

Attractin (D-8): sc-514084

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

1. Miller, K.A., et al. 1997. Genetic studies of the mouse mutations mahogany and mahoganoid. *Genetics* 146: 1407-1415.
2. Duke-Cohan, J.S., et al. 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., et al. 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., et al. 1999. The mahogany protein is a receptor involved in suppression of obesity. *Nature* 398: 148-152.
5. Gunn, T.M., et al. 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 (D-8) 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_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Attractin (D-8) is available conjugated to agarose (sc-514084 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514084 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514084 PE), fluorescein (sc-514084 FITC), Alexa Fluor® 488 (sc-514084 AF488), Alexa Fluor® 546 (sc-514084 AF546), Alexa Fluor® 594 (sc-514084 AF594) or Alexa Fluor® 647 (sc-514084 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514084 AF680) or Alexa Fluor® 790 (sc-514084 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Attractin (D-8) 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.

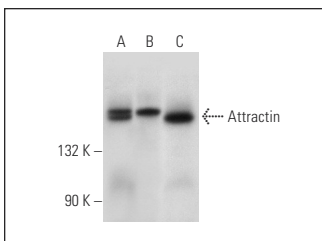
Molecular Weight of Attractin: 175 kDa.

Positive Controls: A549 cell lysate: sc-2413, KNRK whole cell lysate: sc-2214 or RT-4 whole cell lysate: sc-364257.

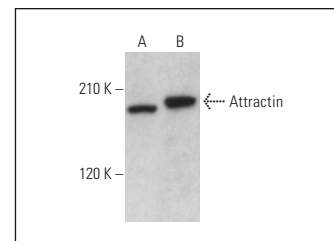
RECOMMENDED SUPPORT REAGENTS

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 (D-8): sc-514084. Western blot analysis of Attractin expression in A549 (A), RT-4 (B) and U-251-MG (C) whole cell lysates.



Attractin (D-8): sc-514084. Western blot analysis of Attractin expression in SK-BR-3 (A) and KNRK (B) whole cell lysates.

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 for detailed protocols and support products.

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