

## **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

### **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-hydroxymethyl-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 (betahydroxybutyrate, 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**

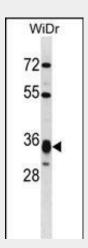
Highest expression in liver. Expressed in pancreas, kidney, intestine, testis, fibroblasts and lymphoblasts. Very low expression in brain and skeletal muscle. The relative expression of isoform 2 (at mRNA level) is highest in heart (30%), skeletal muscle (22%), and brain (14%).

#### **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 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)