

## PPARA Polyclonal antibody

Catalog Number: 15540-1-AP

Featured Product

173 Publications

## Basic Information

<b>Catalog Number:</b> 15540-1-AP	<b>GenBank Accession Number:</b> BC000052	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 650 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5465	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
<b>Source:</b> Rabbit	<b>Full Name:</b> peroxisome proliferator-activated receptor alpha	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 52 kDa	
<b>Immunogen Catalog Number:</b> AG7896	<b>Observed MW:</b> 52 kDa	

## Applications

<b>Tested Applications:</b> IP, WB, ELISA	<b>Positive Controls:</b> WB : C2C12 cells, IP : U-937 cells,
<b>Cited Applications:</b> ChIP, CoIP, IF, WB	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, goat, chicken, rat, mouse, hamster, pig, bovine	

## 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  $\beta$ -oxidation pathways. In addition, PPARA seems to decrease inflammation mainly through direct interaction with NF- $\kappa$ B, causing inhibition of its signaling pathway or reducing the activated levels of NF- $\kappa$ 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

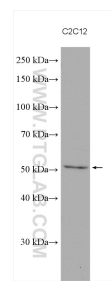
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
 Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

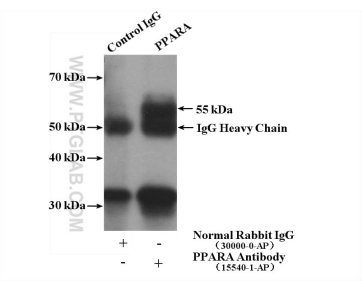
For technical support and original validation data for this product please contact:  
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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Selected Validation Data



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.