SANTA CRUZ BIOTECHNOLOGY, INC.

CTRP7 (F-14): sc-79220

BACKGROUND

Members of the C1q/TNF-α protein family have diverse functions that are related to cell adhesion and basement membrane components that may exert their effects in a paracrine or autocrine fashion. CTRP7 (complement C1q tumor necrosis factor-related protein 7) is a 289 amino acid secreted glycoprotein that contains one collagen-like domain and one C1q domain. In young obese mice, transcripts of CTRP1, CTRP2, CTRP3, CTRP6 and CTRP7 are found to be upregulated. CTRP7 is predominantly expressed in adipose tissue and may be a paralog of Acrp30 (adiponectin). Caloric restriction in young animals leads to an increase in serum Acrp30, however this is not the case with older animals. During caloric restriction in older animals, transcription of CTRP2 and CTRP7 is significantly induced in senescent skeletal muscle and myocardium. This however is not sufficient to activate AMPK to the same extent as in younger animals, therefore suggesting that CTRP2 and CTRP7 are not suitable substitutions for Acrp30 function.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: C1QTNF7 (human) mapping to 4p15.32; C1qtnf7 (mouse) mapping to 5 B3.

SOURCE

CTRP7 (F-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CTRP7 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-79220 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTRP7 (F-14) is recommended for detection of CTRP7 of mouse, rat and human 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).

CTRP7 (F-14) is also recommended for detection of CTRP7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CTRP7 siRNA (h): sc-77056, CTRP7 siRNA (m): sc-77057, CTRP7 shRNA Plasmid (h): sc-77056-SH, CTRP7 shRNA Plasmid (m): sc-77057-SH, CTRP7 shRNA (h) Lentiviral Particles: sc-77056-V and CTRP7 shRNA (m) Lentiviral Particles: sc-77057-V.

Molecular Weight of CTRP7: 31 kDa.

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.

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 or our catalog for detailed protocols and support products.