

HMGCS2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5169

Specification

HMGCS2 Antibody (C-term) - Product Information

Application Primary Accession Reactivity Predicted Host Clonality Calculated MW Isotype Antigen Source

WB, IHC-P, FC,E <u>P54868</u> Human, Rat Mouse Rabbit Polyclonal H=57,52,50;M=57;Rat=57 KDa Rabbit IgG HUMAN

HMGCS2 Antibody (C-term) - Additional Information

Gene ID 3158

Antigen Region 478-508

Other Names HMGCS2; Hydroxymethylglutaryl-CoA synthase, mitochondrial; 3-hydroxy-3-methylglutaryl coenzyme A synthase

Dilution WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

Target/Specificity

This HMGCS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 478-508 amino acids from the C-terminal region of human HMGCS2.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

HMGCS2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HMGCS2 Antibody (C-term) - Protein Information



Name HMGCS2

Function

Catalyzes the first irreversible step in ketogenesis, condensing acetyl-CoA to acetoacetyl-CoA to form HMG-CoA, which is converted by HMG-CoA reductase (HMGCR) into mevalonate.

Cellular Location Mitochondrion {ECO:0000250|UniProtKB:P22791}.

Tissue Location

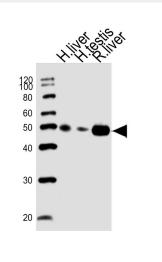
Expression in liver is 200-fold higher than in any other tissue. Low expression in colon, kidney, testis, and pancreas Very low expression in heart and skeletal muscle (PubMed:16940161, PubMed:21952825, PubMed:7893153). Not detected in brain (PubMed:21952825).

HMGCS2 Antibody (C-term) - Protocols

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

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

HMGCS2 Antibody (C-term) - Images

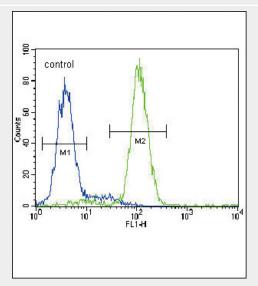


Western blot analysis of lysates from human liver, human testis, human placenta, rat liver tissue lysate (from left to right), using HMGCS2 Antibody (C-term)(Cat. #AW5169). AW5169 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.





HMGCS2 Antibody (C-term) (Cat. #AW5169) IHC analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HMGCS2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



HMGCS2 Antibody (C-term) (Cat. #AW5169) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HMGCS2 Antibody (C-term) - Background

HMGCS2 belongs to the HMG-CoA synthase family. It is a mitochondrial enzyme that catalyzes the first reaction of ketogenesis, a metabolic pathway that provides lipid-derived energy for various organs during times of carbohydrate deprivation, such as fasting.

HMGCS2 Antibody (C-term) - References

Lu,Y., et.al., J. Lipid Res. 49 (12), 2582-2589 (2008)