

## Adiponectin Polyclonal Antibody

### Product Specifications

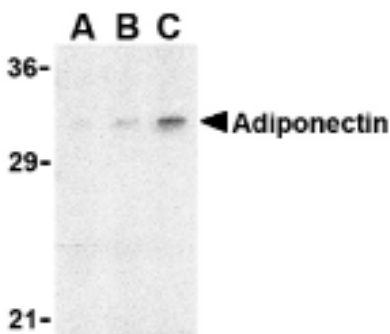
<b>Catalog Number:</b>	905-714-100
<b>Host:</b>	Rabbit
<b>Species Reactivity:</b>	Human, mouse, rat
<b>Applications:</b> <i>The optimal dilution for a specific application must be determined by the investigator</i>	<b>WB:</b> 1 µg/mL <b>IHC:</b> 1 µg/mL
<b>Predicted m.w.:</b>	~32 kDa
<b>Concentration:</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 Adiponectin
<b>Related Products:</b>	
905-715-100	CTRP1 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:

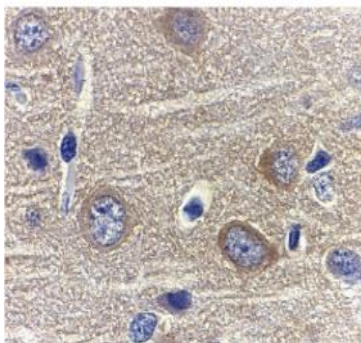
Adipose tissue of an organism plays a major role in regulating physiologic and pathologic processes such as metabolism and immunity by producing and secreting a variety of bioactive molecules termed adipokines<sup>1</sup>. One highly conserved family of adipokines is adiponectin/ACRP30 and its structural 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>. Adiponectin is detected at high levels in normal human plasma, but is often reduced in obese subjects and in those with increased insulin resistance and type 2 diabetes, suggesting adiponectin may be a useful pharmacological target for various metabolic diseases<sup>5</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) *PNAS USA* **101**, 10302-10307.
4. Shapiro, L. and Scherer, P.E. (1998) *Curr Biol.* **8**, 335-338.
5. Lihn, A.S., *et al.* (2005) *Obes Rev.* **6**, 13-21.



Western blot analysis of rat brain cell lysate, probed with Adiponectin Polyclonal Antibody at (A) 1, (B) 2, and (C) 4 µg/mL



Immunohistochemistry of rat brain tissue with Adiponectin Polyclonal Antibody at 1 µg/mL

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