

#### PPARG Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1186a

### Specification

## PPARG Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Description WB, E <u>P37231</u> Human Mouse Monoclonal IgG1

PPARG: peroxisome proliferator-activated receptor gamma. This gene encodes a member of the peroxisome proliferator-activated receptor (PPAR) subfamily of nuclear receptors. PPARs form heterodimers with retinoid X receptors (RXRs) and these heterodimers regulate transcription of various genes. Three subtypes of PPARs are known: PPAR-alpha, PPAR-delta, and PPAR-gamma. The protein encoded by this gene is PPAR-gamma and is a regulator of adipocyte differentiation. Additionally, PPAR-gamma has been implicated in the pathology of numerous diseases including obesity, diabetes, atherosclerosis and cancer. Alternatively spliced transcript variants that encode different isoforms have been described.

Immunogen Purified recombinant fragment of PPARG (aa170-270) expressed in E. Coli. <br />

**Formulation** Ascitic fluid containing 0.03% sodium azide. <br />

#### **PPARG 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

Dilution WB~~1/500 - 1/2000 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PPARG Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **PPARG 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.

## **PPARG Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **PPARG Antibody - Images**





Figure 1: Western blot analysis using PPARG mouse mAb against truncated PPARG-His recombinant protein (1) and full-length PPARG(aa1-477) transfected CHO-K1 cell lysate (2).

# PPARG Antibody - References

1. Sarcoidosis Vasc Diffuse Lung Dis. 2006 Jun;23(2):93-100 2. Hum Biol. 2007 Feb;79(1):111-9. 3. Hum Genet. 2008 Feb;123(1):35-40. Epub 2007 Nov 13.