**BACKGROUND**

Adipsin is the mouse homolog of the previously described human complement Factor D, a serine protease, which is now designated human Adipsin. Human Adipsin is highly expressed in and secreted by adipose tissue, and it has also been found in monocytes and macrophages. Rodent Adipsin has only been detected in high levels in adipose tissue. It has been shown that complement factor B, when complexed with activated complement component C3, is cleaved by Adipsin. While low expression of Adipsin has been confirmed in obese mice with hypothalamic defects, this inverse correlation between Adipsin expression and obesity has not been demonstrated in humans.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CFD (human) mapping to 19p13.3.

**SOURCE**

Adipsin (D10/4) is a mouse monoclonal antibody raised against complement protein factor D purified from human serum.

**PRODUCT**

Each vial contains 200 µg IgGk kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Adipsin (D10/4) is available conjugated to agarose (sc-47683 AC), 500 µg/0.25 mg agarose in 1 ml for WB, to HRP (sc-47683 HRP), 200 µg/ml, for WB, HRP, and ELISA; to either phycoerythrin (sc-47683 PE), fluorescein (sc-47683 FITC), Alexa Fluor® 488 (sc-47683 AF488), Alexa Fluor® 546 (sc-47683 AF546), Alexa Fluor® 594 (sc-47683 AF594) or Alexa Fluor® 647 (sc-47683 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM, and to either Alexa Fluor® 680 (sc-47683 AF680) or Alexa Fluor® 790 (sc-47683 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Adipsin (D10/4) is recommended for detection of Adipsin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:1000-1:1000), 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Adipsin siRNA (h): sc-29646, Adipsin shRNA Plasmid (h): sc-29646-SH and Adipsin shRNA (h) Lentiviral Particles: sc-29646-V.

Molecular Weight of Adipsin: 28 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182, THP-1 cell lysate: sc-2238 or U-937 cell lysate: sc-2239.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk 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).


**DATA**

Adipsin (D10/4): sc-47683 Western blot analysis of Adipsin expression in THP-1 (A), AML-193 (B) and U-937 (C) whole cell lysates.

Adipsin (D10/4): sc-47683 Immunoperoxidase staining of formalin fixed, paraffin embedded human kidney tissue showing cytoplasmic and extracellular staining of cells in tubules (B).

**SELECT PRODUCT CITATIONS**


**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 for detailed protocols and support products.

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