For Research Use Only

CoraLite® Plus 488-conjugated PPAR Gamma Monoclonal antibody

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Antibodies | ELISA kits | Proteins
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Catalog Number:CL488-60127 1 Publications

Basic Information

Catalog Number:
CL488-60127

Size:
100ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG10005

GenBank Accession Number:
BC006811

GeneID (NCBI):
5468

Full Name:
peroxisome proliferator-activated receptor gamma

Calculated MW:
58 kDa

Purification Method:
Protein G purification

CloneNo.:
4E12F10

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
FC (Intra)

Cited Applications:
FC

Species Specificity:
human

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 PPARα (NR1C1), PPARβ/δ (NR1C2) and PPARγ (NR1C3), which are activated by selective ligands. PPARγ, 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
Mohammad Rehan	37423298	J Biol Chem	FC

Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, 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
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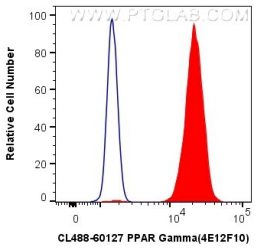
Selected Validation Data



1X10^6 K-562 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human PPAR Gamma (CL488-60127, Clone:4E12F10) (red), or 0.8 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).