

Adiponectin . Rabbit Antigen Immunoaffinity Purified Polyclonal
ACRP30, adipocyte complement-related protein 30 (NT)

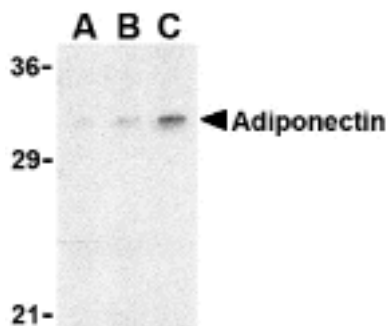
BACKGROUND

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 paralog, the C1q/tumor necrosis factor- β -related proteins (CTRPs) 1-7 (2). Unlike the CTRPs, which are expressed in a wide variety of tissues, adiponectin is reported to be expressed exclusively by differentiated adipocytes (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). It is present in high levels in normal human plasma, but is reduced in obese subjects and often in those with increased insulin resistance and type 2 diabetes, suggesting that adiponectin may be a useful pharmacological target in various metabolic diseases (5).

IMMUNOGEN

Rabbit polyclonal adiponectin antibody was raised against a 15 amino acid peptide from near the amino terminus of human adiponectin.

Western blot analysis of adiponectin in rat brain cell lysate with adiponectin antibody at (A) 1, (B) 2, and (C) 4 μ g/ml.



ORDERING INFORMATION

CATALOG NUMBER

X1832P

SIZE

100 μ g

FORM

Unconjugated

HOST/CLONE

Rabbit

FORMULATION

Provided as solution in phosphate buffered saline with 0.02% sodium azide

CONCENTRATION

See vial for concentration

ISOTYPE

IgG

APPLICATIONS

Western Blot, Immunohistochemistry

SPECIES REACTIVITY

Human, Mouse, Rat

ACCESSION NUMBER

Human Q15848

POSITIVE CONTROL/TISSUE EXPRESSION

Positive Control Rat brain cell lysate

A secreted protein synthesized exclusively by adipocytes.⁶

COMMENTS

Adiponectin antibody can be used for the detection of adiponectin by Western blot at 1 ug/ml.

PURIFICATION

Antigen Immunoaffinity Purification

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

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.
- 5) Lihn AS, Pedersen SB, and Richelsen B. Adiponectin: action, regulation and association to insulin sensitivity. *Obes. Rev.* 2005; 6:13-21.
- 6) UniProtKB/Swiss-Prot entry Q15848, <http://au.expasy.org/uniprot/Q15848>, Accessed February 27, 2007.

PRODUCT SPECIFIC REFERENCES