SANTA CRUZ BIOTECHNOLOGY, INC.

Acrp30 (G-17): sc-26496

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 TNFα, 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, C1QTNF9B (human) mapping to 13q12.12; Adipoq (mouse) mapping to 16 B1.

SOURCE

Acrp30 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Acrp30 of human 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-26496 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.

APPLICATIONS

Acrp30 (G-17) is recommended for detection of precursor and mature Acrp30 and LOC387911 of human origin and precursor and mature Acrp30 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); may be cross-reactive with CTRP9.

Acrp30 (G-17) is also recommended for detection of precursor and mature Acrp30 and LOC387911 in additional species, including equine, canine, bovine and porcine.

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

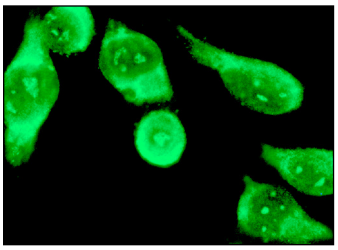
Molecular Weight of Acrp30: 30 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243 or MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Acrp30 (G-17): sc-26496. Immunofluorescence staining of methanol-fixed Mia PaCa-2 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Eiras, S., et al. 2008. Extension of coronary artery disease is associated with increased IL-6 and decreased adiponectin gene expression in epicardial adipose tissue. Cytokine 43: 174-180.
2. Kasimanickam, V.R., et al. 2013. Associations of adiponectin and fertility estimates in Holstein bulls. Theriogenology 79: 766-77.e1-e3.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.