

## Anti-PPAR delta (N terminal specific) (RABBIT) Antibody PPAR Delta Antibody

Catalog # ASR5216

# Specification

# Anti-PPAR delta (N terminal specific) (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Mouse Human, Mouse Polyclonal WB, IHC, E, I, LCI This affinity purified antibody has been tested for use in ELISA, IHC, and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a single band approximately 43 kDa in size corresponding to PPAR delta by western blot in the appropriate tissue or cell lysate.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M
Immunogen	Sodium Chloride, pH 7.2 Anti-PPAR delta antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids near the amino terminus of mouse PPAR delta.
Preservative	0.01% (w/v) Sodium Azide

## Anti-PPAR delta (N terminal specific) (RABBIT) Antibody - Additional Information

Gene ID 19015

Other Names 19015

## Purity

This affinity purified antibody is directed against mouse PPAR delta protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest reactivity with this protein from mouse and rat sources based on 100% homology for the immunogen sequence. Cross-reactivity with PPAR delta protein from human, chimpanzee and rabbit may occur as this sequence shows 85% homology with the protein from these sources. Cross-reactivity with PPAR delta 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 delta (N terminal specific) (RABBIT) Antibody - Protein Information

Name Ppard

Synonyms Nr1c2, Pparb

Function

Ligand-activated transcription factor key mediator of energy metabolism in adipose tissues (PubMed:<a href="http://www.uniprot.org/citations/35675826" target="\_blank">35675826</a>). Receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Has a preference for poly-unsaturated fatty acids, such as gamma- linoleic acid and eicosapentanoic acid. Once activated by a ligand, the receptor binds to promoter elements of target genes. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as transcription activator for the acyl-CoA oxidase gene. Decreases expression of NPC1L1 once activated by a ligand (By similarity).

**Cellular Location** Nucleus.

**Tissue Location** Heart, adrenal and intestine.

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

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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





Immunohistochemistry of Rabbit Anti-PPAR delta (N terminal specific). Antigen Retrieval: HIER pH 6.2. [Right] -Neg Ctrl: Normal rabbit IgG on heart striated muscle, pH6.2 (40X). [Left Top - low mag, Left Bottom - 20X] -Staining: Diffuse cytoplasmatic positivity for PPAR delta in human myocardiocitys at 1:500.

## Anti-PPAR delta (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 adjpocyte 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.