

PPARG Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1186a

Product Information

| Application Primary Accession Reactivity Host Clonality Clone Names Isotype Calculated MW Description | WB, E P37231 Human Mouse Monoclonal 3A4A9; 1E6A1 IgG1 57620 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. |
| Formulation | Ascitic fluid containing 0.03% sodium azide. |

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. |

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. |

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.

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).

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