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CTRP4 Antibody
Catalog # ASC10338

Specification

CTRP4 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q9BXJ3
Other Accession	AAH35628, 23243285
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**CTRP4 antibody can be used for the detection of CTRP4 by Western blot at 1 - 4 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.**

CTRP4 Antibody - Additional Information

Gene ID **114900**

Other Names
CTRP4 Antibody: CTRP4, ZACRP4, CTRP4, Complement C1q tumor necrosis factor-related protein 4, C1q and tumor necrosis factor related protein 4

Target/Specificity
C1QTNF4; These proteins are often highly modified post-translationally and migrate in SDS-PAGE at positions other than their predicted size.

Reconstitution & Storage
CTRP4 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
CTRP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CTRP4 Antibody - Protein Information

Name C1QTNF4

Synonyms CTRP4

Function
May be involved in the regulation of the inflammatory network. Its role as pro- or anti-inflammatory seems to be context dependent (PubMed:21658842, PubMed:<a

href="http://www.uniprot.org/citations/27086950" target="_blank">27086950). Seems to have some role in regulating food intake and energy balance when administered in the brain. This effect is sustained over a two-day period, and it is accompanied by decreased expression of orexigenic neuropeptides in the hypothalamus 3 hours post-injection (By similarity).

Cellular Location
Secreted.

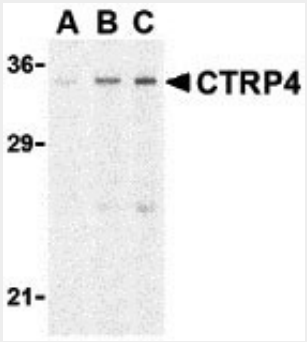
Tissue Location
Widely expressed at low levels (PubMed:21658842). Highest levels in adipocyte tissue and brain (PubMed:24366864)

CTRP4 Antibody - Protocols

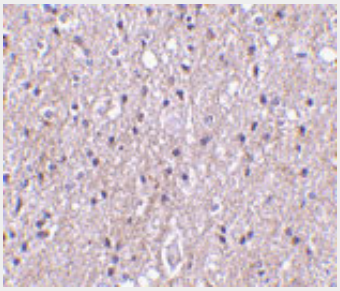
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CTRP4 Antibody - Images

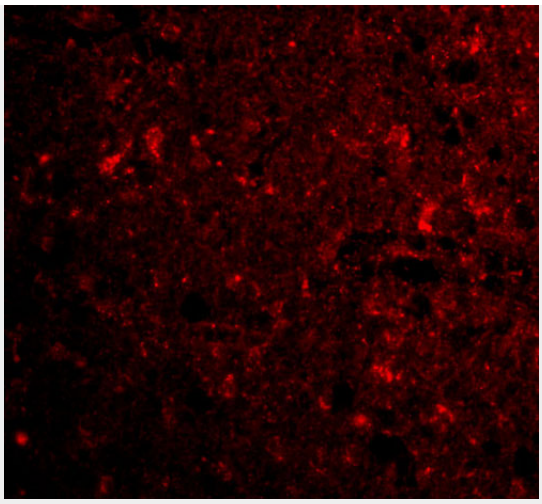


Western blot analysis of CTRP4 in rat brain cell lysate with CTRP4 antibody at (A) 1, (B) 2, and (C) 4 µg/mL.



Immunohistochemistry of CTRP4 in human brain tissue with CTRP4 antibody at 10 µg/mL.

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Immunofluorescence of CTRP4 in human brain tissue with CTRP4 antibody at 20 µg/mL.

CTRP4 Antibody - Background

CTRP4 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. Multiple isoforms of mouse CTRP4 have been reported.

CTRP4 Antibody - 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.