



## CTRP1 Polyclonal Antibody

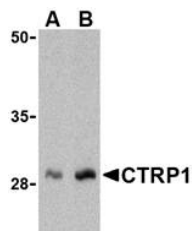
Product Specifications	
<b>Catalog Number:</b>	905-715-100
<b>Host:</b>	Rabbit
<b>Species Reactivity:</b>	Human, mouse, rat
<b>Applications:</b> <i>The optimal dilution for a specific application must be determined by the investigator</i>	<b>WB:</b> 1-2 µg/mL <b>IHC:</b> 10 µg/mL
<b>Predicted m.w.:</b>	~29 kDa CTRP proteins are highly modified post-translationally and can migrate in SDS-PAGE at positions other than their predicted size.
<b>Concentration:</b>	See product label
<b>Purification:</b>	Peptide Affinity
<b>Format:</b>	PBS, 0.02% sodium azide
<b>Storage:</b> <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
<b>Immunogen:</b>	Synthetic peptide corresponding to sequence near the amino-terminus of human CTRP1
<b>Related Products:</b>	
905-714-100	Adiponectin Polyclonal Antibody
905-728-100	CTRP2 Polyclonal Antibody
905-716-100	CTRP3 Polyclonal Antibody
905-717-100	CTRP4 Polyclonal Antibody
905-718-100	CTRP5 Polyclonal Antibody
905-719-100	CTRP6 Polyclonal Antibody
905-720-100	CTRP7 Polyclonal Antibody

### Background:

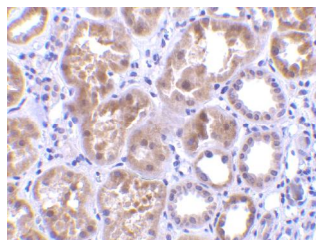
Adipose tissue of an organism plays a major role in regulating physiologic and pathologic processes such as metabolism and immunity by producing and secreting a variety of bioactive molecules termed adipokines<sup>1</sup>. One highly conserved family of adipokines is adiponectin/ACRP30 and its structural and functional paralogs, the C1q/tumor necrosis factor- $\alpha$ -related proteins (CTRPs) 1-7<sup>2</sup>. Unlike adiponectin, which is expressed exclusively by differentiated adipocytes, the CTRPs are expressed in a wide variety of tissues<sup>3</sup>. 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<sup>4</sup>. In obese (*ob/ob*) mice, RT-PCR analysis showed that mCTRP1 transcripts are seen at substantially higher levels in adipose tissues compared to those of normal mice<sup>3</sup>.

#### References:

1. Fantuzzi, G. (2005) *J Allergy Clin Immunol.* **115**, 911-919.
2. Tsao, T.-S., *et al.* (2002) *Euro J Pharmacol.* **440**, 213-221.
3. Wong, G.W., *et al.* (2004) *Proc Natl Acad Sci USA* **101**, 10302-10307.
4. Shapiro, L. and Scherer, P.E. (1998) *Curr Biol.* **8**, 335-338.



Western blot analysis of human kidney cell lysate with CTRP1 Polyclonal antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of human kidney tissue with CTRP1 Polyclonal antibody at 10 µg/mL.