

# HMGCS2 rabbit monoclonal antibody

Catalog # H00003158-K

Size 100 ug x up to 3

## Specification

|                         |                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description     | Rabbit monoclonal antibody raised against a human HMGCS2 peptide using ARM Technology.                                                                                                                                                                                       |
| Immunogen               | A synthetic peptide of human HMGCS2 is used for rabbit immunization.<br>Customer or Abnova will decide on the preferred peptide sequence.                                                                                                                                    |
| Host                    | Rabbit                                                                                                                                                                                                                                                                       |
| Library Construction    | Non-fusion antibody library from rabbit spleen ( <a href="#">ARM Technology</a> ).                                                                                                                                                                                           |
| Expression              | Overexpression vector and transfection into 293H cell line.                                                                                                                                                                                                                  |
| Reactivity              | Human                                                                                                                                                                                                                                                                        |
| Purification            | Protein A                                                                                                                                                                                                                                                                    |
| Isotype                 | IgG                                                                                                                                                                                                                                                                          |
| Quality Control Testing | Antibody reactive against human HMGCS2 peptide by ELISA and mammalian transfected lysate by Western Blot.                                                                                                                                                                    |
| Storage Buffer          | In 1x PBS, pH 7.4                                                                                                                                                                                                                                                            |
| Storage Instruction     | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.                                                                                                                                                                                                     |
| Deliverable             | Up to three rabbit IgG clones of 100 ug each will be delivered to customer.                                                                                                                                                                                                  |
| Note                    | 1. Customer may provide cell or tissue lysate for antibody screening.<br>2. Rabbit monoclonal antibody generated by ARM technology is amenable to antibody engineering including F(ab) <sub>2</sub> , IgG, scFv and different Fc and non-Fc conjugates per customer request. |

## Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- ELISA

## Gene Info — HMGCS2

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID       | <a href="#">3158</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| GeneBank Accession# | <a href="#">HMGCS2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Name           | HMGCS2                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Alias          | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene Description    | 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2 (mitochondrial)                                                                                                                                                                                                                                                                                                                                                                                                          |
| Omim ID             | <a href="#">600234 605911</a>                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Gene Ontology       | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Gene Summary        | Mitochondrial 3-hydroxy-3-methylglutaryl CoA synthase (HMGCS2; EC 2.3.3.10) mediates the first reaction of ketogenesis, a metabolic pathway that provides lipid-derived energy for brain, heart, kidney, and other organs during times of carbohydrate deprivation such as fasting (Robinson and Williamson, 1980 [PubMed 6986618]). Also see cytoplasmic HMG-CoA synthase (HMGCS1; MIM 142940), which mediates an early step in cholesterol synthesis.[supplied by OMIM] |
| Other Designations  | OTTHUMP00000013928 hydroxymethylglutaryl-CoA synthase 2                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Pathway

- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Butanoate metabolism](#)
- [Metabolic pathways](#)
- [PPAR signaling pathway](#)
- [Synthesis and degradation of ketone bodies](#)
- [Terpenoid backbone biosynthesis](#)
- [Valine](#)

## Disease

- [Alzheimer disease](#)
- [Arthritis](#)
- [Bipolar Disorder](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypertension](#)
- [Kidney Failure](#)
- [Lymphoma](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Osteoporosis](#)