SANTA CRUZ BIOTECHNOLOGY, INC.

CTRP8 (V-13): sc-242518



The Power to Question

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 extracelluar matrix-related roles. CTRP8 (complement C1q tumor necrosis factor-related protein 8), also known as UN05829 or C10TNF8 (C1q and tumor necrosis factor related protein 8), is a 252 amino acid secreted protein that is expressed predominantly in lung and testis. Containing one C1q domain and one collagen-like domain, CTRP8 exists as a homotrimer and forms heteromeric complexes with C1qL1. CTRP8 is encoded by a gene located on human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome.

REFERENCES

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- Kim, K.Y., et al. 2006. Tumor necrosis factor-α and interleukin-1β increases CTRP1 expression in adipose tissue. FEBS Lett. 580: 3953-3960.
- Akiyama, H., et al. 2007. CTRP3/cartducin promotes proliferation and migration of endothelial cells. Mol. Cell. Biochem. 304: 243-248.
- 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.
- Wölfing, B., et al. 2008. Effects of the new C1q/TNF-related protein (CTRP-3) "cartonectin" on the adipocytic secretion of adipokines. Obesity 16: 1481-1486.
- Peterson, J.M., et al. 2009. CTRP8 and CTRP9B are novel proteins that hetero-oligomerize with C1q/TNF family members. Biochem. Biophys. Res. Commun. 388: 360-365.
- Wong, G.W., et al. 2009. 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.

CHROMOSOMAL LOCATION

Genetic locus: C1QTNF8 (human) mapping to 16p13.3.

SOURCE

CTRP8 (V-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CTRP8 of human 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 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242518 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTRP8 (V-13) is recommended for detection of CTRP8 of 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); non cross-reactive with other CTRP family members.

Suitable for use as control antibody for CTRP8 siRNA (h): sc-93167, CTRP8 shRNA Plasmid (h): sc-93167-SH and CTRP8 shRNA (h) Lentiviral Particles: sc-93167-V.

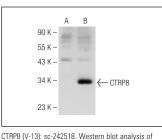
Molecular Weight of CTRP8: 28 kDa.

Positive Controls: CTRP8 (h): 293T Lysate: sc-174073.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



CTRP8 expression in non-transfected: sc-117752 (A) and human CTRP8 transfected: sc-174073 (B) 293T whole cell lysates.

RESEARCH USE

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