

CTRP1 Antibody

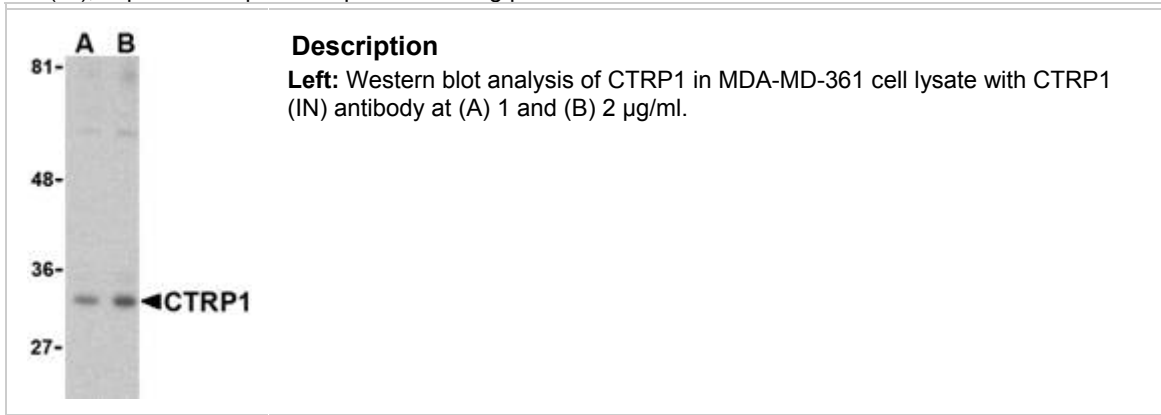
SIG-3555

Background

Adipose tissue of an organism plays a major role in regulating physiologic and pathologic processes such as metabolism and immunity by producing and secreting a variety of bioactive molecules termed adipokines (reviewed in 1). One highly conserved family of adipokines is adiponectin/ACRP30 and its structural and functional paralogs, the C1q/tumor necrosis factor- α -related proteins (CTRPs) 1-7 (2). Unlike adiponectin, which is expressed exclusively by differentiated adipocytes, the CTRPs are expressed in a wide variety of tissues (3). These proteins are thought to act mainly on liver and muscle tissue to control glucose and lipid metabolism. An analysis of the crystal structure of adiponectin revealed a structural and evolutionary link between TNF and C1q-containing proteins, suggesting that these proteins arose from a common ancestral innate immunity gene (4). In obese (*ob/ob*) mice, RT-PCR analysis showed that mCTRP1 transcripts are seen at substantially higher levels in adipose tissues compared to those of normal mice (3).

Additional Names

CTRP1 (IN), G protein coupled receptor interacting protein 1 / GIP



Source

CTRP1 (IN) antibody was raised against a 16 amino acid peptide from near the center of human CTRP1.

Purification

Affinity chromatography purified via peptide column

Clonality / Clone

This is a polyclonal antibody.

Host

CTRP1 antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

Immunogen

Human CTRP1 / G protein coupled receptor interacting protein 1 / GIP (Intermediate Domain) Peptide

Application

CTRP1 antibody can be used for the detection of CTRP1 by Western blot at 1 µg/ml. MDA-MD-361 cell lysate can be used as positive control. Anti-CTRP1 is human and mouse reactive. These proteins are often highly modified post-translationally and migrate in SDS-PAGE at positions other than their predicted size.

Tested Application

E, WB

Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

Blocking Peptide

CTRP1 Peptide (contact Zyagen for availability)

Storage

CTRP1 antibody can be stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Positive Control

MDA-MB-361 Cell Lysate (contact Zyagen for availability)

Species Reactivity

H, M

Protein GI Number

38372917

Protein Accession Number

NP_940995

Short Description

(IN) a novel adipokine

References

1. Fantuzzi G. Adipose tissue, adipokines, and inflammation. *J. Allergy Clin. Immunol.* 2005; 115:911-9.
2. Tsao T-S, Lodish HF, and Fruebis J. ACRP30, a new hormone controlling fat and glucose metabolism. *Euro. J. Pharmacol.* 2002; 440:213-21.
3. Wong GW, Wang J, Hug C, et al. A family of Acrp30/ adiponectin structural and functional paralogs. *Proc. Natl. Acad. Sci. USA* 2004; 101:10302-7.
4. Shapiro L and Scherer PE. The crystal structure of a complement-1q family protein suggests an evolutionary link to tumor necrosis factor. *Curr. Biol.* 1998; 8:335-8.