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CTRP2 Antibody

Catalog # ASC10384

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q9BXJ5
Other Accession	NP_114114, 94818738
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	29952
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CTRP2 antibody can be used for the detection of CTRP2 by Western blot at 1 g/mL. Antibody can also be used for immunocytochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

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

Protein Information

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

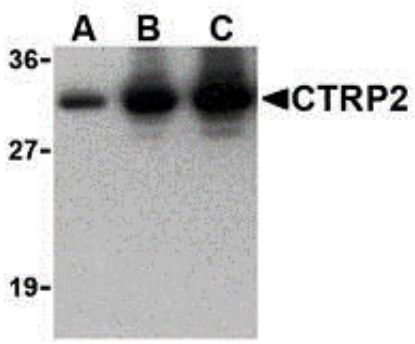
Background

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 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.

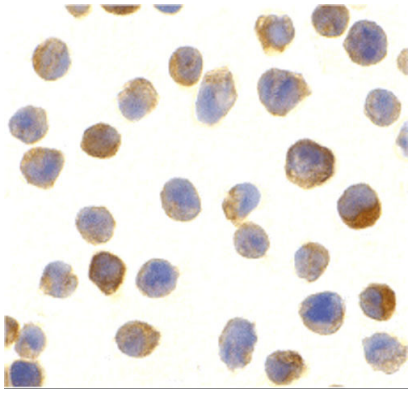
References

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

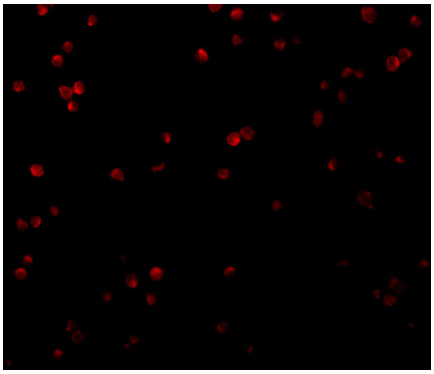


Western blot of recombinant CTRP2: (A) 5 ng, (B) 25 ng, and (C) 50 ng with CTRP2 at 1 µg/mL.



Immunocytochemistry of CTRP2 in Jurkat cells with CTRP2 antibody at 10 µg/mL.

Immunofluorescence of CTRP2 in Jurkat cells with CTRP2 antibody at 20 µg/mL.



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