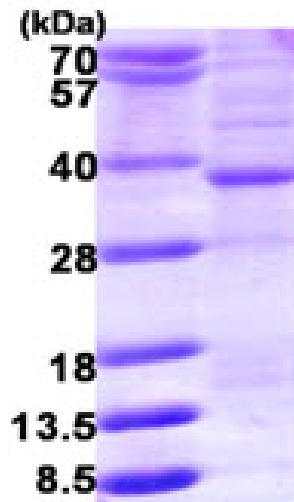
## General References

Cardoso M.L. et al. (2004) Mol. Genet. Metab. 82: 334-338.

Wang S.P et al. (1996) Genomics 33: 99-104.

## DATA

### SDS-PAGE



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

15% SDS-PAGE (3ug)