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PPARA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12910c

Product Information

Application	WB, FC, E
Primary Accession	Q07869
Other Accession	P37232, P37230, P23204, NP_005027.2, NP_001001928.1
Reactivity	Human, Mouse
Predicted	Rat, Xenopus, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21340
Calculated MW	52225
Antigen Region	153-181

Additional Information

Gene ID	5465
Other Names	Peroxisome proliferator-activated receptor alpha, PPAR-alpha, Nuclear receptor subfamily 1 group C member 1, PPARA, NR1C1, PPAR
Target/Specificity	This PPARA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 153-181 amino acids from the Central region of human PPARA.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
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	PPARA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PPARA
Synonyms	NR1C1, PPAR

Function	Ligand-activated transcription factor. Key regulator of lipid metabolism. Activated by the endogenous ligand 1-palmitoyl-2-oleoyl-sn-glycerol-3-phosphocholine (16:0/18:1-GPC). Activated by oleylethanolamide, a naturally occurring lipid that regulates satiety. Receptor for peroxisome proliferators such as hypolipidemic drugs and fatty acids. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as a transcription activator for the ACOX1 and P450 genes. Transactivation activity requires heterodimerization with RXRA and is antagonized by NR2C2. May be required for the propagation of clock information to metabolic pathways regulated by PER2.
Cellular Location	Nucleus.
Tissue Location	Skeletal muscle, liver, heart and kidney. Expressed in monocytes (PubMed:28167758).

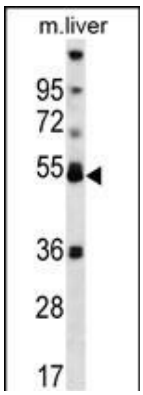
Background

Peroxisome proliferators include hypolipidemic drugs, herbicides, leukotriene antagonists, and plasticizers; this term arises because they induce an increase in the size and number of peroxisomes. Peroxisomes are subcellular organelles found in plants and animals that contain enzymes for respiration and for cholesterol and lipid metabolism. The action of peroxisome proliferators is thought to be mediated via specific receptors, called PPARs, which belong to the steroid hormone receptor superfamily. PPARs affect the expression of target genes involved in cell proliferation, cell differentiation and in immune and inflammation responses. Three closely related subtypes (alpha, beta/delta, and gamma) have been identified. This gene encodes the subtype PPAR-alpha, which is a nuclear transcription factor. Multiple alternatively spliced transcript variants have been described for this gene, although the full-length nature of only two has been determined.

References

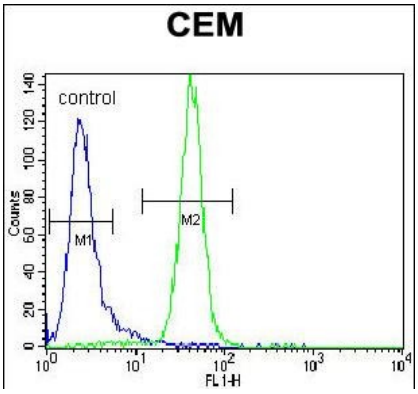
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Eynon, N., et al. Mitochondrion (2010) In press :
Aldhoon, B., et al. Folia Biol. (Praha) 56(3):116-123(2010)

Images



PPARA Antibody (Center) (Cat. #AP12910c) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the PPARA antibody detected the PPARA protein (arrow).

PPARA Antibody (Center) (Cat. #AP12910c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary



antibodies were used for the analysis.

Citations

- Role of pregnane X receptor in obesity and glucose homeostasis in male mice.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.