

## Product datasheet for **TA351250**

### HMGC51 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: Human fetal liver tissue IHC: 50-200 Positive control: Human gastric cancer Predicted cell location: Cytoplasm
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide of human HMGC51
Formulation:	pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	57 kDa
Gene Name:	3-hydroxy-3-methylglutaryl-CoA synthase 1
Database Link:	<a href="#">NP_002121</a> <a href="#">Entrez Gene 3157 Human</a> <a href="#">Q01581</a>



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**Background:**

HMG-CoA Synthase exists as both a mitochondrial (mHMGCS) and cytoplasmic (cHMGCS) enzyme that condenses acetyl-CoA with acetoacetyl-CoA to form HMG-CoA. The HMG-CoA produced by cHMGCS is transformed into mevalonate by HMG-CoA reductase, which starts isoprenoid biosynthesis. End products of the isoprenoid pathway include cholesterol, ubiquinone, dolichol, isopentenyl adenosine and farnesyl groups. mHMGCS, together with HMG-CoA Lyase, is responsible for ketone body biosynthesis. mHMGCS is expressed in liver and kidney. Fasting, cAMP and fatty acids increase the level of transcription of mHMGCS, while feeding and insulin repress it. A regulatory element within the mHMGCS promoter confers transcriptional regulation by PPAR, RXR, COUP-TF and HNF-4.

**Synonyms:**

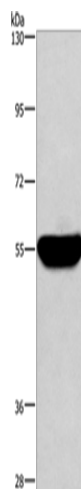
HMGC1

**Protein Families:**

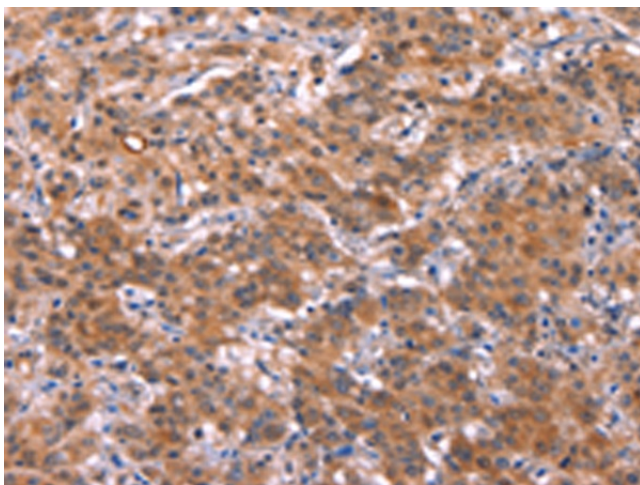
Druggable Genome

**Protein Pathways:**

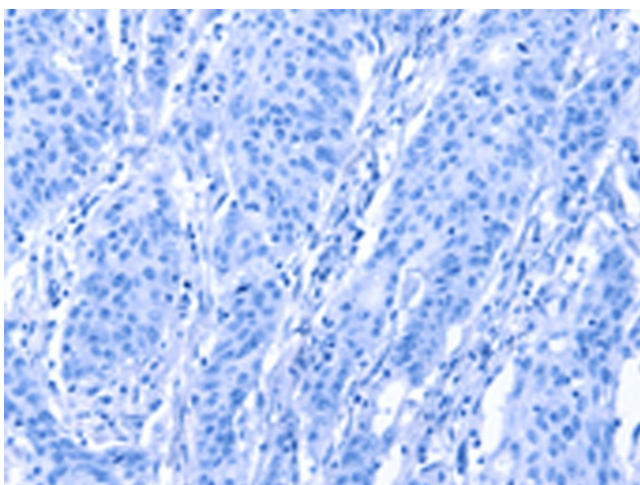
Butanoate metabolism, Metabolic pathways, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Valine, leucine and isoleucine degradation

**Product images:**

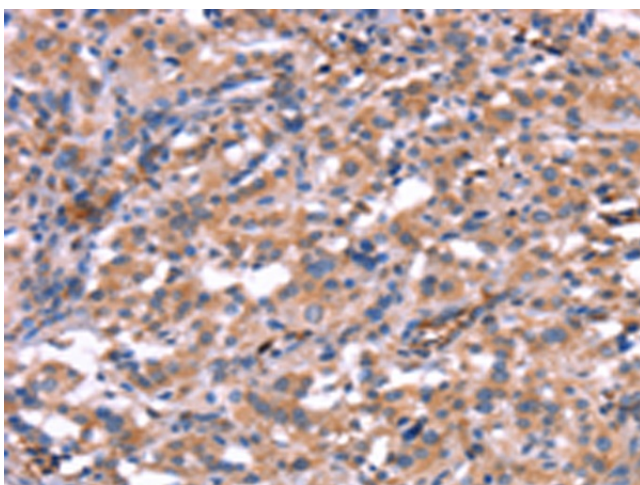
Gel: 6%SDS-PAGE  
Lysate: 40 µg  
Lane: Human fetal liver tissue  
Primary antibody: TA351250 (HMGC1 Antibody)  
at dilution 1/300  
Secondary antibody: Goat anti rabbit IgG at  
1/8000 dilution  
Exposure time: 30 seconds



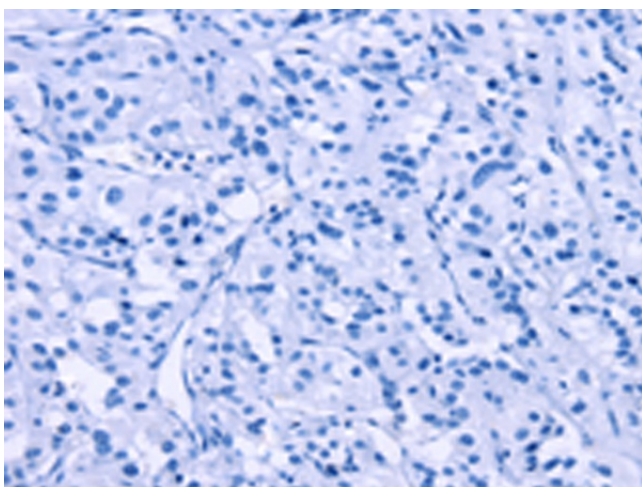
Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA351250 (HMGC51 Antibody) at dilution 1/40 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA351250 (HMGC51 Antibody) at dilution 1/40, treated with synthetic peptide. (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using TA351250 (HMGC51 Antibody) at dilution 1/40 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using TA351250 (HMGC51 Antibody) at dilution 1/40, treated with synthetic peptide. (Original magnification:  $\times 200$ )