

# MDGI (1rFABP-299): sc-81750

## 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 meta-bolism. 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.

## REFERENCES

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- Veerkamp, J.H. and Maatman, R.G. 1995. Cytoplasmic fatty acid-binding proteins: their structure and genes. *Prog. Lipid Res.* 34: 17-52.
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- Glatz, J.F. and Storch, J. 2001. Unravelling the significance of cellular fatty acid-binding proteins. *Curr. Opin. Lipidol.* 12: 267-274.
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## CHROMOSOMAL LOCATION

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

## SOURCE

MDGI (1rFABP-299) is a mouse monoclonal antibody raised against cardiac Fatty Acid Binding Protein (MDGI) of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

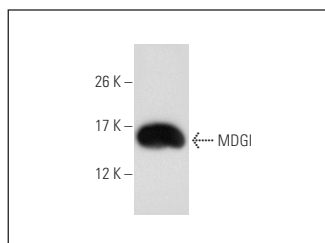
MDGI (1rFABP-299) is recommended for detection of MDGI of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

## DATA



MDGI (1rFABP-299): sc-81750. Western blot analysis of MDGI expression in mouse heart 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.