

## HMGCL Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18139a

### Specification

# HMGCL Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	<u>P35914</u>
Other Accession	<u>NP_000182.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	34360
Antigen Region	71-99

## HMGCL Antibody (N-term) - Additional Information

#### Gene ID 3155

**Other Names** Hydroxymethylglutaryl-CoA lyase, mitochondrial, HL, HMG-CoA lyase, 3-hydroxy-3-methylglutarate-CoA lyase, HMGCL

#### Target/Specificity

This HMGCL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 71-99 amino acids from the N-terminal region of human HMGCL.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

HMGCL Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## HMGCL Antibody (N-term) - Protein Information

Name HMGCL



**Function** Mitochondrial 3-hydroxy-3-methylglutaryl-CoA lyase that catalyzes a cation-dependent cleavage of (S)-3-hydroxy-3- methylglutaryl-CoA into acetyl-CoA and acetoacetate, a key step in ketogenesis. Terminal step in leucine catabolism. Ketone bodies (beta- hydroxybutyrate, acetoacetate and acetone) are essential as an alternative source of energy to glucose, as lipid precursors and as regulators of metabolism.

Cellular Location Mitochondrion matrix {ECO:0000250|UniProtKB:P38060}. Peroxisome {ECO:0000250|UniProtKB:P38060}. Note=Unprocessed form is peroxisomal {ECO:0000250|UniProtKB:P38060}

#### **Tissue Location**

Highest expression in liver. Expressed in pancreas, kidney, intestine, testis, fibroblasts and lymphoblasts. Very low expression in brain and skeletal muscle. The relative expression of isoform 2 (at mRNA level) is highest in heart (30%), skeletal muscle (22%), and brain (14%).

## **HMGCL Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## HMGCL Antibody (N-term) - Images



HMGCL Antibody (N-term) (Cat. #AP18139a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the HMGCL antibody detected the HMGCL protein (arrow).

## HMGCL Antibody (N-term) - Background

The protein encoded by this gene belongs to the HMG-CoA lyase family. It is a mitochondrial enzyme that catalyzes the final step of leucine degradation and plays a key role in ketone body formation. Mutations in this gene are associated with HMG-CoA lyase



deficiency. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

## HMGCL Antibody (N-term) - References

Fu, Z., et al. J. Biol. Chem. 285(34):26341-26349(2010) Pierron, S., et al. Arch Pediatr 17(1):10-13(2010) Menao, S., et al. Hum. Mutat. 30 (3), E520-E529 (2009) : Lin, W.D., et al. Clin. Chim. Acta 401 (1-2), 33-36 (2009) : Carrasco, P., et al. Mol. Genet. Metab. 91(2):120-127(2007)