### For Research Use Only

# CoraLite® Plus 750-conjugated PPAR Gamma Recombinant antibody

Catalog Number: CL750-81490-5

Basic	Information

Catalog Number: CL750-81490-5 Size: 1000 µ g/ml Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG10005 GenBank Accession Number: BC006811 GeneID (NCBI): 5468 UNIPROT ID: P37231 Full Name: peroxisome proliferator-activated receptor gamma Calculated MW: 58 kDa Observed MW: 50-60 kDa

#### Purification Method: Protein A purification CloneNo.: 230374A3 Recommended Dilutions: WB 1:500-1:2000 Excitation/Emission maxima wavelengths: 755 nm / 780 nm

# **Applications**

Tested Applications: WB, FC (Intra) Species Specificity: human, rat

#### Positive Controls:

WB: LO2 cells, HepG2 cells, MCF-7 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  $\alpha$  (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 Nterminus (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

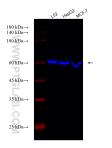
#### Storage:

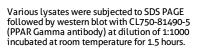
Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer: PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3. Aliquoting is unnecessary for -20°C storage

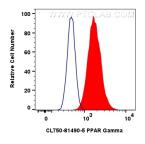
For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

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

## Selected Validation Data







1x10^6 HeLa cells were intracellularly stained with 0.8 ug Coralite® Plus 750 PPAR Gamma Recombinant Antibody (CL750-81490-5, Clone:230374A3)(red), or 0.8 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).