

Acrp30 (A-13): sc-26497

BACKGROUND

Acrp30 (adipocyte complement-related protein or AdipoQ) is a secretory protein made exclusively in adipocytes with mRNA induced over 100-fold during adipocyte differentiation. Post-transcriptional modification of Acrp30 yields several oligomeric forms of varying molecular weight, including a monomer, a dimer, a trimer, a hexamer and a polymer. Acrp30 is an abundant serum protein, secreted exclusively from fat cells, and is implicated in energy homeostasis and obesity. Due to the dysregulation of Acrp30 in cases of obesity in humans and mice and the strong structural similarity to TNF α , Acrp30 is a suspected regulator of whole body energy homeostasis. In addition, regulated exocytosis of Acrp30 appears to require phosphatidylinositol-3-kinase activity, since Insulin-stimulated Acrp30 secretion is blocked by pharmacologic inhibitors of this enzyme.

CHROMOSOMAL LOCATION

Genetic locus: ADIPOQ (human) mapping to 3q27.3; Adipoq (mouse) mapping to 16 B1.

SOURCE

Acrp30 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Acrp30 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-26497 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Acrp30 (A-13) is recommended for detection of precursor and mature Acrp30 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Acrp30 (A-13) is also recommended for detection of precursor and mature Acrp30 in additional species, including bovine.

Suitable for use as control antibody for Acrp30 siRNA (h): sc-43600, Acrp30 siRNA (m): sc-45891, Acrp30 shRNA Plasmid (h): sc-43600-SH, Acrp30 shRNA Plasmid (m): sc-45891-SH, Acrp30 shRNA (h) Lentiviral Particles: sc-43600-V and Acrp30 shRNA (m) Lentiviral Particles: sc-45891-V.

Molecular Weight of Acrp30: 30 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, MIA PaCa-2 cell lysate: sc-2285 or NCI-H929 whole cell lysate: sc-364786.

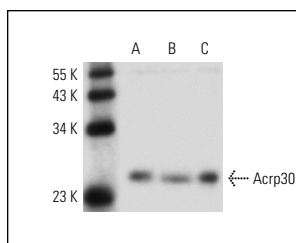
STORAGE

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

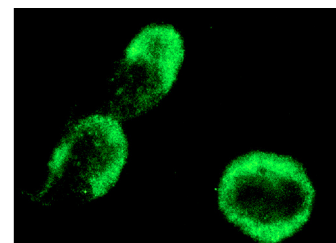
RESEARCH USE

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

DATA



Acrp30 (A-13): sc-26497. Western blot analysis of Acrp30 expression in 3T3-L1 (A), NCI-H929 (B) and MIA PaCa-2 (C) whole cell lysates.



Acrp30 (A-13): sc-26497. Immunofluorescence staining of methanol-fixed MIA PaCa-2 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Ikeda, K., et al. 2006. Transcription factor activating enhancer-binding protein-2 β : a negative regulator of adiponectin gene expression. *J. Biol. Chem.* 281: 31245-31253.
- Yim, H.E., et al. 2011. Postnatal early overnutrition dysregulates the intrarenal renin-angiotensin system and extracellular matrix-linked molecules in juvenile male rats. *J. Nutr. Biochem.* 23: 937-945.
- Tomicek, N.J., et al. 2011. Increased estrogen receptor β in adipose tissue is associated with increased intracellular and reduced circulating adiponectin protein levels in aged female rats. *Gend. Med.* 8: 325-333.
- Asensio-López, M.C., et al. 2011. Metformin protects against doxorubicin-induced cardiotoxicity: involvement of the adiponectin cardiac system. *Free Radic. Biol. Med.* 51: 1861-1871.
- Moreno-Navarrete, J.M., et al. 2013. Decreased RB1 mRNA, protein, and activity reflect obesity-induced altered adipogenic capacity in human adipose tissue. *Diabetes* 62:1923-1931.

PROTOCOLS

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