

HMGCL (T-20): sc-101973

BACKGROUND

HMGCL (3-hydroxy-3-methylglutaryl-coenzyme A (CoA) lyase), also known as HMG-CoA lyase or HL, is a mitochondrial matrix protein that belongs to the HMG-CoA lyase family of proteins. Expressed in liver, lymphoblasts and fibroblasts, HMGCL exists as a homodimer and participates in leucine catabolism and ketogenesis, the hepatic synthesis of ketone bodies that, during fasting, provide a major source of energy for heart, brain and kidney. More specifically, HMGCL catalyzes the final step of these processes, the cleavage of 3-hydroxy-3-methylglutaryl CoA to acetoacetic acid and acetyl CoA. Mutations in the gene encoding HMGCL can lead to HMG-CoA lyase deficiency (also known as HL deficiency or hydroxymethylglutaricaciduria), a metabolic disease that, if left untreated, results in hypoglycemia and coma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HMGCL (human) mapping to 1p36.11; Hmgcl (mouse) mapping to 4 D3.

SOURCE

HMGCL (T-20) is a purified rabbit polyclonal antibody raised against HMGCL of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

HMGCL (T-20) is recommended for detection of HMGCL of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HMGCL siRNA (h): sc-78794, HMGCL siRNA (m): sc-146051, HMGCL shRNA Plasmid (h): sc-78794-SH, HMGCL shRNA Plasmid (m): sc-146051-SH, HMGCL shRNA (h) Lentiviral Particles: sc-78794-V and HMGCL shRNA (m) Lentiviral Particles: sc-146051-V.

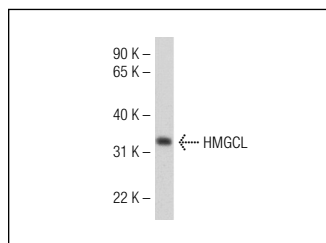
Molecular Weight of HMGCL: 31 kDa.

Positive Controls: HMGCL (h): 293 lysate: sc-111008 or A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



HMGCL (T-20): sc-101973. Western blot analysis of HMGCL expression in fetal liver tissue extract.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.


 MONOS
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Try **HMGCL (63Z): sc-100548**, our highly recommended monoclonal alternative to HMGCL (T-20).