

CTRP1 (W-18): sc-65070

BACKGROUND

CTRP1 (also designated complement C1q tumor necrosis factor-related protein 1 precursor, G protein-coupled receptor-interacting protein and GIP) is a 281 amino acid protein encoded by the human gene C1QTN1. CTRP1 is a member of the CTRP superfamily and is expressed at high levels in adipose tissues of obese Zucker diabetic fatty (fa/fa) rats. It consists of an N-terminal signal peptide sequence followed by a variable region, a collagen repeat domain and a C-terminal globular domain. CTRP1 expression is induced by proinflammatory cytokines, including TNF α and IL-1 β . Due to its cytokine induced nature, CTRP1 expression may be associated with a low-grade chronic inflammation status in adipose tissues.

REFERENCES

1. Wu, T.H., et al. 1997. Increased excretion of tumor necrosis factor- α and interleukin-1 β in urine from patients with IgA nephropathy and Schönlein-Henoch purpura. *Nephron* 74: 79-88.
2. Branten, A.J., et al. 2002. Short-term effects of fish oil treatment on urinary excretion of high- and low-molecular weight proteins in patients with IgA nephropathy. *Clin. Nephrol.* 58: 267-274.
3. Bergmann, J., et al. 2005. IgA nephropathy and Hodgkin's disease: a rare coincidence. Case report and literature review. *Am. J. Kidney Dis.* 45: e16-e19.
4. 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.
5. Khositseth, S., et al. 2007. IgA nephropathy associated with Hodgkin's disease in children: a case report, literature review and urinary proteome analysis. *Pediatr. Nephrol.* 22: 541-546.
6. Jeon, J.H., et al. 2008. A novel adipokine CTRP1 stimulates aldosterone production. *FASEB J.* 22: 1502-1511.

CHROMOSOMAL LOCATION

Genetic locus: C1qtnf1 (mouse) mapping to 11 E2.

SOURCE

CTRP1 (W-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CTRP1 of rat 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-65070 P, (100 μ g 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

CTRP1 (W-18) is recommended for detection of CTRP1 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 CTRP1 siRNA (m): sc-62172, CTRP1 shRNA Plasmid (m): sc-62172-SH and CTRP1 shRNA (m) Lentiviral Particles: sc-62172-V.

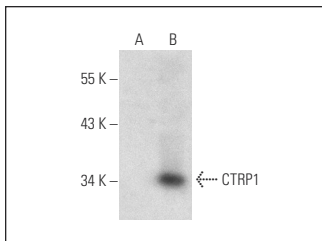
Molecular Weight of CTRP1: 32 kDa.

Positive Controls: PC-12 cell lysate: sc-2250 or CTRP1 (m): 293T Lysate: sc-125181.

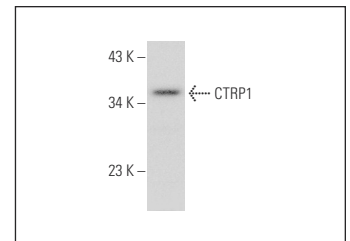
RECOMMENDED SECONDARY REAGENTS

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



CTRP1 (W-18): sc-65070. Western blot analysis of CTRP1 expression in non-transfected: sc-117752 (A) and mouse CTRP1 transfected: sc-125181 (B) 293T whole cell lysates.



CTRP1 (W-18): sc-65070. Western blot analysis of CTRP1 expression in PC-12 whole cell lysate.

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.