For Research Use Only

CoraLite® Plus 488-conjugated PPARA Monoclonal antibody



Catalog Number: CL488-66826

Basic Information

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1000 µg/ml

Source:

BC00052
GeneID (NCBI):
5465
UNIPROTID:

Mouse Q07869

Isotype: Full Name:
IgG1 peroxisome proliferator-activated

Immunogen Catalog Number: receptor alpha
AG7896 Calculated MW:

52 kDa Observed MW: 53 kDa

GenBank Accession Number:

Purification Method: Protein G purification

CloneNo.: 1G1E10

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications: Species Specificity: human, rat

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 polyenephosphatidylcholine 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:RKI 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.

Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data