

PPARA Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5078

Specification

PPARA Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | IF, WB, IHC-P, FC,E |
| Primary Accession | Q07869 |
| Reactivity | Human, Mouse |
| Host | Mouse |
| Clonality | Monoclonal |
| Calculated MW | H=52;M=52 KDa |
| Isotype | IgG1, κ |
| Antigen Source | HUMAN |

PPARA Antibody - 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

IF~~1:25
WB~~1:500
IHC-P~~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.

PPARA Antibody - 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).

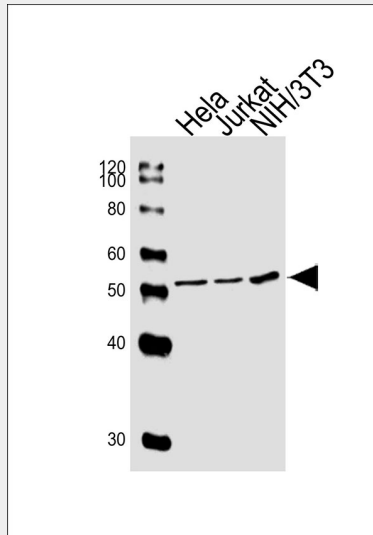
PPARA Antibody - Protocols

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

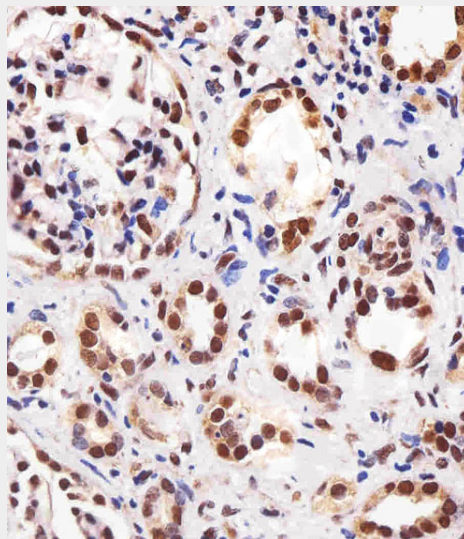
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PPARA Antibody - Images

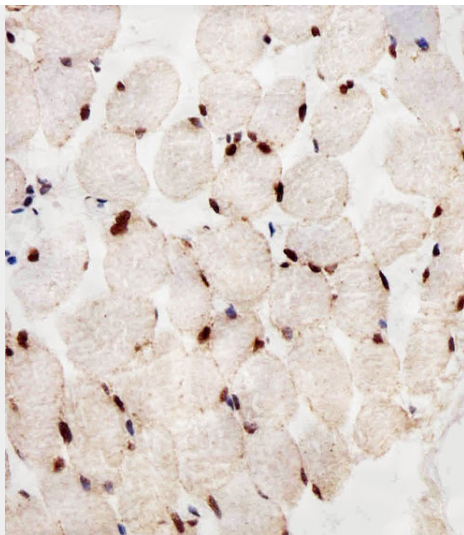
Fluorescent image of HeLa cells stained with PPARA Antibody(Cat#AW5078). AW5078 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin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



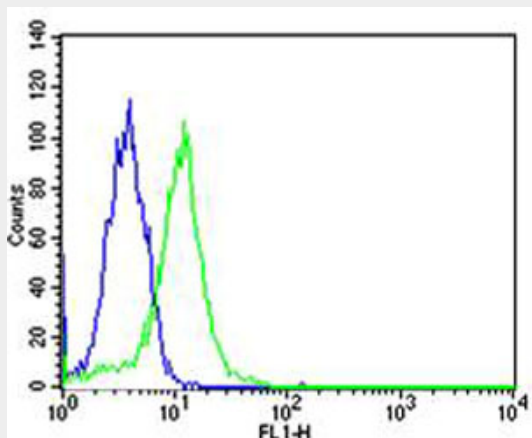
Western blot analysis of lysates from HeLa, Jurkat, mouse NIH/3T3 cell line (from left to right), using PPARA Antibody (Cat. #AW5078). AW5078 was diluted at 1:500 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody.



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.



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.



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 IgG at 1:400 dilution was used as the secondary antibody.

PPARA Antibody - 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.

PPARA Antibody - 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).