

# Attractin (F-2): sc-514036

## BACKGROUND

Mahogany (MG), originally identified as a protein involved in pigmentation, acts in conjunction with melanocortin receptors to suppress diet-induced obesity. Mahogany contains a single transmembrane domain, and it is expressed in a broad range of tissues, including the hypothalamus and pigment cells. Mutations within the mahogany gene were shown to rescue agouti-lethal-yellow mutant mice from obesity. The extracellular domain of mouse mahogany is the ortholog of the human protein attractin. Attractin (also designated DPPT-L) is a human serum glycoprotein and is a member of the CUB family of cell adhesion and guidance proteins. Attractin is expressed on activated T cells and is released from the cells 48 to 72 hours after activation.

## REFERENCES

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2. Duke-Cohan, J.S., Gu, J., McLaughlin, D.F., Xu, Y., Freeman, G.J. and Schlossman, S.F. 1998. Attractin (DPPT-L), a member of the CUB family of cell adhesion and guidance proteins, is secreted by activated human T lymphocytes and modulates immune cell interactions. *Proc. Natl. Acad. Sci. USA* 95: 11336-11341.
3. Dinulescu, D.M., Fan, W., Boston, B.A., McCall, K., Lamoreux, M.L., Moore, K.J., Montagno, J. and Cone, R.D. 1998. Mahogany (MG) stimulates feeding and increases basal metabolic rate independent of its suppression of agouti. *Proc. Natl. Acad. Sci. USA* 95: 12707-12712.
4. Nagle, D.L., McGrail, S.H., Vitale, J., Woolf, E.A., Dussault, B.J., Jr., DiRocco, L., Holmgren, L., Montagno, J., Bork, P., Huszar, D., Fairchild-Huntress, V., Ge, P., Keilty, J., Ebeling, C., Baldini, L., Gilchrist, J., et al. 1999. The mahogany protein is a receptor involved in suppression of obesity. *Nature* 398: 148-152.
5. Gunn, T.M., Miller, K.A., He, L., Hyman, R.W., Davis, R.W., Azarani, A., Schlossman, S.F., Duke-Cohan, J.S. and Barsh, G.S. 1999. The mouse mahogany locus encodes a transmembrane form of human Attractin. *Nature* 398: 152-156.

## CHROMOSOMAL LOCATION

Genetic locus: ATRN (human) mapping to 20p13; Atrn (mouse) mapping to 2 F1.

## SOURCE

Attractin (F-2) is a mouse monoclonal antibody raised against amino acids 877-950 mapping within an internal region of Attractin of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Attractin (F-2) is recommended for detection of Attractin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Attractin siRNA (h): sc-77343, Attractin siRNA (m): sc-77345, Attractin shRNA Plasmid (h): sc-77343-SH, Attractin shRNA Plasmid (m): sc-77345-SH, Attractin shRNA (h) Lentiviral Particles: sc-77343-V and Attractin shRNA (m) Lentiviral Particles: sc-77345-V.

Molecular Weight of Attractin: 175 kDa.

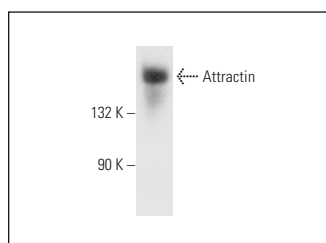
Positive Controls: human plasma extract: sc-364374.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Attractin (F-2): sc-514036. Western blot analysis of Attractin in human plasma.

## 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.