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PPAR gamma Antibody

Rabbit mAb
Catalog # AP91106

Product Information

Application	WB
Primary Accession	P37231
Reactivity	Human
Clonality	Monoclonal
Other Names	CIMT1; GLM1; NR1C3; PPAR gamma; PARG; PPARG1; PPARG2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	57620

Additional Information

Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PPAR gamma
Description	Receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the receptor binds to a promoter element in the gene for acyl-CoA oxidase and activates its transcription. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	PPARG
Synonyms	NR1C3
Function	Ligand-activated transcription factor that forms obligate heterodimers with the retinoic acid receptor and acts as a key regulator of biological processes, such as adipocyte differentiation, lipid metabolism, glucose homeostasis and beta-oxidation of fatty acids (PubMed:16150867, PubMed:20829347, PubMed:23525231, PubMed:8702406, PubMed:8706692, PubMed:9065481). Activated by lipid ligands: binds peroxisome proliferators, such as hypolipidemic drugs, and fatty acids, such as prostaglandin J2 metabolites (PubMed:16150867, PubMed:20829347, PubMed:23525231, PubMed:8702406, PubMed:8706692, PubMed:9065481). Ligand-binding results in a conformational change in the receptor, promoting dissociation of repressors and recruitment of coactivators, and subsequent activation of target gene expression (PubMed:16150867, PubMed:20829347,

PubMed:23525231, PubMed:8702406, PubMed:8706692, PubMed:9065481). Specifically binds to DNA specific PPAR response elements (PPRE) and modulates the transcription of its target genes, such as acyl-CoA oxidase (By similarity). Acts as a critical regulator of gut homeostasis by suppressing NF-kappa-B-mediated pro-inflammatory responses (PubMed:20829347). Plays a role in the regulation of cardiovascular circadian rhythms by regulating the transcription of BMAL1 in the blood vessels (By similarity).

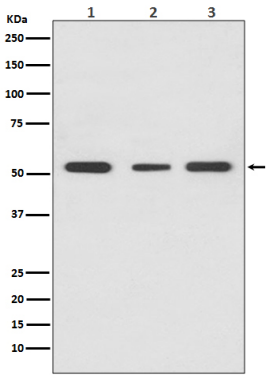
Cellular Location

Nucleus. Cytoplasm Note=Redistributed from the nucleus to the cytosol through a MAP2K1/MEK1-dependent manner (PubMed:17101779). NOCT enhances its nuclear translocation (By similarity). {ECO:0000250|UniProtKB:P37238, ECO:0000269|PubMed:17101779}

Tissue Location

Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.

Images



Western blot analysis of PPAR gamma expression in (1) HeLa cell lysate; (2) PC-3 cell lysate; (3) THP-1 cell lysate.