

### **HMGCL Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16221c

## **Specification**

### **HMGCL Antibody (Center) - Product Information**

Application WB,E
Primary Accession P35914

Other Accession <u>Q8HXZ6</u>, <u>Q29448</u>, <u>NP 000182.2</u>,

NP 001159531.1

Reactivity Human

Predicted Bovine, Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 34360
Antigen Region 161-190

# **HMGCL Antibody (Center) - 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 161-190 amino acids from the Central 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **HMGCL Antibody (Center) - 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**

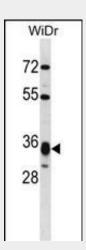
Highest expression in liver. Expressed in pancreas, kidney, intestine, testis, fibroblasts and lymphoblasts. Very low expression in brain and skeletal muscle. The relative expression of isoform 2 (at mRNA level) is highest in heart (30%), skeletal muscle (22%), and brain (14%).

### **HMGCL Antibody (Center) - Protocols**

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

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

### **HMGCL Antibody (Center) - Images**



HMGCL Antibody (Center) (Cat. #AP16221c) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the HMGCL antibody detected the HMGCL protein (arrow).

### **HMGCL Antibody (Center) - Background**

HMGCL belongs to the HMG-CoA lyase family. It is a mitochondrial enzyme that catalyzes the final





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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 (Center) - 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)