

## PPAR Gamma Monoclonal antibody

Catalog Number: 66936-1-Ig **15 Publications**

## Basic Information

<b>Catalog Number:</b> 66936-1-Ig	<b>GenBank Accession Number:</b> BC006811	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 2000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5468	<b>CloneNo.:</b> 1F4A2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P37231	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:250-1:1000 FC (Intra): 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Isotype:</b> IgG1	<b>Full Name:</b> peroxisome proliferator-activated receptor gamma	
<b>Immunogen Catalog Number:</b> AG16657	<b>Calculated MW:</b> 58 kDa <b>Observed MW:</b> 50 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, FC (Intra), ELISA	<b>Positive Controls:</b> <b>WB :</b> HepG2 cells, MCF-7 cells, mouse adipose tissue, A431 cells, A549 cells, PC-3 cells, K-562 cells, HL-60 cells <b>IHC :</b> human prostate cancer tissue, human colon cancer tissue <b>FC (Intra) :</b> HeLa cells,
<b>Cited Applications:</b> WB, IHC, IF, ChIP	
<b>Species Specificity:</b> human, mouse	
<b>Cited Species:</b> human, mouse, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Peroxisome Proliferator-Activated Receptors (PPARs) are ligand-activated intracellular transcription factors, members of the nuclear hormone receptor superfamily (NR), that includes estrogen, thyroid hormone receptors, retinoic acid, Vitamin D3 as well as retinoid X receptors (RXRs). The PPAR subfamily consists of three subtypes encoded by distinct genes denoted PPAR $\alpha$  (NR1C1), PPAR $\beta/\delta$  (NR1C2) and PPAR $\gamma$  (NR1C3), which are activated by selective ligands. PPAR $\gamma$ , also named as PPARG, contains one nuclear receptor DNA-binding domain and is a receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. It plays an important role in the regulation of lipid homeostasis, adipogenesis, INS resistance, and development of various organs. Defects in PPARG are the cause of familial partial lipodystrophy type 3 (FPLD3) and may be associated with susceptibility to obesity. Defects in PPARG can lead to type 2 INS-resistant diabetes and hypertension. PPARG mutations may be associated with colon cancer. Genetic variations in PPARG are associated with susceptibility to glioma type 1 (GLM1). PPARG has two isoforms with molecular weight 57 kDa and 54 kDa (PMID: 9831621), but modified PPARG is about 67 kDa (PMID: 16809887). PPARG2 is a splice variant and has an additional 30 amino acids at the N-terminus (PMID: 15689403). Experimental data indicate that a 45 kDa protein displaying three different sequences immunologically related to the nuclear receptor PPARG2 is located in mitochondria (mt-PPAR). However, the molecular weight of this protein is clearly less when compared to that of PPARG2 (57 kDa) (PMID: 10922459). PPARG has been reported to be localized mainly (but not always) in the nucleus. PPARG can also be detected in the cytoplasm and was reported to possess extra-nuclear/non-genomic actions (PMID: 17611413; 19432669; 14681322).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shan-Shan Zhang	36235633	Nutrients	WB
Piao Luo	35646542	Acta Pharm Sin B	WB
Yang Song	30967566	Sci Rep	IHC,IF

## Storage

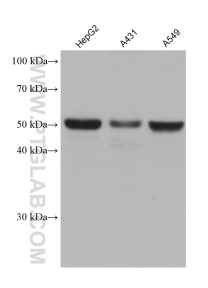
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
 Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

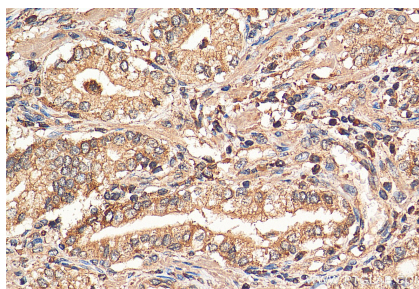
For technical support and original validation data for this product please contact:  
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
 E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
 W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

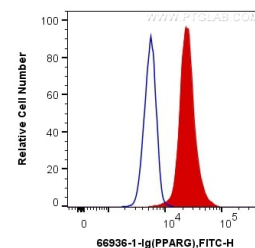
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66936-1-Ig (PPAR $\gamma$  antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 66936-1-Ig (PPAR $\gamma$  antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.4  $\mu$ g Anti-Human PPAR $\gamma$  (66936-1-Ig, Clone:1F4A2) and CoraLite $^{\text{TM}}$  488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4  $\mu$ g Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).