

Rabbit anti-Human HMGCS1 Polyclonal Antibody | anti-HMGCS1 antibody

Anti-HMGCS1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19542	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

HMGCS1; Polyclonal Antibody; Anti-HMGCS1 Antibody Picoband; anti-HMGCS1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-HMGCS1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), ICC (Immunocytochemistry), WB (Western Blot)
Application Notes	WB: 0.25-0.5 ug/ml, Human IHC-P: 2-5 ug/ml, Human ICC/IF: 5 ug/ml, Human FC/FACS: 1-3 ug/1x10 ⁶ cells, Human Direct ELISA: 0.1-0.5 ug/ml, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC(P) and ICC.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human HMGCS1 recombinant protein (Position: K251-H520).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



IF (Immunofluorescence)

Figure 10. IF analysis of HMGCS1 using anti-HMGCS1 antibody (AAA19542).HMGCS1 was detected in an immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-HMGCS1Antibody (AAA19542) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



FCM (Flow Cytometry)

Figure 9. Flow Cytometry analysis of JK cells using anti-HMGCS1 antibody (AAA19542).Overlay histogram showing JK cells stained with AAA19542 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HMGCS1 Antibody (AAA19542, 1 ug/1x10^6 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 8. IHC analysis of HMGCS1 using anti-HMGCS1 antibody (AAA19542).HMGCS1 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HMGCS1 Antibody (AAA19542) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 7. IHC analysis of HMGCS1 using anti-HMGCS1 antibody (AAA19542).HMGCS1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HMGCS1 Antibody (AAA19542) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 6. IHC analysis of HMGCS1 using anti-HMGCS1 antibody (AAA19542).HMGCS1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HMGCS1 Antibody (AAA19542) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 5. IHC analysis of HMGCS1 using anti-HMGCS1 antibody (AAA19542).HMGCS1 was detected in a paraffin-embedded section of human gastric adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HMGCS1 Antibody (AAA19542) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-HMGCS1 antibody	In molecular biology, hydroxymethylglutaryl-CoA synthase or HMG-CoA synthase EC 2.3.3.10 is an enzyme which catalyzes the reaction in which acetyl-CoA condenses with acetoacetyl-CoA to form 3-hydroxy-3-methylglutaryl-CoA (HMG-CoA). Cytoplasmic 3-hydroxy-3-methylglutaryl-CoA synthase (HMGCS1) catalyzes the first committed step of mevalonate pathway essential for cholesterol biosynthesis. HMGCS1 transcription is regulated by sterol levels. Studies showed that miR-223 reduces cholesterol biosynthesis by inhibiting HMGCS1 and methylsterol monooxygenase 1. In addition, activation of the EGFR family member ERBB4 induces the expression of SREBP-regulated genes (including HMGCS1) involved in cholesterol biosynthesis, suggesting a role of this enzyme in the metabolic re-programming in ERBB4-driven cancers.
Product Categories/Family for anti-HMGCS1 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	1708239
NCBI GeneID	3157
UniProt Accession #	Q01581; B2RDL8

Molecular Weight	520
NCBI Official Full Name	Hydroxymethylglutaryl-CoA synthase, cytoplasmic
NCBI Official Synonym Full Names	3-hydroxy-3-methylglutaryl-CoA synthase 1 (soluble)
NCBI Official Symbol	HMGCS1
NCBI Official Synonym Symbols	HMGCS
NCBI Protein Information	hydroxymethylglutaryl-CoA synthase, cytoplasmic; 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) synthase; 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 (soluble)
UniProt Protein Name	Hydroxymethylglutaryl-CoA synthase, cytoplasmic
UniProt Gene Name	HMGCS1
UniProt Synonym Gene Names	HMGCS; HMG-CoA synthase
UniProt Entry Name	HMCS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hmgcs1-antibody-flow-cytometry-immunofluorescence-immunohistochemistry-immunocytochemistry-western-blot-elisa/19542>