

Product datasheet

Anti-HMGCS2 antibody [EPR8642] ab137043

Recombinant **RabMAb**

[6 References](#) [9 Images](#)

Overview

Product name	Anti-HMGCS2 antibody [EPR8642]
Description	Rabbit monoclonal [EPR8642] to HMGCS2
Host species	Rabbit
Specificity	Does not cross react with HMGCS1.
Tested applications	Suitable for: IHC-P, WB Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) corresponding to Human HMGCS2 aa 450 to the C-terminus. Database link: P54868
Positive control	WB: Human fetal liver, mouse kidney and rat kidney tissue lysates and Caco 2 cell lysate. IHC-P: Human, mouse and rat liver tissues and human colon tissue.

General notes

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#)

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8642
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab137043** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

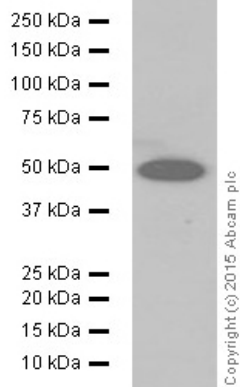
Application	Abreviews	Notes
IHC-P		1/50 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
WB		1/1000 - 1/10000. Detects a band of approximately 50 kDa (predicted molecular weight: 57 kDa).

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

Function	This enzyme condenses acetyl-CoA with acetoacetyl-CoA to form HMG-CoA, which is the substrate for HMG-CoA reductase.
Tissue specificity	High expression in liver and colon. Low expression in testis, heart, skeletal muscle and kidney.
Pathway	Metabolic intermediate biosynthesis; (R)-mevalonate biosynthesis; (R)-mevalonate from acetyl-CoA: step 2/3.
Involvement in disease	Defects in HMGCS2 are the cause of HMG-CoA synthase deficiency (HMGCS deficiency) [MIM:605911]; also known as deficiency of mitochondrial 3-hydroxy-3-methylglutaryl-CoA synthase 2. Affected individuals present with severe hypoketotic hypoglycemia, mild hepatomegaly, or fatty liver, and a nondiagnostic pattern of urinary organic acids with increase of medium and short chain dicarboxylic acids.
Sequence similarities	Belongs to the HMG-CoA synthase family.
Cellular localization	Mitochondrion.

Images



Western blot - Anti-HMGCS2 antibody [EPR8642] (ab137043)

Anti-HMGCS2 antibody [EPR8642] (ab137043) at 1/10000 dilution (purified) + Human fetal liver tissue lysate at 10 μ g

Secondary

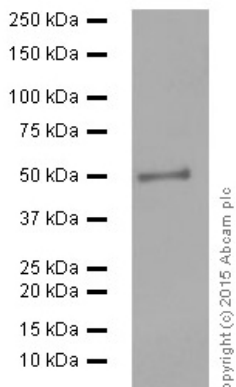
HRP-conjugated goat anti-rabbit IgG (specific to the non-reduced form of IgG) at 1/1000 dilution

Predicted band size: 57 kDa

Observed band size: 50 kDa

[why is the actual band size different from the predicted?](#)

Blocking and dilution buffer: 5% NFDM /TBST.



Western blot - Anti-HMGCS2 antibody [EPR8642] (ab137043)

Anti-HMGCS2 antibody [EPR8642] (ab137043) at 1/1000 dilution (purified) + Rat kidney tissue lysate at 20 μ g

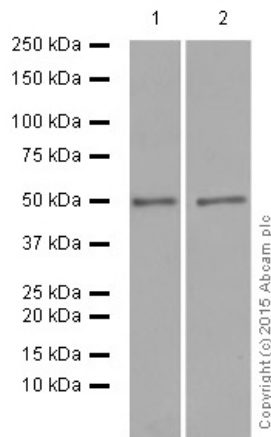
Secondary

HRP-conjugated goat anti-rabbit IgG (specific to the non-reduced form of IgG) at 1/1000 dilution

Predicted band size: 57 kDa

Observed band size: 50 kDa [why is the actual band size different from the predicted?](#)

Blocking and dilution buffer: 5% NFDM /TBST.



Western blot - Anti-HMGCS2 antibody [EPR8642] (ab137043)

All lanes : Anti-HMGCS2 antibody [EPR8642] (ab137043) at 1/5000 dilution (purified)

Lane 1 : Caco-2 whole cell lysate

Lane 2 : Mouse kidney tissue lysate

Lysates/proteins at 20 µg per lane.

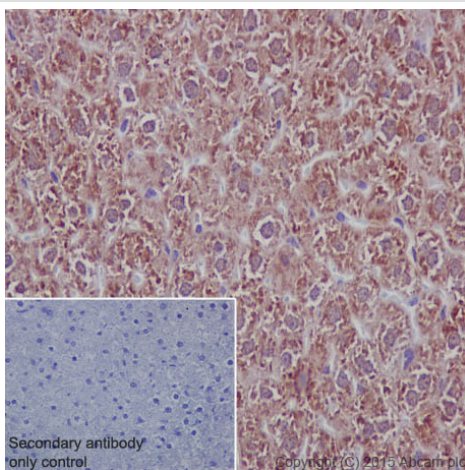
Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG (specific to the non-reduced form of IgG) at 1/1000 dilution

Predicted band size: 57 kDa

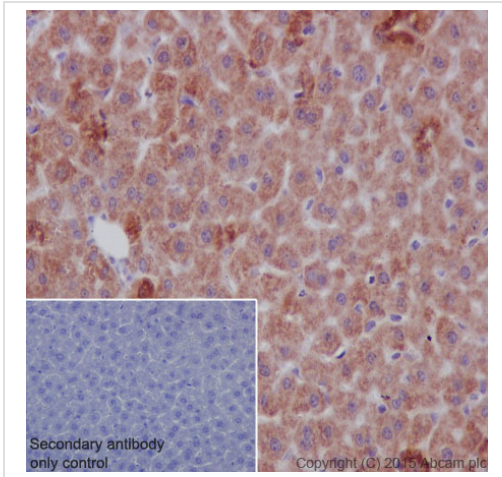
Observed band size: 50 kDa [why is the actual band size different from the predicted?](#)

Blocking and dilution buffer: 5% NFDM /TBST.



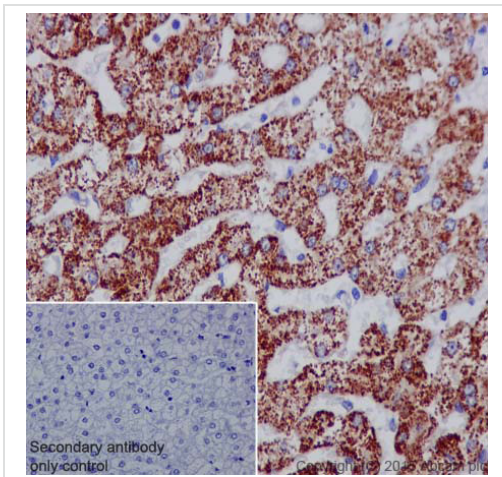
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGCS2 antibody [EPR8642] (ab137043)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling HMGCS2 with purified ab137043 at a dilution of 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



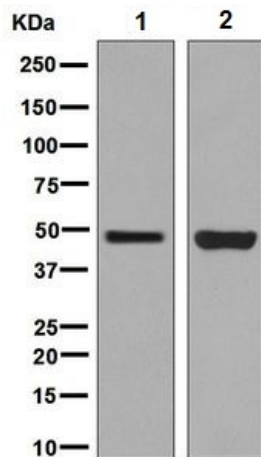
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue labelling HMGCS2 with purified ab137043 at a dilution of 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGCS2 antibody [EPR8642] (ab137043)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling HMGCS2 with purified ab137043 at a dilution of 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGCS2 antibody [EPR8642] (ab137043)



Western blot - Anti-HMGCS2 antibody [EPR8642] (ab137043)

All lanes : Anti-HMGCS2 antibody [EPR8642] (ab137043) at 1/1000 dilution (unpurified)

Lane 1 : Human fetal liver lysate

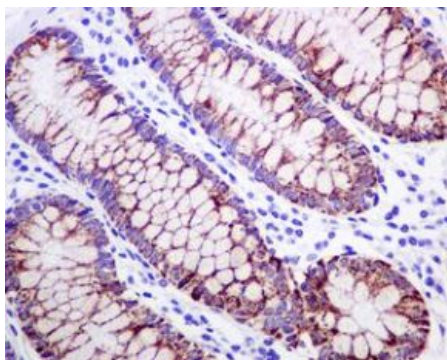
Lane 2 : Caco 2 lysate

Lysates/proteins at 10 µg per lane.

Secondary

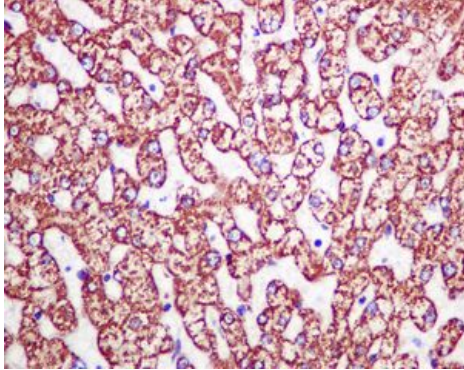
All lanes : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGCS2 antibody [EPR8642] (ab137043)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling HMGCS2 with unpurified ab137043 at a dilution of 1/50.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling HMGCS2 with unpurified ab137043 at a dilution of 1/50.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGCS2 antibody [EPR8642] (ab137043)

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