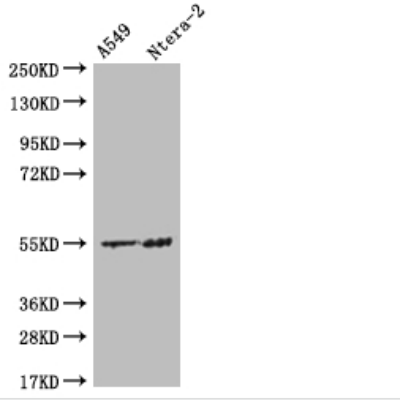
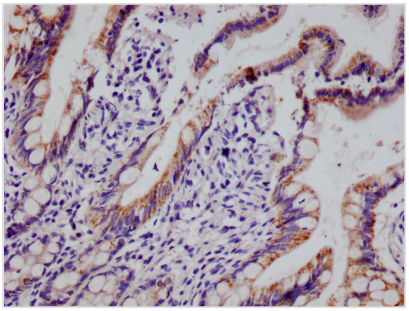
HMGCS2 Recombinant Monoclonal Antibody

Product Code	CSB-RA693900A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P54868
Immunogen	A synthesized peptide derived from human HMGCS2
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:2000, IHC:1:50-1:200
Relevance	Catalyzes the first irreversible step in ketogenesis, condensing acetyl-CoA to acetoacetyl-CoA to form HMG-CoA, which is converted by HMG-CoA reductase (HMGCR) into mevalonate. {ECO:0000269|PubMed:11228257, ECO:0000269|PubMed:23751782, ECO:0000269|PubMed:29597274}.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Metabolism; Signal transduction
Gene Names	HMGCS2
Clone No.	19C11

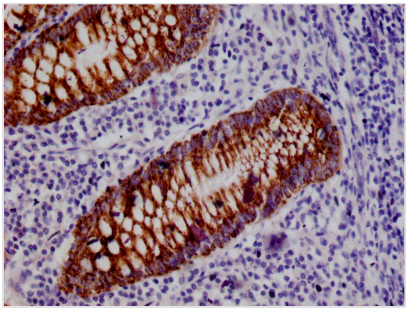
Image



Western Blot
Positive WB detected in: A549 whole cell lysate, Ntera-2 whole cell lysate
All lanes: HMGCS2 antibody at 1:500
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 57, 53, 51 kDa
Observed band size: 55 kDa



IHC image of CSB-RA693900A0HU diluted at 1:100 and staining in paraffin-embedded human small intestine tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA693900A0HU diluted at 1:100 and staining in paraffin-embedded human appendix tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.

Description

The production of the HMGCS2 recombinant monoclonal antibody involves a carefully orchestrated process that includes the following steps. Initially, B cells are isolated from an animal immunized with a synthesized peptide derived from human HMGCS2. Total RNA is extracted from the harvested B cells, and cDNA is synthesized through reverse transcription. The HMGCS2 antibody genes are then amplified using PCR with specific primers and cloned into an expression vector. This vector is transfected into host cells to facilitate the production of the HMGCS2 recombinant monoclonal antibody. Afterward, the antibody is purified from the cell culture supernatant using affinity chromatography. To ensure its quality, the purified antibody undergoes rigorous characterization and validation, including ELISA, WB, and IHC analysis, to confirm its specificity and ability to recognize human HMGCS2 protein. This systematic approach guarantees the generation of a reliable HMGCS2 recombinant monoclonal antibody suitable for various applications in the study of HMGCS2 protein.