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HMGCS2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5169

Product Information

Application	FC, IHC-P, WB
Primary Accession	P54868
Reactivity	Mouse, Rat, Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56635
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	3158
Antigen Region	478-508
Other Names	HMGCS2; Hydroxymethylglutaryl-CoA synthase, mitochondrial; 3-hydroxy-3-methylglutaryl coenzyme A synthase
Dilution	FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000
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.

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).

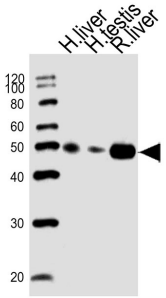
Background

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.

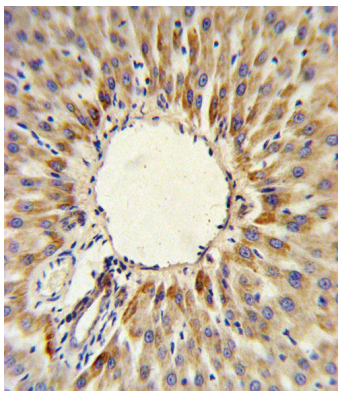
References

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

Images

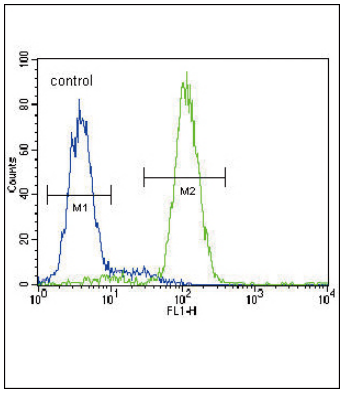


Western blot analysis of lysates from human liver,human testis,human placenta,rat liver tissue lysate (from left to right), using HMGCS2 Antibody (C-term)(Cat. #AW5169). AW5169 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.