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PPAR-γ (phospho Ser112) Polyclonal Antibody

Catalog # AP67248

Product Information

Application	WB, E
Primary Accession	P37231
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57620

Additional Information

Gene ID	5468
Other Names	PPARG; NR1C3; Peroxisome proliferator-activated receptor gamma; PPAR-gamma; Nuclear receptor subfamily 1 group C member 3
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

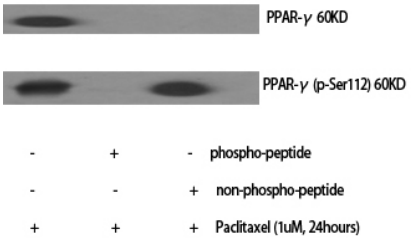
Name	PPARG
Synonyms	NR1C3
Function	Ligand-activated transcription factor that forms obligate heterodimers with the retinoic acid receptor and acts as a key regulator of biological processes, such as adipocyte differentiation, lipid metabolism, glucose homeostasis and beta-oxidation of fatty acids (PubMed:16150867, 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.

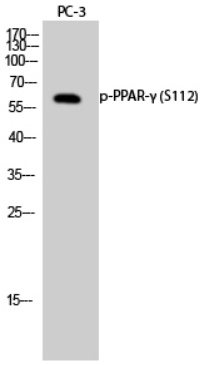
Background

Nuclear receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the nuclear receptor binds to DNA specific PPAR response elements (PPRE) and modulates the transcription of its target genes, such as acyl-CoA oxidase. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis. ARF6 acts as a key regulator of the tissue-specific adipocyte P2 (aP2) enhancer. Acts as a critical regulator of gut homeostasis by suppressing NF-kappa-B-mediated proinflammatory responses. Plays a role in the regulation of cardiovascular circadian rhythms by regulating the transcription of ARNTL/BMAL1 in the blood vessels (By similarity).

Images



Western Blot analysis of various cells using Phospho-PPAR-γ (S112) Polyclonal Antibody diluted at 1：500



Western Blot analysis of PC-3 cells using Phospho-PPAR-γ (S112) Polyclonal Antibody diluted at 1：500