

CTRP2 Antibody

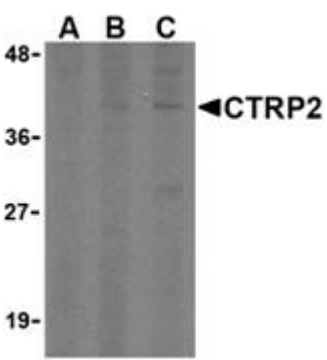
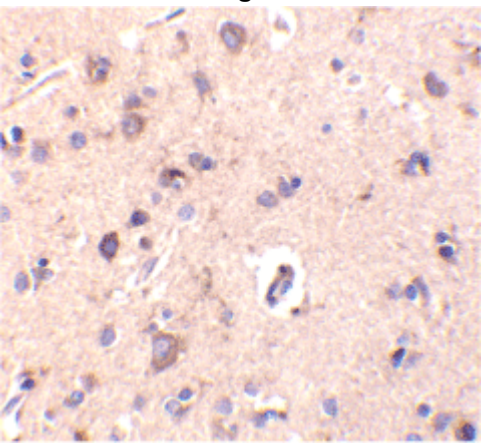
SIG-3559

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- γ -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). Of the CTRPs, CTRP2 is most similar structurally and functionally to adiponectin. Recombinant CTRP2 rapidly activated AMPK and MAPK in cultured C2C12 cells, leading to increased glycogen accumulation and fatty acid oxidation (3).

Additional Names

CTRP2 (IN), CTRP2

	<p>Description</p> <p>Left: Western blot analysis of CTRP2 in 3T3 (Balb) cell lysate with CTRP2 (IN) antibody at (A) 1, (B) 2, and (C) 4 μg/ml.</p> <p>Below: Immunohistochemical staining of human brain tissue using CTRP2 antibody at 10 μg/ml.</p> <p>Other Product Images</p> 
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Source

Rabbit CTRP2 polyclonal antibody was raised against a 16 amino acid peptide from near the center of human CTRP2.

Purification

Affinity chromatography purified via peptide column

Clonality / Clone

This is a polyclonal antibody.

Host

CTRP2 antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

Immunogen

Human CTRP2 (Intermediate Domain) Peptide

Application

CTRP2 polyclonal antibody can be used for the detection of CTRP2 by Western blot at 2 - 4 µg/ml. These proteins are often highly modified post-translationally and migrate in SDS-PAGE at positions other than their predicted size.

Tested Application

E, WB, IHC

Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

Blocking Peptide

CTRP2 Peptide (contact Zyagen for availability)

Storage

CTRP2 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

1. 3T3 Cell Lysate (contact Zyagen for availability)
2. Human Brain Tissue Lysate (contact Zyagen for availability)

Species Reactivity

H, M

Protein GI Number

94818738

Protein Accession Number

NP_114114

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.