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


CHROMOSOMAL LOCATION

Genetic locus: C1QTNF1 (human) mapping to 17q25.3; C1qtnf1 (mouse) mapping to 11 E2.

SOURCE

CTRP1 (2E7) is a mouse monoclonal antibody raised against recombinant CTRP1 of human origin.

PRODUCT

Each vial contains 100 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

CTRP1 (2E7) is recommended for detection of CTRP1 of mouse, rat and human 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)] 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 siRNA (m): sc-62172, CTRP1 shRNA Plasmid (h): sc-62171-SH, CTRP1 shRNA Plasmid (m): sc-62172-SH, CTRP1 shRNA (h) Lentiviral Particles: sc-62171-V and CTRP1 shRNA (m) Lentiviral Particles: sc-62172-V.

Molecular Weight of CTRP1: 32 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

SELECT PRODUCT CITATIONS


RESEARCH USE

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