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# PPARA | PPAR alpha Recombinant Rabbit mAb

Catalog # AP96682

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q6I9S0 |
| **Other Accession** | Q6I9S0 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Recombinant |
| **Calculated MW** | 52 KDa |
| **Physical State** | Liquid |
| **Immunogen** | Recombinant human PPARA protein |
| **Isotype** | IgG/Kappa |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the nuclear hormone receptor family. NR1 subfamily. Contains 1 nuclear receptor DNA-binding domain. |
| **SUBUNIT** | Heterodimer; with RXRA. This heterodimerization is required for DNA binding and transactivation activity. Interacts with AKAP13, LPIN1 and PRDM16. Also interacts with PPARBP coactivator in vitro. Interacts with CITED2; the interaction stimulates its transcriptional activity. Interacts with NCOA3 and NCOA6 coactivators. Interacts with ASXL1 AND ASXL2. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Peroxisome proliferators are nongenotoxic carcinogens which are purported to exert their effect on cells through their interaction with members of the nuclear hormone receptor family, termed Peroxisome Proliferator Activated Receptors (PPARs). Nuclear hormone receptors are ligand dependent intracellular proteins that stimulate transcription of specific genes by binding to specific DNA sequences following activation by the appropriate ligand. Studies indicate that PPARs are activated by peroxisome proliferators such as clofibric acid, nafenopin, and WY-14,643, as well as by some fatty acids. It has also been shown that PPARs can induce transcription of acyl coenzyme A oxidase and cytochrome P450 A6 (CYP450 A6) through interaction with specific response elements. PPAR alpha is activated by free fatty acids including linoleic, arachidonic, and oleic acids. Induction of peroxisomes by this mechanism leads to a reduction in blood triglyceride levels. PPAR alpha is expressed mainly in skeletal muscle, heart, liver, and kidney and is thought to regulate many genes involved in the beta-oxidation of fatty acids. Activation of rat liver PPAR alpha has been shown to suppress hepatocyte apoptosis. PPAR alpha, like several other nuclear hormone receptors, heterodimerizes with retinoic X receptor (RXR) alpha to form a transcriptionally competent complex. |

## Additional Information

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| **Gene ID** | 5465 |
| **Other Names** | NR1C1; PPAR; PPAR-alpha; PPARalpha; hPPAR; 4933429D07Rik; PPARA_HUMAN; PPARA; Nuclear receptor subfamily 1 group C member 1; Q6I9S0_HUMAN; PPARA_MOUSE; Q542P9_MOUSE; PPARA_RAT; peroxisome proliferator activated receptor alpha; peroxisome proliferative activated receptor, alpha; peroxisome proliferator-activated receptor alpha |
| **Dilution** | WB=1:500-2000 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | PPARA \| PPAR alpha Recombinant Rabbit mAb |
| **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 (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. |

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