SANTA CRUZ BIOTECHNOLOGY, INC.

Attractin (D-8): sc-514084

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

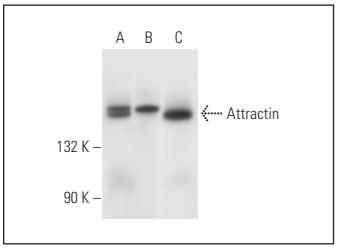
Molecular Weight of Attractin: 175 kDa.

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

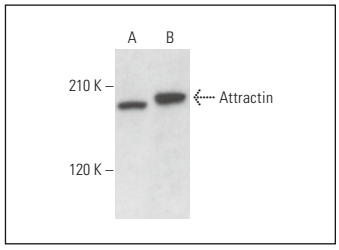
RECOMMENDED SUPPORT REAGENTS

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.