

CTRP6 (M-48): sc-98712

BACKGROUND

Members of the CTRP (complement C1q tumor necrosis factor-related protein) family are structurally related, although functionally diverse. CTRPs share TNF α -like globular domains and N-terminal glycine-X-Y repeats and also tend to form trimers that have the ability to congregate into higher order structures. Functions of this protein family range from immune homeostasis to structural and extracellular matrix-related roles. CTRP6 (complement C1q tumor necrosis factor-related protein 6) is a 259 amino acid secreted glycoprotein consisting of an N-terminal signal peptide sequence followed by a collagen-like domain and a C-terminal globular domain. Predominantly expressed in eye and placenta, CTRP6 is also upregulated in obese mice. Along with CTRP1, CTRP2, CTRP3 and CTRP5, CTRP6 circulates in the blood and is thought to function as an endocrine hormone. There are three isoforms of CTRP6 that are produced as a result of alternative splicing events.

REFERENCES

1. Lasser, G., et al. 2006. C1qTNF-related protein-1 (CTRP1): a vascular wall protein that inhibits collagen-induced platelet aggregation by blocking VWF binding to collagen. *Blood* 107: 423-430.
2. Kim, K.Y., et al. 2006. Tumor necrosis factor- α and interleukin-1 β increases CTRP1 expression in adipose tissue. *FEBS Lett.* 580: 3953-3960.
3. Akiyama, H., et al. 2007. CTRP3/cartducin promotes proliferation and migration of endothelial cells. *Mol. Cell. Biochem.* 304: 243-248.
4. Wong, G.W., et al. 2008. Molecular, biochemical and functional characterizations of C1q/TNF family members: adipose-tissue-selective expression patterns, regulation by PPAR- γ agonist, cysteine-mediated oligomerizations, combinatorial associations and metabolic functions. *Biochem. J.* 416: 161-177.
5. Jeon, J.H., et al. 2008. A novel adipokine CTRP1 stimulates aldosterone production. *FASEB J.* 22: 1502-1511.
6. Wong, G.W., et al. 2008. Identification and characterization of CTRP9, a novel secreted glycoprotein, from adipose tissue that reduces serum glucose in mice and forms heterotrimers with adiponectin. *FASEB J.* 23: 241-258
7. Wölfing, B., et al. 2008. Effects of the new C1q/TNF-related protein (CTRP3) "cartonectin" on the adipocytic secretion of adipokines. *Obesity* 16: 1481-1486.

CHROMOSOMAL LOCATION

Genetic locus: C1qtnf6 (mouse) mapping to 15 E1.

SOURCE

CTRP6 (M-48) is a rabbit polyclonal antibody raised against amino acids 87-134 mapping within an internal region of CTRP6 of mouse origin.

STORAGE

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

PRODUCT

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

APPLICATIONS

CTRP6 (M-48) is recommended for detection of CTRP6 of mouse and rat 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).

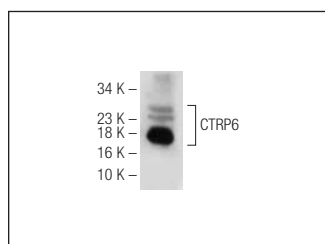
Suitable for use as control antibody for CTRP6 siRNA (m): sc-142628, CTRP6 shRNA Plasmid (m): sc-142628-SH and CTRP6 shRNA (m) Lentiviral Particles: sc-142628-V.

Molecular Weight of CTRP6: 29 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CTRP6 (M-48): sc-98712. Western blot analysis of CTRP6 expression in mouse eye tissue extract.

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.