

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

Anti-HMGCS1 Antibody, Rabbit Polyclonal

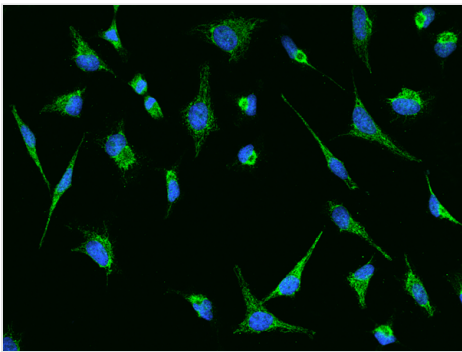
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA256370	Rabbit	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry

PRODUCT SYNONYMS

HMGCS1; Polyclonal Antibody; Anti-HMGCS1 Antibody; Rabbit Polyclonal; HMGCS1 Antibody; Rabbit PAb; Antigen Affinity Purified; 3-hydroxy-3-methylglutaryl-CoA synthase 1; Anti-HMGCS Antibody; anti-HMGCS1 antibody

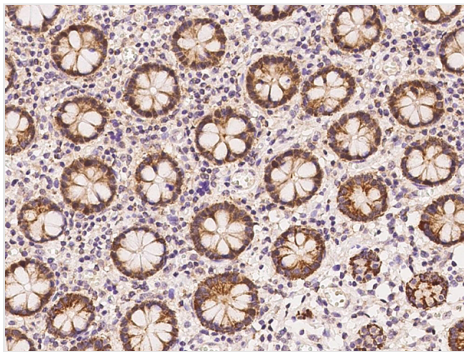
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human HMGCS1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; PBS, pH7.0 with 0.03% Proclin300
Applicable Applications for anti-HMGCS1 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry)
Immunogen	E Coli-derived Human HMGCS1 fragment
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with E Coli-derived Human HMGCS1 fragment, and purified by antigen affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Avoid repeated freeze-thaw cycles.



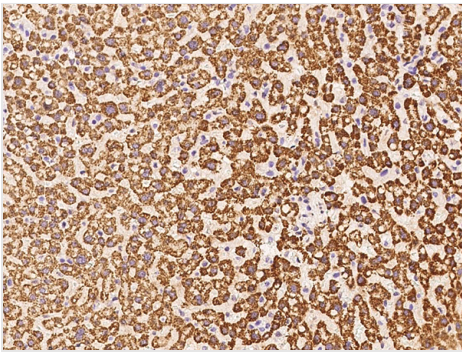
IF (Immunofluorescence)

Immunofluorescence staining of HMGCS1 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-human HMGCS1 polyclonal antibody (dilution ratio 1:200) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.



IHC (Immunohistochemistry)

Immunochemical staining of human HMGCS1 in human large intestine with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohistochemistry)

Immunochemical staining of human HMGCS1 in human liver with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

Related Product Information for anti-HMGCS1 antibody	HMGCS1 (3-hydroxy-3-methylglutaryl-CoA synthase 1), the rate-limiting enzyme of the MVA pathway, is overexpressed in colon cancer tissues and positively regulates the cell proliferation, migration, and invasion of colon cancer cells. Besides, HMGCS1 could enhance the activity of pERK independent of the MVA pathway, and the suppression of HMGCS1 could completely reduce the EGF-induced proliferation of colon cancer cells. HMGCS1 may be a novel biomarker, and the combination of targeting HMGCS1 and MEK might be a promising therapeutic strategy for patients with colon cancer. hmgcs1 encodes the first enzyme in the cholesterol synthesis pathway and mutation of hmgcs1 inhibits cholesterol synthesis. The 3-hydroxy-3-methylglutaryl-CoA synthase 1 (HMGCS1) is a potential regulatory node in the mevalonate pathway that is frequently dysregulated in tumors. HMGCS1 contributes to gastric cancer progression in both metabolic and nonmetabolic manners.
References	Zhou S, et al. (2020) Dipyrindamole enhances the cytotoxicities of trametinib against colon cancer cells through combined targeting of hmgcs1 and mek pathway. Mol Cancer Ther 19 (1): 135-146.Wang IH, et al. (2020) Mevalonate pathway enzyme hmgcs1 contributes to gastric cancer progression. Cancers (Basel) 12 (5): 1088.Hernandez JA, et al. (2019) Mutations in the zebrafish hmgcs1 gene reveal a novel function for isoprenoids during red blood cell development. Blood Adv 3 (8): 1244-1254.

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.