Anti-Adiponectin receptor protein 1 Antibody [SC69-04]

ET1610-86

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Zebrafish
Applications:	IF-Cell, IF-Tissue, IHC-P, FC
Molecular Wt:	Predicted band size: 43 kDa
Clone number:	SC69-04

Description: Adiponectin receptor 1 (AdipoR1) is a protein which in humans is encoded by the ADIPOR1 gene. It is a member of the progestin and adipoQ receptor (PAQR) family, and is also known as PAQR1. Similar to G protein-coupled receptors (GPCRs), AdipoR1 also possesses 7 transmembrane domains. However, AdipoR1 is orientated oppositely to GPCRs in the membrane (i.e., cytoplasmic N-terminus, extracellular C-terminus) and does not associate with G proteins. The adiponectin receptors, AdipoR1 and AdipoR2, serve as receptors for globular and full-length adiponectin and mediate increased AMPK and PPAR-α ligand activities, as well as fatty acid oxidation and glucose uptake by adiponectin.

Immunogen: Synthetic peptide within Human ADIPOR1 aa 5-54 / 375.

Positive control: Hela, HepG2, LO2, human kidney tissue, mouse liver tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: Q96A54 Human | Q91VH1 Mouse
Unigene: 104556 Rat

Recommended Dilutions:

IF-Cell	1:50-1:200
IF-Tissue	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

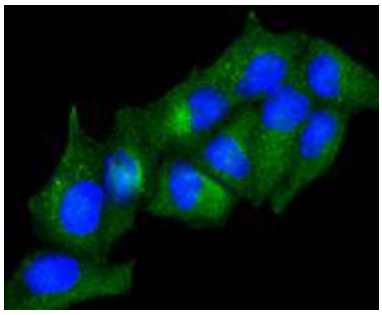

Fig1: ICC staining of Adiponectin receptor protein 1 in Hela cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1610-86, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

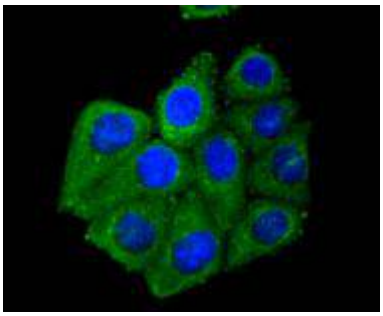

Fig2: ICC staining of Adiponectin receptor protein 1 in HepG2 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1610-86, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

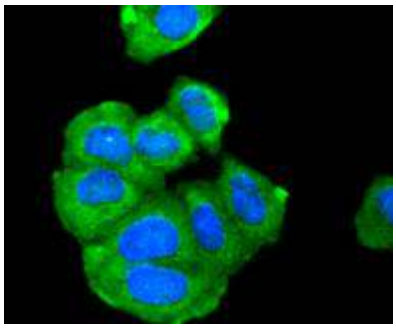

Fig3: ICC staining of Adiponectin receptor protein 1 in LO2 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1610-86, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

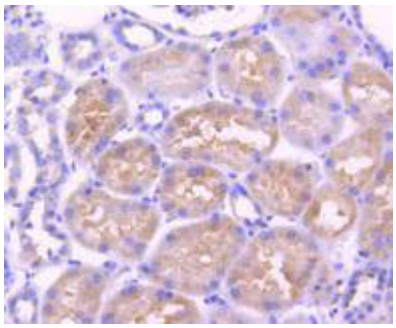

Fig4: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Adiponectin receptor protein 1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1610-86, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

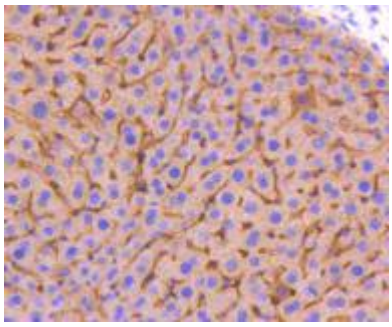

Fig5: Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Adiponectin receptor protein 1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1610-86, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

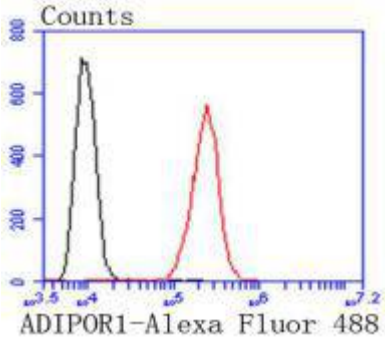

Fig6: Flow cytometric analysis of Adiponectin receptor protein 1 was done on HepG2 cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1610-86, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Fang F et al. Adiponectin attenuates angiotensin II-induced oxidative stress in renal tubular cells through AMPK and cAMP-Epac signal transduction pathways. Am J Physiol Renal Physiol 304:F1366-74 (2013).
2. Gulli RA et al. Exercise restores insulin, but not adiponectin, response in skeletal muscle of high-fat fed rodents. Am J Physiol Regul Integr Comp Physiol 303:R1062-70 (2012).