

For Research Use Only

PPARA Polyclonal antibody

Catalog Number: 15540-1-AP

Featured Product

190 Publications



Basic Information

Catalog Number:

15540-1-AP

Size:

150ul, Concentration: 650 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7896

GenBank Accession Number:

BC000052

GeneID (NCBI):

5465

UNIPROT ID:

Q07869

Full Name:

peroxisome proliferator-activated receptor alpha

Calculated MW:

52 kDa

Observed MW:

52 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

Applications

Tested Applications:

WB, IP, ELISA

Cited Applications:

WB, IF, CoIP, ChIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, chicken, bovine, hamster, goat

Positive Controls:

WB : C2C12 cells,

IP : U-937 cells,

Background Information

Peroxisome proliferator-activated receptor alpha (PPARA) is a ligand-activated transcription factor that belongs to the PPAR nuclear receptor superfamily. PPARA is essential in the modulation of lipid transport and metabolism, mainly through activating mitochondrial and peroxisomal fatty acid β -oxidation pathways. In addition, PPARA seems to decrease inflammation mainly through direct interaction with NF- κ B, causing inhibition of its signaling pathway or reducing the activated levels of NF- κ B and subsequent inflammation. Furthermore, PPARA was implicated in the attenuation of oxidative stress in alcoholic liver disease when treated with polyene phosphatidylcholine through downregulation of ROS-generating enzymes such as ethanol-inducible cytochrome P450 2E1 (CYP2E1), acyl-CoA oxidase, and NADPH oxidase. PPARA exists two isoforms and molecular weight of PPARA isoforms are 52 kDa and 22 kDa. The ability of a retinoid X receptor (RXR) to heterodimerize with many nuclear receptors, including LXR, PPAR, NGF1B and RAR, underscores its pivotal role within the nuclear receptor superfamily. Among these heterodimers, PPAR:RXR is considered an important signalling mediator of both PPAR ligands, such as fatty acids, and 9-cis retinoic acid (9-cis RA), an RXR ligand. (PMID: 15103326). PPARA can form Heterodimer with RXRA and molecular weight of Heterodimer is about 110 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Yuxiang Sun	31590050	Colloids Surf B Biointerfaces	WB
Lei Ye	33491741	Int J Oncol	WB
Alyssa Charrier	27624101	Am J Physiol Endocrinol Metab	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

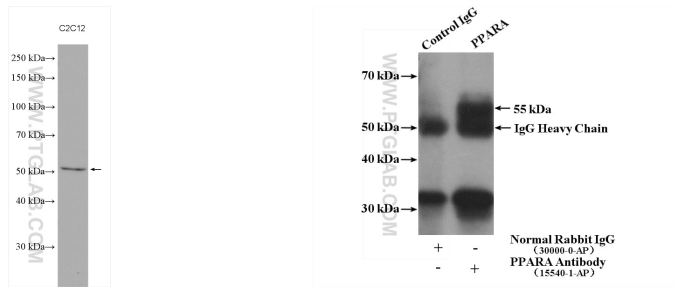
For technical support and original validation data for this product please contact:

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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



C2C12 cells were subjected to SDS PAGE followed by western blot with 15540-1-AP (PPARA antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.

IP result of anti-PPARA (IP:15540-1-AP, 4ug; Detection:15540-1-AP 1:300) with U-937 cells lysate 4000ug.