

# CTRP2 Antibody

Catalog # ASC10335

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q9BXJ5</a>
<b>Other Accession</b>	<a href="#">NP_114114</a> , <a href="#">94818738</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	29952
<b>Concentration (mg/ml)</b>	1 mg/mL
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	CTRP2 antibody can be used for the detection of CTRP2 by Western blot at 1 $\mu$ g/mL.

## Additional Information

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<b>Gene ID</b>	114898
<b>Other Names</b>	CTRP2 Antibody: CTRP2, zacrp2, CTRP2, UNQ6349/PRO21054, Complement C1q tumor necrosis factor-related protein 2, C1q and tumor necrosis factor related protein 2
<b>Target/Specificity</b>	C1QTNF2; These proteins are often highly modified post-translationally and migrate in SDS-PAGE at positions other than their predicted size.
<b>Reconstitution &amp; Storage</b>	CTRP2 antibody can be stored at 4°C for three months and -20°C, stable for up to 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.
<b>Precautions</b>	CTRP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	C1QTNF2
<b>Synonyms</b>	CTRP2
<b>Function</b>	Involved in the regulation of lipid metabolism in adipose tissue and liver.
<b>Cellular Location</b>	Secreted.
<b>Tissue Location</b>	Expressed in adipose tissue.

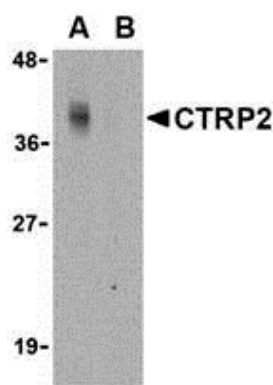
## Background

**CTRP2 Antibody:** 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. One highly conserved family of adipokines is adiponectin/ACRP30 and its structural and functional paralogs, the C1q/tumor necrosis factor- $\alpha$ -related proteins (CTRPs) 1-7. Unlike adiponectin, which is expressed exclusively by differentiated adipocytes, the CTRPs are expressed in a wide variety of tissues. 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. 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.

## References

- Fantuzzi G. Adipose tissue, adipokines, and inflammation. *J. Allergy Clin. Immunol.* 2005; 115:911-9.
- Tsao T-S, Lodish HF, and Fruebis J. ACRP30, a new hormone controlling fat and glucose metabolism. *Euro. J. Pharmacol.* 2002; 440:213-21.
- 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.
- 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.

## Images



Western blot analysis of CTRP2 in Caco-2 cell lysate with CTRP2 antibody at 1  $\mu$ g/mL in either the (A) absence or (B) presence of blocking peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.