

PPAR Gamma Recombinant monoclonal antibody

Catalog Number: 81490-5-RR

1 Publications

Basic Information

Catalog Number: 81490-5-RR	GenBank Accession Number: BC006811	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 5468	CloneNo.: 230374A3
Isotype: IgG	UNIPROT ID: P37231	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:1000-1:4000 IF-P: 1:50-1:500 FC (Intra): 0.25 ug per 10 ⁶ cells in a 100 µl suspension
Immunogen Catalog Number: AG10005	Full Name: peroxisome proliferator-activated receptor gamma	
	Calculated MW: 58 kDa	
	Observed MW: 50-60 kDa	

Applications

Tested Applications: WB, IHC, IF-P, FC (Intra), ELISA	Positive Controls: WB: MCF-7 cells, HepG2 cells, L02 cells, C6 cells IHC: human placenta tissue, mouse brain tissue IF-P: rat liver tissue, FC (Intra): HeLa cells, K562 cells
Cited Applications: WB, IHC, IF	
Species Specificity: human, mouse, rat	
Cited Species: human	

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 α (NR1C1), PPAR β / δ (NR1C2) and PPAR γ (NR1C3), which are activated by selective ligands. PPAR γ , 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).

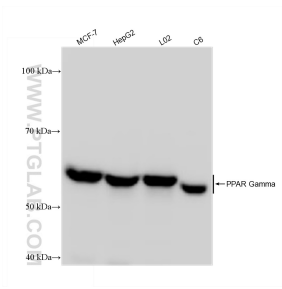
Notable Publications

Author	Pubmed ID	Journal	Application
Ying Deng	40604951	Eur J Med Res	WB,IHC,IF

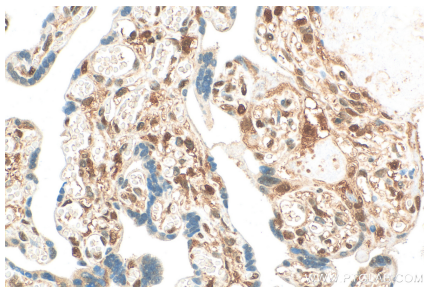
Storage

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

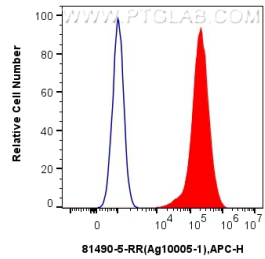
Selected Validation Data



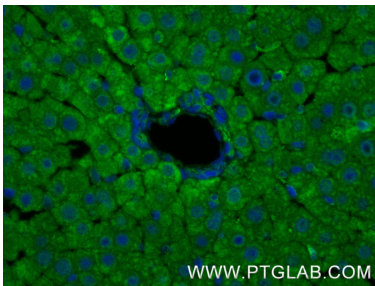
Various lysates were subjected to SDS PAGE followed by western blot with 81490-5-RR (PPAR Gamma antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



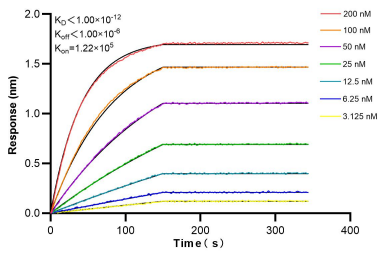
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 81490-5-RR (PPAR Gamma antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug PPAR Gamma Recombinant antibody (81490-5-RR, Clone:230374A3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug rabbit IgG isotype control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



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).



Biolayer interferometry (BLI) kinetic assays of 81490-5-RR against Human PPAR Gamma were performed. The affinity constant is below 1 pM.