

## **ADIPOR2 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5105C

## **Specification**

#### ADIPOR2 Antibody (Center) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Antigen Region

IF, WB, FC,E
086V24
Human
Rabbit
Polyclonal
Rabbit Ig
45-72

ADIPOR2 Antibody (Center) - Additional Information

#### **Gene ID** 79602

#### **Other Names**

Adiponectin receptor protein 2, Progestin and adipoQ receptor family member II, ADIPOR2, PAQR2

## Target/Specificity

This ADIPOR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 45-72 amino acids from the Central region of human ADIPOR2.

## **Dilution**

IF~~1:10~50 WB~~1:1000 FC~~1:25

## **Format**

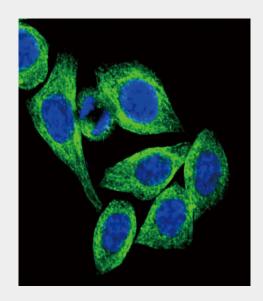
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

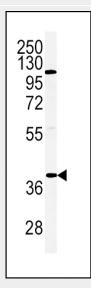
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ADIPOR2 Antibody (Center) is for research



Confocal immunofluorescent analysis of ADIPOR2 Antibody (Center) (Cat. #AP5105c) with Hela cell followed by Alexa Fluor[]?489-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of ADIPOR2 Antibody (Center) (Cat. #AP5105c) in Hela cell line lysates (35ug/lane).ADIPOR2 (arrow) was detected using the purified Pab.



use only and not for use in diagnostic or therapeutic procedures.

#### **ADIPOR2 Antibody (Center) - Protein Information**

Receptor for ADIPOQ, an essential hormone

### Name ADIPOR2 (HGNC:24041)

#### **Function**

secreted by adipocytes that regulates glucose and lipid metabolism (PubMed: <a h ref="http://www.uniprot.org/citations/12802 337" target="\_blank">12802337</a>, PubMed:<a href="http://www.uniprot.org/ci tations/25855295" target=" blank">25855295</a>). Required for normal body fat and glucose homeostasis. ADIPOQ-binding activates a signaling cascade that leads to increased PPARA activity, and ultimately to increased fatty acid oxidation and glucose uptake. Has intermediate affinity for globular and full-length adiponectin. Required for normal revascularization after chronic ischemia caused by severing of blood vessels (By

## **Cellular Location**

similarity).

Cell membrane; Multi-pass membrane protein Note=Localized to the cell membrane and intracellular organelles

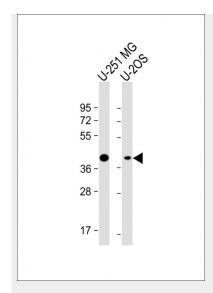
## **Tissue Location**

Ubiquitous (PubMed:16044242). Highly expressed in skeletal muscle, liver and placenta (PubMed:12802337). Weakly expressed in brain, heart, colon, spleen, kidney, thymus, small intestine, peripheral blood leukocytes and lung (PubMed:12802337)

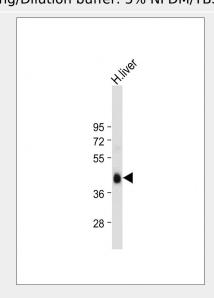
## **ADIPOR2 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



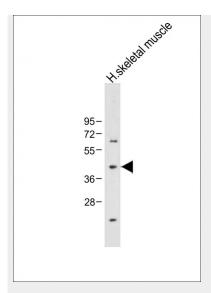
All lanes: Anti-ADIPOR2 Antibody (Center) at 1:2000 dilution Lane 1: U-251 MG whole cell lysate Lane 2: U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



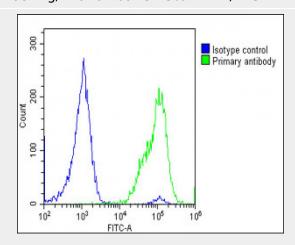
Anti-ADIPOR2 Antibody (Center) at 1:1000 dilution + Human liver tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



## • Cell Culture



Anti-ADIPOR2 Antibody (Center) at 1:1000 dilution + Human skeletal muscle tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing U-2 OS cells stained with AP5105c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP5105c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.





## ADIPOR2 Antibody (Center) - Background

The adiponectin receptors, ADIPOR1 (MIM 607945) and ADIPOR2, serve as receptors for globular and full-length adiponectin (MIM 605441) and mediate increased AMPK (see MIM 602739) and PPAR-alpha (PPARA; MIM 170998) ligand activities, as well as fatty acid oxidation and glucose uptake by adiponectin.

# **ADIPOR2 Antibody (Center) - References**

Ferguson, J.F., et al. Am. J. Clin. Nutr. 91(3):794-801(2010) Halvatsiotis, I., et al. Cardiovasc Diabetol 9, 10 (2010) Yoshihara, K., et al. J Reprod Med 54 (11-12), 669-674 (2009)

## **ADIPOR2 Antibody (Center) - Citations**

- Contrasting Effects of Adipokines on the Cytokine Production by Primary Human Bronchial Epithelial Cells: Inhibitory Effects of Adiponectin
- Novel phytopeptide osmotin mimics preventive effects of adiponectin on vascular inflammation and atherosclerosis.