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## CoraLite® Plus 647-conjugated PPAR Gamma Monoclonal antibody

www.ptglab.com

Catalog Number: CL647-60127

**Basic Information** 

Catalog Number:

CL647-60127

1000 µg/ml Source: Mouse Isotype:

Immunogen Catalog Number:

lgG1

AG10005

58 kDa

GenBank Accession Number:

BC006811 GeneID (NCBI): 5468 **UNIPROT ID:** P37231

peroxisome proliferator-activated receptor gamma

Calculated MW: Observed MW: 50-60 kDa

Full Name:

**Purification Method:** 

Protein G purification CloneNo.:

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

4E12F10

**Applications** 

**Tested Applications:** 

FC (Intra)

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 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).

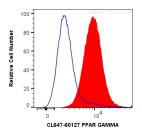
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 K-562 cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human PPAR Gamma (CL647-60127, Clone:4E12F10) (red), or 0.2 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).