

## Basic Information

<b>Product Name</b>	Anti-HMGCS2 Antibody	
<b>Gene Name</b>	HMGCS2	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human HMGCS2 recombinant protein (Position: M1-P487).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	50 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

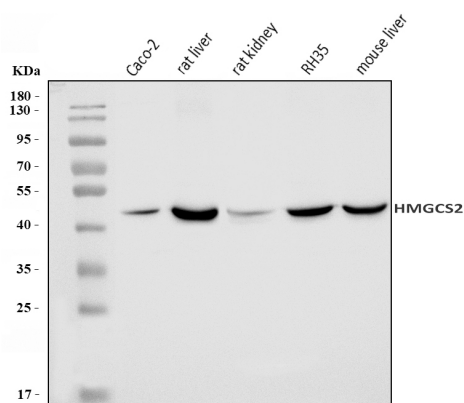
## Background Information

3-hydroxy-3-methylglutaryl-CoA synthase 2 (mitochondrial) is an enzyme in humans that is encoded by the HMGCS2 gene. The protein encoded by this gene 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. Mutations in this gene are associated with HMG-CoA synthase deficiency. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

## Reference

Anti-HMGCS2 Antibody被引用在2文献中。

## Selected Validation Data



Western blot analysis of HMGCS2 using anti-HMGCS2 antibody (A04371-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Caco-2 whole cell lysates,

Lane 2: rat liver tissue lysates,

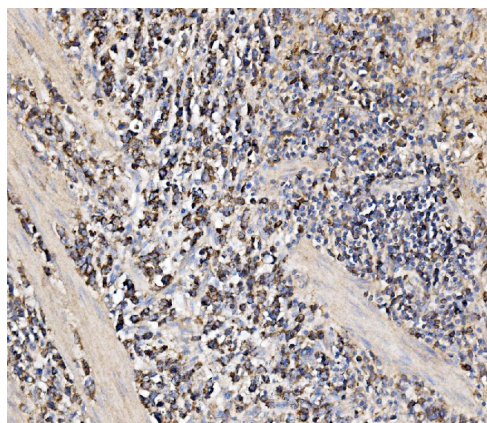
Lane 3: rat kidney tissue lysates,

Lane 4: RH35 whole cell lysates,

Lane 5: mouse liver tissue lysates.

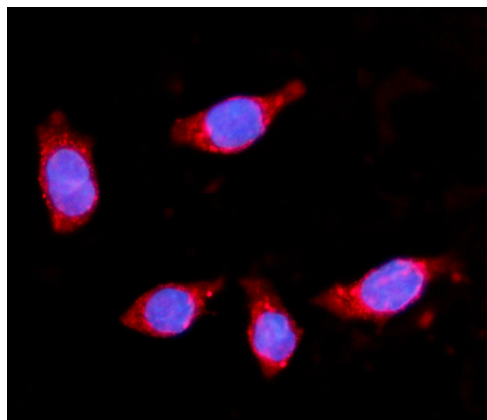
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-HMGCS2 antigen affinity purified polyclonal antibody (A04371-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HMGCS2 at approximately 50 kDa. The expected band size for HMGCS2 is at 57 kDa.

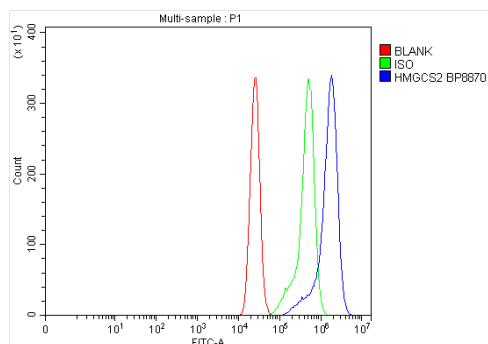


IHC analysis of HMGCS2 using anti-HMGCS2 antibody (A04371-2).

HMGCS2 was detected in a paraffin-embedded section of human gastric cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-HMGCS2 Antibody (A04371-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of HMGCS2 using anti-HMGCS2 antibody (A04371-2). HMGCS2 was detected in an immunocytochemical section of Caco-2 cells. The section was incubated with rabbit anti-HMGCS2 Antibody (A04371-2) at a dilution of 1:100. Dylight594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of Caco-2 cells using anti-HMGCS2 antibody (A04371-2).

Overlay histogram showing Caco-2 cells stained with A04371-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HMGCS2 Antibody (A04371-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.