

Anti-PPAR alpha (N-terminal specific) (RABBIT) Antibody

PPAR alpha Antibody Catalog # ASR5217

Specification

Anti-PPAR alpha (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 Anti-PPAR alpha Antibody has been tested in ELISA, Western Blot, Immunohistochemistry, and Immunofluorescence. Expect a single band approximately 52 kDa in size corresponding to PPAR alpha by western blot in the appropriate tissue or cell lysate. A 1:200 dilution is suggested for Immunohistochemistry. 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	PPAR alpha Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a N-Terminal region near amino acids 1-25 of mouse PPAR alpha.
Preservative	0.01% (w/v) Sodium Azide

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

Gene ID 19013

Other Names 19013

Purity

Anti-PPAR alpha Antibody is directed against mouse PPAR alpha protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from mouse, rat, bovine, dog, golden hamster and boar sources based on 100% homology for the immunogen sequence. Cross reactivity with PPAR alpha protein from human, chimpanzee and rhesus monkey may also occur as this sequence shows 88% homology (16/18 identities) with the protein from these sources. Cross reactivity with PPAR alpha 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 alpha (N-terminal specific) (RABBIT) Antibody - Protein Information

Name Ppara

Synonyms Nr1c1, Ppar

Function

Ligand-activated transcription factor. Key regulator of lipid metabolism. Activated by the endogenous ligand 1-palmitoyl-2-oleoyl-sn- glycerol-3-phosphocholine (16:0/18:1-GPC). Activated by oleylethanolamide, a naturally occurring lipid that regulates satiety. Receptor for peroxisome proliferators such as hypolipidemic drugs and fatty acids. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as a transcription activator for the ACOX1 and P450 genes. Transactivation activity requires heterodimerization with RXRA and is antagonized by NR2C2. May be required for the propagation of clock information to metabolic pathways regulated by PER2.

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:20159955}

Tissue Location

Highly expressed in liver, kidney and heart. Very weakly expressed in brain and testis

Anti-PPAR alpha (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 alpha (N-terminal specific) (RABBIT) Antibody - Images



Western Blot of Rabbit anti-PPAR Alpha (N-terminal Specific) antibody. Lane M: Prestained Molecular Weight Markers. Lane 1: NIH/3T3 (p/n W10-000-358). Load: 10 μ g per lane. Primary antibody: PPAR Alpha (N-terminal specific) antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) at RT for 30 min. Predicted/Observed size: ~50 kDa for PPAR Alpha.

Anti-PPAR alpha (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. Anti-Ppar Antibody is useful for research interested in transcription and metabolic pathways.