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PPARA Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5078

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	Q07869
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	52225
Isotype	IgG1,κ
Antigen Source	HUMAN

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
Dilution	WB~~1:500 IHC-P~~1:100~500 IF~~1:25 FC~~1:25
Target/Specificity	This PPARA antibody is generated from a mouse immunized with a recombination protein from the human region of human PPARA.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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 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).

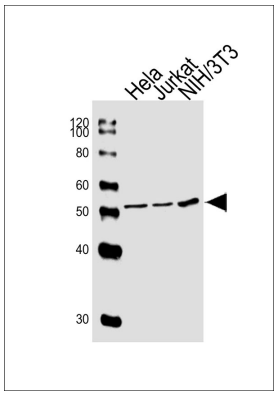
Background

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 (By similarity). Receptor for peroxisome proliferators such as hypolipidemic drugs and fatty acids. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as transcription activator for the ACOX1 and P450 genes. Transactivation activity requires heterodimerization with RXRA and is antagonized by NR2C2.

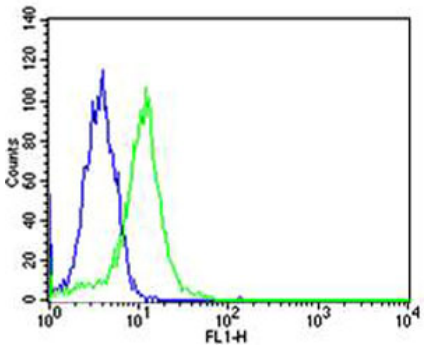
References

Sher T.,et al.Biochemistry 32:5598-5604(1993).
Mukherjee R.,et al.J. Steroid Biochem. Mol. Biol. 51:157-166(1994).
Tugwood J.D.,et al.Ann. N. Y. Acad. Sci. 804:252-265(1996).
Kobayashi T.,et al.FEBS Lett. 582:2737-2744(2008).
Cho M.-C.,et al.Immunopharmacol. Immunotoxicol. 31:459-467(2009).

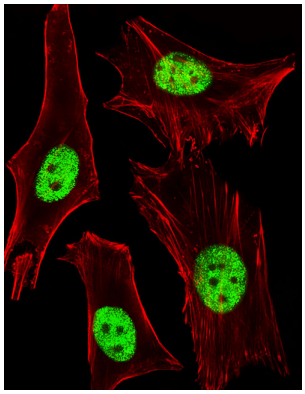
Images



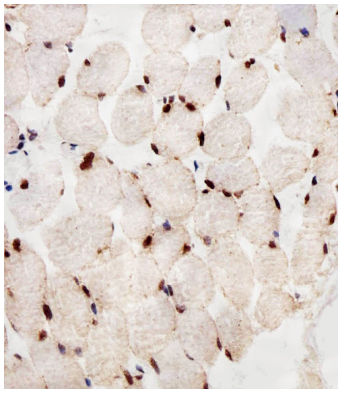
Western blot analysis of lysates from Hela,Jurkat,mouse NIH/3T3 cell line (from left to right), using PPARA Antibody(Cat. #AW5078). AW5078 was diluted at 1:500 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



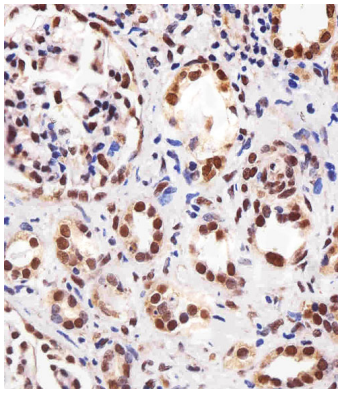
Flow cytometric analysis of Hela cells using PPARA Antibody(green, Cat#AW5078) compared to an isotype control of mouse IgG1(blue). AW5078 was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-mouse lgG at 1:400 dilution was used as the secondary antibody.



Fluorescent image of Hela cells stained with PPARA Antibody(Cat#AW5078). AW5078 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-mouse lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded H. skeletal muscle section using PPARA Antibody(Cat#AW5078). AW5078 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. kidney section using PPARA Antibody(Cat#AW5078). AW5078 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.