

# Adipsin (L-21): sc-12403

## 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/macrophages. Rodent Adipsin has only been detected in high levels in adipose tissue. Complement Factor B, when complexed with activated complement component C3, has been shown to be cleaved by Adipsin. Low expression of Adipsin has been shown in obese mice with hypothalamic defects, suggesting that obesity may be caused as a result of this systemic disorder.

## REFERENCES

1. Lesavre, P.H., et al. 1979. The alternative pathway C3/C5 convertase: chemical basis of Factor B activation. *J. Immunol.* 123: 529-534.
2. Niemann, M.A., et al. 1984. Amino acid sequence of human D of the alternative complement pathway. *Biochem.* 23: 2482-2486.
3. Rosen, B.S., et al. 1989. Adipsin and complement Factor D activity: an immune-related defect in obesity. *Science* 244: 1483-1487.
4. White, R.T., et al. 1992. Human Adipsin is identical to complement Factor D and is expressed at high levels in adipose tissue. *J. Biol. Chem.* 267: 9210-9213.
5. Choy, L.N., et al. 1992. Adipsin and an endo-genous pathway of complement from adipose cells. *J. Biol. Chem.* 267: 12736-12741.
6. Platt, K.A., et al. 1994. Independent regulation of adipose tissue-specificity and obesity response of the Adipsin promoter in transgenic mice. *J. Biol. Chem.* 269: 28558-28562.

## CHROMOSOMAL LOCATION

Genetic locus: CFD (human) mapping to 19p13.3; Cfd (mouse) mapping to 10 C1.

## SOURCE

Adipsin (L-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Adipsin of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12403 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

Adipsin (L-21) is recommended for detection of Adipsin 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)], 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 Adipsin siRNA (h): sc-29646, Adipsin siRNA (m): sc-29647, Adipsin shRNA Plasmid (h): sc-29646-SH, Adipsin shRNA Plasmid (m): sc-29647-SH, Adipsin shRNA (h) Lentiviral Particles: sc-29646-V and Adipsin shRNA (m) Lentiviral Particles: sc-29647-V.

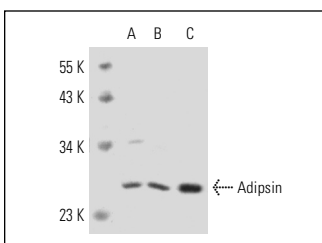
Molecular Weight of Adipsin: 28 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, WEHI-231 whole cell lysate: sc-2213 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Adipsin (L-21): sc-12403. Western blot analysis of Adipsin expression in WEHI-231 (A) and Jurkat (B) whole cell lysates and analysis of human Adipsin protein (C).

## SELECT PRODUCT CITATIONS

1. Hamza, M.S., et al. 2009. De-novo identification of PPAR $\gamma$ /RXR binding sites and direct targets during adipogenesis. *PLoS ONE* E-published.

**MONOS**  
Satisfaction  
Guaranteed

Try **Adipsin (D10/4): sc-47683** or **Adipsin (D-8): sc-376015**, our highly recommended monoclonal alternatives to Adipsin (L-21).