

# PPARD Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13778b

## **Product Information**

Application	WB, E
Primary Accession	<u>Q03181</u>
Other Accession	<u>NP_001165289.1</u> , <u>NP_001165290.1</u> , <u>NP_001165291.1</u> , <u>NP_803184.1</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	49903
Antigen Region	364-393

## **Additional Information**

Gene ID	5467
Other Names	Peroxisome proliferator-activated receptor delta, PPAR-delta, NUCI, Nuclear hormone receptor 1, NUC1, Nuclear receptor subfamily 1 group C member 2, Peroxisome proliferator-activated receptor beta, PPAR-beta, PPARD, NR1C2, PPARB
Target/Specificity	This PPARD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 364-393 amino acids from the C-terminal region of human PPARD.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PPARD Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	PPARD ( <u>HGNC:9235</u> )
Synonyms	NR1C2, PPARB

Function	Ligand-activated transcription factor key mediator of energy metabolism in adipose tissues (PubMed: <u>35675826</u> ). 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.
Cellular Location	Nucleus.
Tissue Location	Ubiquitous with maximal levels in placenta and skeletal muscle

## Background

This gene encodes a member of the peroxisome proliferator-activated receptor (PPAR) family. PPARs are nuclear hormone receptors that bind peroxisome proliferators and control the size and number of peroxisomes produced by cells. PPARs mediate a variety of biological processes, and may be involved in the development of several chronic diseases, including diabetes, obesity, atherosclerosis, and cancer. This protein is a potent inhibitor of ligand-induced transcription activity of PPAR alpha and PPAR gamma. It may function as an integrator of transcription repression and nuclear receptor signaling. The expression of this gene is found to be elevated in colorectal cancer cells. The elevated expression can be repressed by adenomatosis polyposis coli (APC), a tumor suppressor protein related to APC/beta-catenin signaling pathway. Knockout studies in mice suggested the role of this protein in myelination of the corpus callosum, lipid metabolism, and epidermal cell proliferation. Alternate splicing results in multiple transcript variants.

# References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Christopoulos, P., et al. Ann. N. Y. Acad. Sci. 1205, 185-191 (2010) : Dunn, S.E., et al. J. Exp. Med. 207(8):1599-1608(2010) Eynon, N., et al. Mitochondrion (2010) In press : Jguirim-Souissi, I., et al. Genet. Mol. Res. 9(3):1326-1333(2010)

### Images



All lanes : Anti-PPARD Antibody (C-term) 1:2000 dilution Lane 1 : PC-12 whole cel lysate Lane 2 : K562 whole cel lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 50kDa Blocking/Dilution buffer : 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.