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AP30260PU-N Polyclonal Antibody to CTRP7 - Aff - Purified

Quantity: 0.1 mg

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-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). Like the other members of the adiponectin and CTRP protein family, the mature CTRP7 is secreted and can be found

in the organism

 Uniprot ID:
 Q5BKS0

 NCBI:
 AAY21932

 GeneID:
 109323

 Host / Isotype:
 Rabbit / IgG

Immunogen: Recombinant mouse CTRP7 (AP30260CP-N)

Format: State: Liquid purified Ig fraction

Purification: Affinity chromatography purified via peptide column

Buffer System: PBS containing 0.02% sodium azide.

Applications: ELISA.

Western Blot: CTRP7 antibody can be used for the detection of CTRP7 at 0.5 $\mu g/ml$. These proteins are often highly modified post-translationally and migrate in SDS-

PAGE at positions other than their predicted size.

Immunocytochemistry.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: Rabbit anti-CTRP7 polyclonal antibody was raised against recombinant human CTRP7.

Species: Human, Mouse, Rat. Other species not tested.

Add. Information: Blocking peptide available: blocking peptide (AP30260CP-N)

Storage: Store the antibody undiluted at 2-8°C.

Shelf life: one year from despatch.

General Readings: 1. Fantuzzi G. Adipose tissue, adipokines, and inflammation. J. Allergy Clin. Immunol.

2005; 115:911-9.

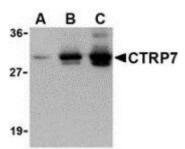
2. Tsao TS, Lodish HF, Fruebis J. ACRP30, a new hormone controlling fat and glucose metabolism. Eur J Pharmacol. 2002 Apr 12;440(2-3):213-21. PubMed PMID: 12007537.



- 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, Scherer PE. The crystal structure of a complement-1q family protein suggests an evolutionary link to tumor necrosis factor. Curr Biol. 1998 Mar 12;8(6):335-8. PubMed PMID: 9512423.

Pictures:

Western blot of recombinant CTRP7: (A) 5 ng, (B) 25 ng, and (C) 50 ng with CTRP2 antibody at 1 ug/mL.



Immunocytochemistry of CTRP7 in 293 cells with CTRP7 antibody at 10 ug/mL.

