

MGAT2 (H-25): sc-130817

BACKGROUND

Monoacylglycerol O-acyltransferase (MGAT) catalyzes diacylglycerol (a precursor to triacylglycerol) synthesis. MGAT is important in intestinal absorption of dietary fat because resynthesis of triacylglycerol is needed for the assembly of the lipoproteins that transport absorbed fat to tissues. MGAT1 is expressed in stomach, kidney, liver and adipose tissue but is not found in the intestine. On the contrary, MGAT2 (monoacylglycerol O-acyltransferase 2) is highly expressed in the small intestine as well as in kidney, liver, colon, stomach and white adipose tissue. MGAT 3 (monoacylglycerol O-acyltransferase 3) is highly homologous to MGAT1 and MGAT2. The expression of MGAT3 is restricted to the gastrointestinal tract, most concentrated in the ileum.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MOGAT2 (human) mapping to 11q13.5; Mogat2 (mouse) mapping to 7 E2.

SOURCE

MGAT2 (H-25) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of MGAT2 of mouse origin.

PRODUCT

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

APPLICATIONS

MGAT2 (H-25) is recommended for detection of MGAT2 of mouse and human 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 MGAT2 siRNA (h): sc-44468, MGAT2 siRNA (m): sc-44873, MGAT2 shRNA Plasmid (h): sc-44468-SH, MGAT2 shRNA Plasmid (m): sc-44873-SH, MGAT2 shRNA (h) Lentiviral Particles: sc-44468-V and MGAT2 shRNA (m) Lentiviral Particles: sc-44873-V.

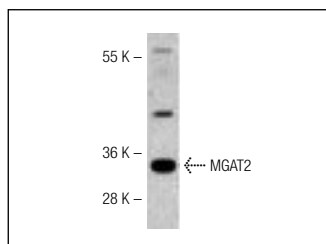
Molecular Weight of MGAT2: 38 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

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



MGAT2 (H-25): sc-130817. Western blot analysis of MGAT2 expression in HL-60 whole cell lysate.

SELECT PRODUCT CITATIONS

- Seyer, A., et al. 2013. Lipidomic and spatio-temporal imaging of fat by mass spectrometry in mice duodenum during lipid digestion. *PLoS ONE* 8: e58224.

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.