

**Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody**  
**PPAR Gamma 2 Antibody**  
**Catalog # ASR5214**

**Specification**

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**Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Mouse
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a single band approximately 55 kDa in size corresponding to PPARg2 by western blot in the appropriate tissue or cell lysate.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the amino terminus of human PPAR gamma 2.
Preservative	0.01% (w/v) Sodium Azide

**Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody - Additional Information**

**Gene ID** 5468

**Other Names**  
5468

**Purity**

This affinity purified antibody is directed against human PPAR gamma isoform 2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human and macaque based on 100% homology for the immunogen sequence. Cross reactivity with PPARg2 protein from dog and swine is likely due to 94% homology (15/16 identities) with the protein from these sources. Cross reactivity does occur with PPARg2 from mouse. Mouse PPARg2 shows 87% homology to the immunogen. Cross reactivity with PPARg2 homologues from other sources has not been determined. No reactivity is expected against other subtypes of PPAR.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended

storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

#### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

### Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody - Protein Information

**Name** PPARG

**Synonyms** NR1C3

#### Function

Nuclear receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the nuclear receptor binds to DNA specific PPAR response elements (PPRE) and modulates the transcription of its target genes, such as acyl-CoA oxidase. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis. ARF6 acts as a key regulator of the tissue-specific adipocyte P2 (aP2) enhancer. Acts as a critical regulator of gut homeostasis by suppressing NF-kappa-B-mediated pro-inflammatory responses. Plays a role in the regulation of cardiovascular circadian rhythms by regulating the transcription of BMAL1 in the blood vessels (By similarity).

#### Cellular Location

Nucleus. Cytoplasm. Note=Redistributed from the nucleus to the cytosol through a MAP2K1/MEK1-dependent manner. NOCT enhances its nuclear translocation

#### Tissue Location

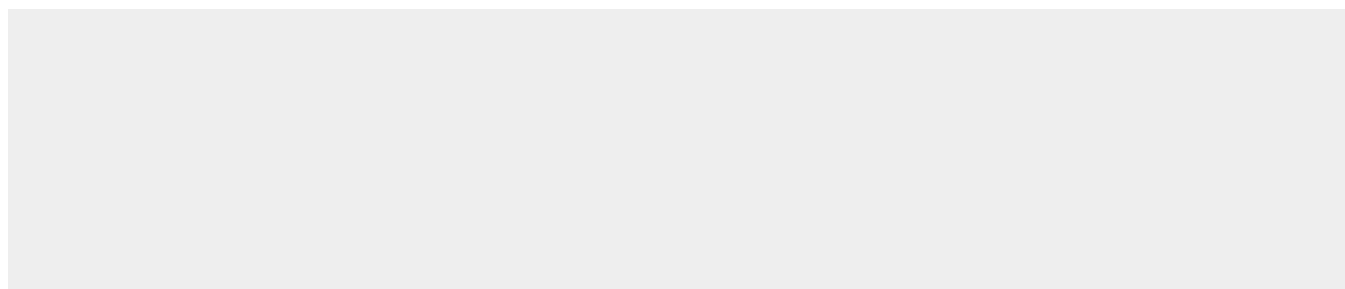
Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.

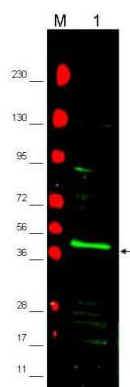
### Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody - Images





Western blot using Rockland's affinity purified anti-PPAR $\gamma$ 2 antibody shows detection of PPAR gamma 2 protein in a mouse 3T3 whole cell lysate (p/n W10-000-358). Approximately 20  $\mu$ g of lysate was loaded onto a 4-20% gradient gel followed by transfer to nitrocellulose. Primary antibody was used at a 1:2,000 dilution in 5% BLOTTO PBS solution (p/n B501-0500). The membrane was washed and reacted with a 1:10,000 dilution of IRDye™ 800 Conjugated Affinity Purified Goat-anti-Rabbit IgG [H&L] MX10. Molecular weight estimation was made by comparison to prestained MW markers indicated at the left (lane M). Other detection systems will yield similar results.

#### **Anti-PPAR gamma 2 (N-terminal specific) (RABBIT) Antibody - Background**

Since their discovery in the early 1990's, the peroxisome proliferator activated receptors (PPARs) have attracted significant attention. This is primarily because PPARs serve as receptors for two very important classes of drugs: the hypolipidemic fibrates and the insulin sensitizing thiazolidinediones. Peroxisome proliferators are non-genotoxic carcinogens that are purported to exert their effect on cells through their interaction with members of the nuclear hormone receptor family termed PPARs. Nuclear hormone receptors are ligand-dependent intracellular proteins that stimulate transcription of specific genes by binding to specific DNA sequences following activation by the appropriate ligand. Upon binding fatty acids or hypolipidemic drugs, PPARs form heterodimers with retinoid X receptors (RXRs) and these heterodimers regulate the expression of target genes. There are 3 known subtypes of PPARs: PPAR-alpha, PPAR-delta and PPAR-gamma. Mostly target genes are involved in the catabolism of fatty acids. Conversely, PPAR-gamma is activated by peroxisome proliferators such as prostaglandins, leukotrienes and anti-diabetic thiazolidinediones and affects the expression of genes involved in the storage of the fatty acids. PPAR-gamma may also be involved in adipocyte differentiation. It has also been shown that PPARs can induce transcription of acyl coenzyme A oxidase and cytochrome P450 through interaction with specific response elements.