

MDGI (N-14)-R: sc-15974-R

BACKGROUND

Fatty acid-binding proteins, designated FABPs, are a family of homologous cytoplasmic proteins that are expressed in a highly tissue-specific manner and play an integral role in the balance between lipid and carbohydrate metabolism. FABPs mediate fatty acid (FA) and/or hydrophobic ligand uptake, transport and targeting within their respective tissues. The mechanisms underlying these actions can give rise to both passive diffusional uptake and protein-mediated transmembrane transport of FAs. FABPs are expressed in adipocytes (A-FABP); brain, (B-FABP); epithelium (E-FABP), also designated psoriasis-associated FABP (PA-FABP); muscle and heart (H-FABP), also designated mammary-derived growth inhibitor (MDGI); intestine (I-FABP); liver (L-FABP); myelin (M-FABP); and testis (T-FABP). MDGI is highly expressed in the myocardium, skeletal and smooth muscle fibers, lipid and/or steroid synthesizing cells and terminally differentiated epithelia of the respiratory, intestinal and urogenital tracts.

CHROMOSOMAL LOCATION

Genetic locus: FABP3 (human) mapping to 1p35.2; Fabp3 (mouse) mapping to 4 D2.2.

SOURCE

MDGI (N-14)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of MDGI of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15974 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

MDGI (N-14) is recommended for detection of MDGI of mouse, rat 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MDGI (N-14)-R is also recommended for detection of MDGI in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MDGI siRNA (h): sc-41245, MDGI siRNA (m): sc-41246, MDGI shRNA Plasmid (h): sc-41245-SH, MDGI shRNA Plasmid (m): sc-41246-SH, MDGI shRNA (h) Lentiviral Particles: sc-41245-V and MDGI shRNA (m) Lentiviral Particles: sc-41246-V.

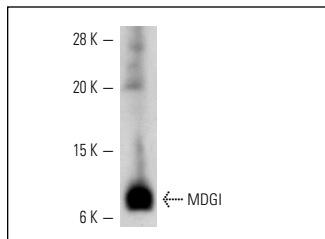
Molecular Weight of MDGI: 14.9 kDa.

Positive Controls: mouse heart extract: sc-2254.

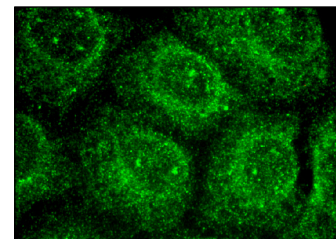
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MDGI (N-14): sc-15974. Western blot analysis of MDGI expression in mouse heart tissue extract.



MDGI (N-14)-R: sc-15974-R. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

SELECT PRODUCT CITATIONS

1. Tang, M.K., et al. 2004. Heart-type fatty acid binding proteins are upregulated during terminal differentiation of mouse cardiomyocytes, as revealed by proteomic analysis. *Cell Tissue Res.* 316: 339-347.
2. Machka, C., et al. 2005. Identification of Dll1 (δ 1) target genes during mouse embryogenesis using differential expression profiling. *Gene Expr. Patterns* 6: 94-101.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **MDGI (G-4): sc-514208** or **MDGI (67D3): sc-58275**, our highly recommended monoclonal alternatives to MDGI (N-14).