

For Research Use Only

PPAR Gamma Polyclonal antibody



Catalog Number: 16643-1-AP

Featured Product

160 Publications

Basic Information

Catalog Number:

16643-1-AP

Size:

150ul, Concentration: 900 µg/ml by Nanodrop and 327 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG10005

GenBank Accession Number:

BC006811

GeneID (NCBI):

5468

Full Name:

peroxisome proliferator-activated receptor gamma

Calculated MW:

58 kDa

Observed MW:

50-60 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

IF, IHC, IP, WB, ELISA

Cited Applications:

CHIP, CoIP, IF, IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

hamster, human, mouse, rat, sheep

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

Positive Controls:

WB : U-937 cells, HL-60 cells, human heart tissue, K-562 cells, MCF-7 cells, mouse heart tissue

IP : HL-60 cells,

IHC : human prostate cancer tissue, mouse colon tissue, human placenta tissue, human breast cancer tissue

IF : 3T3-L1 cells,

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 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
Qipeng Fan	29163813	Oncotarget	WB
Yunjiao Wang	31557405	J Cell Mol Med	WB
Tae Woo Kim	32958825	Br J Cancer	WB

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

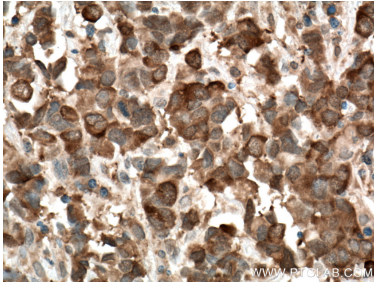
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

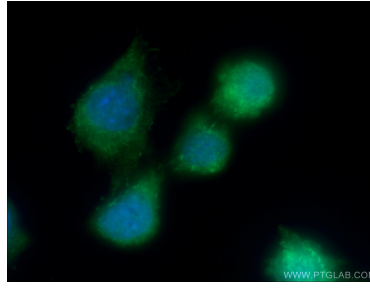
E: proteintech@ptglab.com
W: ptglab.com

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

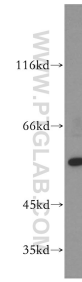
Selected Validation Data



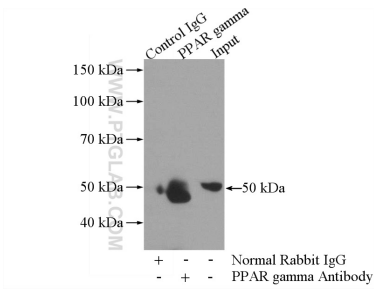
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 16643-1-AP (PPAR gamma antibody) at dilution of 1:200 (under 40x Lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed 3T3-L1 cells using 16643-1-AP (PPAR gamma antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



U-937 cells were subjected to SDS PAGE followed by western blot with 16643-1-AP (PPAR gamma antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



IP Result of anti-PPAR gamma (IP:16643-1-AP, 3ug; Detection:16643-1-AP 1:700) with HL-60 cells lysate 4000ug.