SANTA CRUZ BIOTECHNOLOGY, INC.

CTRP1 (S-13): sc-65068

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 TNFα and IL-1β. 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-1β 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-1β 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 (human) mapping to 17q25.3.

SOURCE

CTRP1 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CTRP1 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-65068 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.

RESEARCH USE

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

APPLICATIONS

CTRP1 (S-13) is recommended for detection of CTRP1 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

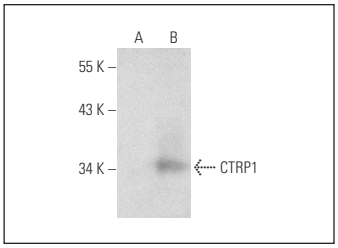
Suitable for use as control antibody for CTRP1 siRNA (h): sc-62171, CTRP1 shRNA Plasmid (h): sc-62171-SH and CTRP1 shRNA (h) Lentiviral Particles: sc-62171-V.

Molecular Weight of CTRP1: 32 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) 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 (S-13): sc-65068. Western blot analysis of CTRP1 expression in non-transfected: sc-117752 (**A**) and mouse CTRP1 transfected: sc-125181 (**B**) 293T whole cell lysates.

PROTOCOLS

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