

# CTRP4 Antibody

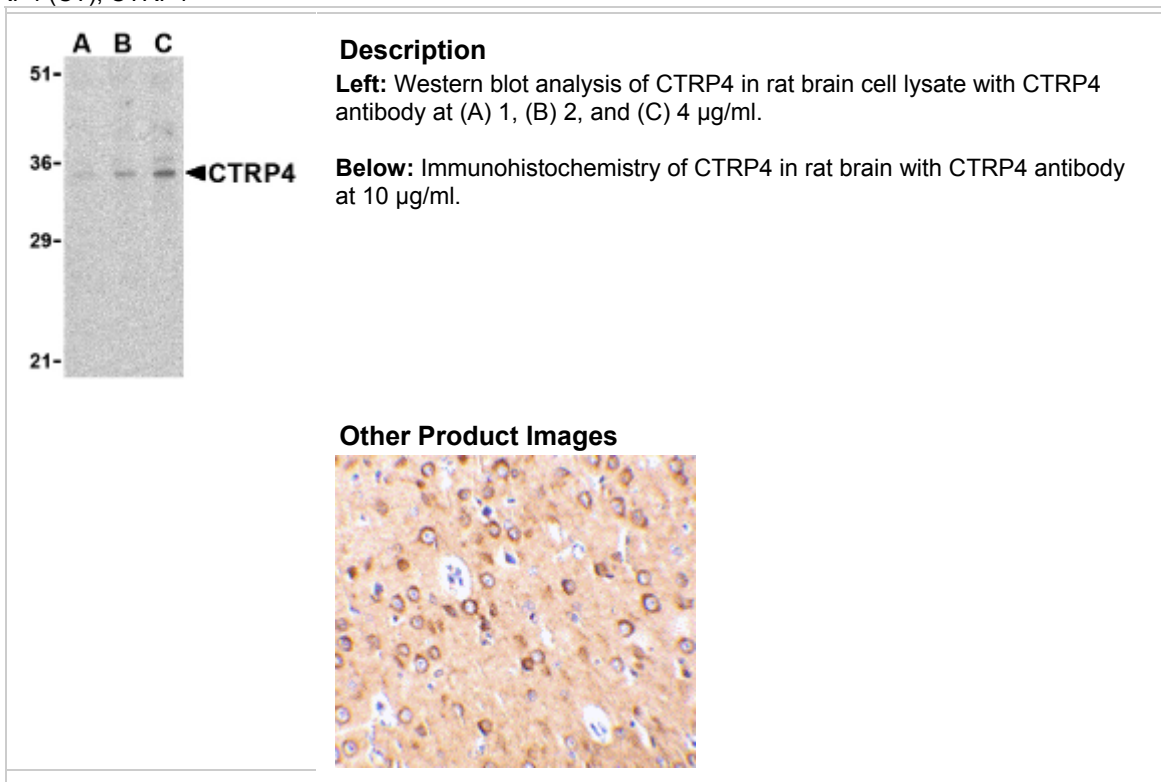
**SIG-3567**

## 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- $\beta$ -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). Multiple isoforms of mouse CTRP4 have been reported.

## Additional Names

CTRP4 (CT), CTRP4



## Source

CTRP4 antibody was raised against a 16 amino acid peptide from near the carboxy terminus of human CTRP4.

## Purification

Affinity chromatography purified via peptide column

## Clonality / Clone

This is a polyclonal antibody.

## Host

CTRP4 antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

## Immunogen

Human CTRP4 (C-Terminus) Peptide

## Application

CTRP4 antibody can be used for the detection of CTRP4 by Western blot at 1 - 2 µg/ml. Rat brain cell lysate can be used as positive control. CTRP4 antibody is human, mouse and rat 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, IHC

## Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

## Blocking Peptide

CTRP4 Peptide (contact Zyagen for availability)

## Storage

CTRP4 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

Rat Brain Tissue Lysate (contact Zyagen for availability)

## Species Reactivity

H, M, R

## Protein GI Number

23243285

## Protein Accession Number

AAH35628

## Short Description

(CT) 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.

