

Anti-PPAR Gamma Antibody
Catalog # ABO10645**Specification**

Anti-PPAR Gamma Antibody - Product Information

Application	WB
Primary Accession	P37231
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Peroxisome proliferator-activated receptor gamma(PPARG) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PPAR Gamma Antibody - Additional Information

Gene ID 5468

Other Names

Peroxisome proliferator-activated receptor gamma, PPAR-gamma, Nuclear receptor subfamily 1 group C member 3, PPARG, NR1C3

Calculated MW

57620 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Nucleus. Cytoplasm. Redistributed from the nucleus to the cytosol through a MAP2K1/MEK1-dependent manner. CCRN4L/NOC enhances its nuclear translocation.

Tissue Specificity

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

Protein Name

Peroxisome proliferator-activated receptor gamma(PPAR-gamma)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human PPAR gamma(45-62aa PHYEDIPFTRTDPVVADY), different from the rat and mouse sequences by two

amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the nuclear hormone receptor family. NR1 subfamily.

Anti-PPAR Gamma Antibody - Protein Information

Name PPARG

Synonyms NR1C3

Function

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 pro-inflammatory responses. 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. NOCT enhances its nuclear translocation

Tissue Location

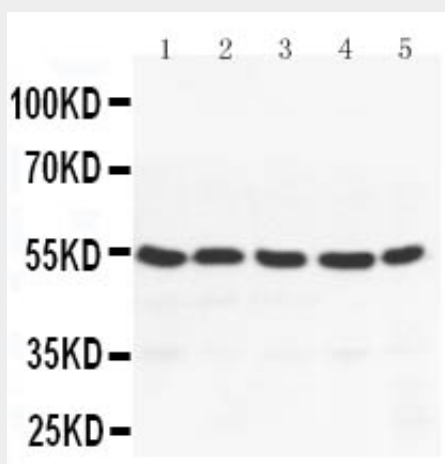
Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.

Anti-PPAR Gamma 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](#)

Anti-PPAR Gamma Antibody - Images



Anti-PPAR gamma antibody, ABO10645, Western blotting
Lane 1: MM453 Cell Lysate
Lane 2: MM231 Cell Lysate
Lane 3: HELA Cell Lysate
Lane 4: JURKAT Cell Lysate
Lane 5: HT1080 Cell Lysate

Anti-PPAR Gamma Antibody - Background

The peroxisome proliferator-activated receptors (PPARs) are a group of three nuclear receptor isoforms, PPAR gamma, PPAR alpha, and PPAR delta, encoded by different genes. PPARs are ligand-regulated transcription factors that control gene expression by binding to specific response elements (PPREs) within promoters. PPAR gamma is a transcription factor that has a pivotal role in adipocyte differentiation and expression of adipocyte-specific genes. The PPAR gamma1 and gamma2 isoforms result from alternative splicing and have ligand-dependent and -independent activation domains. PPAR gamma is a member of a family of nuclear receptors/ligand-dependent transcription factors, which bind to hormone response elements on target gene promoters. Ameshima et al. (2003) found that PPAR gamma is abundantly expressed in normal lung tissues, especially in endothelial cells, but that its expression is reduced or absent in the angiogenic plexiform lesions of pulmonary hypertensive lungs and in the vascular lesions of a rat model of severe pulmonary hypertension. And they conclude that fluid shear stress decreases the expression of PPAR gamma in endothelial cells and that loss of PPAR gamma expression characterizes an abnormal, proliferating, apoptosis-resistant endothelial cell phenotype.