

For Research Use Only

# PPAR Gamma Recombinant antibody, PBS Only

Catalog Number: 81490-5-PBS



## Basic Information

Catalog Number:	81490-5-PBS	GenBank Accession Number:	BC006811	Purification Method:	Protein A purification
Size:	1 mg/ml	GeneID (NCBI):	5468	CloneNo.:	230374A3
Source:	Rabbit	UNIPROT ID:	P37231		
Isotype:	IgG	Full Name:	peroxisome proliferator-activated receptor gamma		
Immunogen Catalog Number:	AG10005	Calculated MW:	58 kDa		
		Observed MW:	50-60 kDa		

## Applications

**Tested Applications:**  
WB, IHC, IF-P, FC (Intra), Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## 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 weights of 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).

## Storage

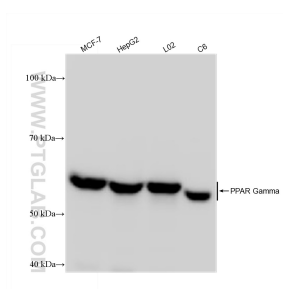
**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

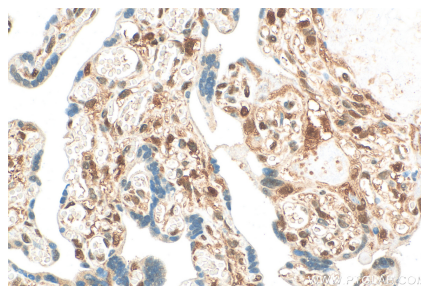
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

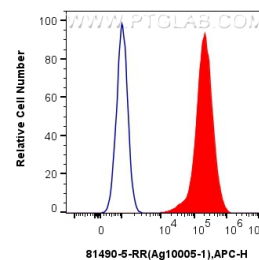
## Selected Validation Data



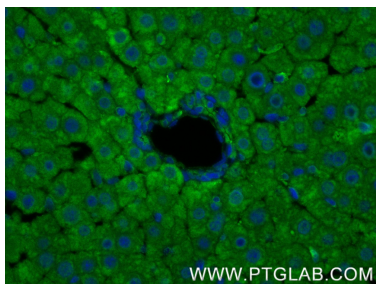
Various lysates were subjected to SDS PAGE followed by western blot with 81490-5-RR (PPAR Gamma antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81490-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 81490-5-RR (PPAR Gamma antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81490-5-PBS in a different storage buffer formulation.



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g PPAR Gamma Recombinant antibody (81490-5-RR, Clone:230374A3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 81490-5-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat liver tissue using PPAR Gamma antibody (81490-5-RR, Clone: 230374A3 ) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81490-5-PBS in a different storage buffer formulation.