10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PPARA Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8425b

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	Q07869
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,κ
Clone Names	1331CT894.186.143
Calculated MW	52225
Antigen Region	1-468

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 a mouse immunized with a recombination protein from the human region of human PPARA.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:25 FC~~1:25 E~~Use at an assay dependent concentration.
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

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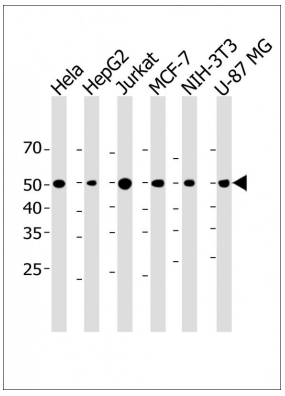
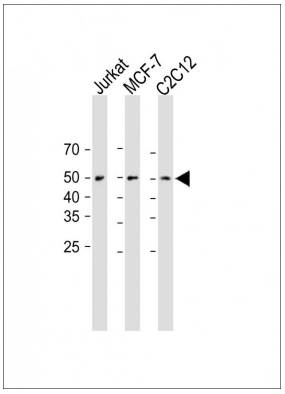
Mukherjee R.,et al.J. Steroid Biochem. Mol. Biol. 51:157-166(1994).
Tugwood J.D.,et al.Ann. N. Y. Acad. Sci. 804:252-265(1996).
Kobayashi T.,et al.FEBS Lett. 582:2737-2744(2008).
Cho M.-C.,et al.Immunopharmacol. Immunotoxicol. 31:459-467(2009).

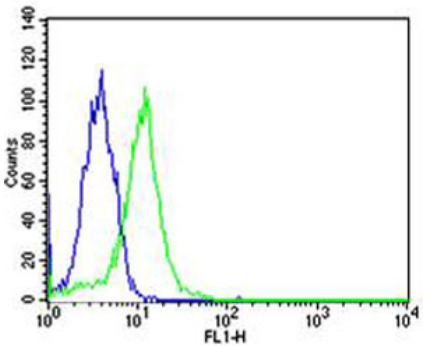
Images



All lanes: Anti-PPARA Antibody at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: U-87 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 52 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes: Anti-PPARA Antibody at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/15000 dilution. Observed band size: 52KDa Blocking/Dilution buffer: 5% NFDM/TBST.

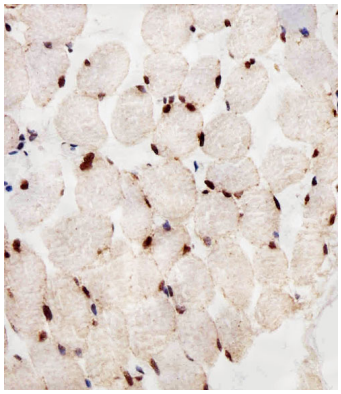




Flow cytometric analysis of Hela cells using PPARA Antibody(green, Cat#AM8425b) compared to an isotype control of mouse IgG1(blue). AM8425b was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-mouse lgG at 1:400 dilution was used as the secondary antibody.



Fluorescent image of Hela cells stained with PPARA Antibody(Cat#AM8425b). AM8425b 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#AM8425b). AM8425b 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.

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