10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PPAR gamma 1 and 2 (internal) (RABBIT) Antibody

PPAR Gamma 1 + 2 Antibody
Catalog # ASR5215

Specification

Anti-PPAR gamma 1 and 2 (internal) (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Rat, Orangutan, Boar, Mink, Human, Mouse, Rabbit, Hamster, Dog, Guinea Pig, Squirrel, Duck**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This affinity-purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user.**
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 an internal region near amino acids 250-300 of human PPAR gamma isoform 1.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-PPAR gamma 1 and 2 (internal) (RABBIT) Antibody - Additional Information

Gene ID 5468

Other Names
5468

Purity
This affinity purified antibody is directed against human PPAR gamma protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest broad reactivity with this protein from several sources. Expect reactivity against human (g1 and g2), mouse (g1 and g2), rat, squirrel, orangutan, duck (g1), macaque (g1-g7), boar (g1a-1d), mink, guinea pig, rabbit (g1 and g3), dog and hamster sources based on 100% homology for the immunogen sequence. Cross reactivity with PPAR gamma 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 1 and 2 (internal) (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 1 and 2 (internal) (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 Cytomety
- Cell Culture

Anti-PPAR gamma 1 and 2 (internal) (RABBIT) Antibody - Images

Anti-PPAR gamma 1 and 2 (internal) (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.