

For Research Use Only

# PPAR Gamma Polyclonal antibody

Catalog Number: 22061-1-AP

Featured Product

9 Publications



## Basic Information

|   |   |   |
|---|---|---|
| <b>Catalog Number:</b><br>22061-1-AP  | <b>GenBank Accession Number:</b><br>BC006811                          | <b>Purification Method:</b><br>Antigen affinity purification          |
| <b>Size:</b><br>150ul, Concentration: 500 µg/ml by Nanodrop and 353 µg/ml by Bradford method using BSA as the standard; | <b>GeneID (NCBI):</b><br>5468   | <b>Recommended Dilutions:</b><br>WB 1:1000-1:6000<br>IHC 1:500-1:2000 |
| <b>Source:</b><br>Rabbit  | <b>Full Name:</b><br>peroxisome proliferator-activated receptor gamma |   |
| <b>Isotype:</b><br>IgG  | <b>Calculated MW:</b><br>505 aa, 58 kDa                               |   |
| <b>Immunogen Catalog Number:</b><br>AG17136   | <b>Observed MW:</b><br>66-70 kDa                                      |   |

## Applications

### Tested Applications:

IHC, WB, ELISA

### Cited Applications:

IHC, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

**WB:** HEK-293 cells, human brain tissue, human heart tissue, mouse ovary tissue, mouse heart tissue, mouse testis tissue, mouse liver tissue, MCF-7 cells, 3T3-L1 cells, rat brain tissue, HL-60 cells, mouse brain tissue, rat liver tissue

**IHC:** human prostate cancer tissue, human colon cancer tissue, rat colon tissue, human placenta tissue

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## 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 |
|-------------|-----------|-----------------|-------------|
| Yan Li      | 30208760  | Autophagy       | WB          |
| Tae Woo Kim | 33051435  | Cell Death Dis  | WB          |
| Xinrui Xing | 29881350  | Front Pharmacol |             |

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

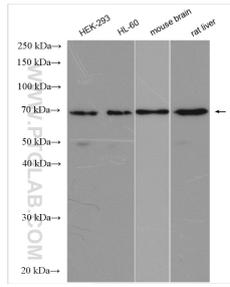
Aliquoting is unnecessary for -20°C storage

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

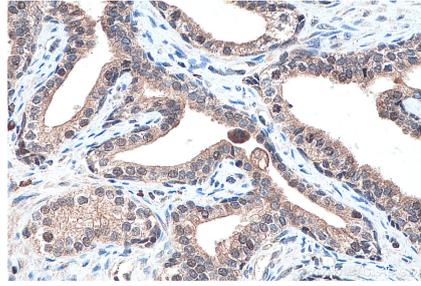
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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 22061-1-AP (PPAR Gamma antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 22061-1-AP (PPAR Gamma antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).