bs-23398R

[Primary Antibody]

PPAR alpha Rabbit pAb

— DATASHEET —

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

GeneID: 5465

SWISS: Q07869

Target: PPAR alpha

Immunogen: KLH conjugated synthetic peptide derived from human PPAR alpha: 181-280/468.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4℃. Store at -20℃ for one year. Avoid repeated freeze/thaw cycles.

Background: Peroxisome proliferators are nongenotoxic carcinogens which are purported to exert their effect on cells through their interaction with members of the nuclear hormone receptor family, termed Peroxisome Proliferator Activated Receptors (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. Studies indicate that PPARs are activated by peroxisome proliferators such as clofibric acid, nafenopin, and WY-14,643, as well as by some fatty acids. It has also been shown that PPARs can induce transcription of acyl coenzyme A oxidase and cytochrome P450 A6 (CYP450 A6) through interaction with specific response elements. PPAR alpha is activated by free fatty acids including linoleic, arachidonic, and oleic acids. Induction of peroxisomes by this mechanism leads to a reduction in blood triglyceride levels. PPAR alpha is expressed mainly in skeletal muscle, heart, liver, and kidney and is thought to regulate many genes involved in the beta-oxidation of fatty acids. Activation of rat liver PPAR alpha has been shown to suppress hepatocyte apoptosis. PPAR alpha, like several other nuclear hormone receptors, heterodimerizes with retinoic X receptor (RXR) alpha to form a transcriptionally competent complex.

Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)

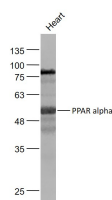**Reactivity:** Human, Mouse (predicted: Rat, Rabbit, Pig, Sheep, Chicken, Dog, Horse)

Predicted MW.: 51 kDa

**Subcellular Location:** Nucleus

— VALIDATION IMAGES —
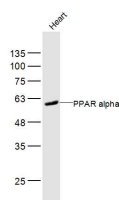
Sample: Heart(Mouse) Lysate at 40 ug Primary: Anti- PPAR alpha (bs-7114R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 51 kD Observed band size: 51 kD

Sample: Heart (Mouse) Lysate at 40 ug Primary: Anti-PPAR alpha (bs-23398R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 51 kD Observed band size: 51 kD
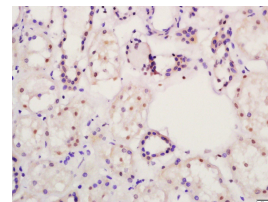
Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-PPAR gamma 2 Polyclonal Antibody, Unconjugated(bs-7114R) 1:200, overnight at 4℃, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining
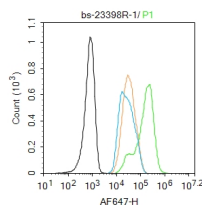
Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-PPAR alpha antibody (bs-23398R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

— SELECTED CITATIONS —

- **[IF=9.8]** Yanghuan Yu. et al. MiRNA-seq and mRNA-seq revealed the mechanism of fluoride-induced cauda epididymal injury. SCI TOTAL ENVIRON. 2024 Jun;930:172895 WB,IF ;Mouse. 38697545

- **[IF=9.988]** Hao Ni. et al. Long term toxicities following developmental exposure to perfluorooctanoic acid: Roles of peroxisome proliferation activated receptor alpha. ENVIRON POLLUT. 2023 Jan;317:120722 WB ;Chicken. 36436667

- **[IF=8.071]** Xiaohui Xu. et al. Hexafluoropropylene oxide dimer acid (HFPO-DA) induced developmental cardiotoxicity and hepatotoxicity in hatchling chickens: Roles of peroxisome proliferator activated receptor alpha. Environ Pollut. 2021 Dec;290:118112 WB ;chicken. 34500398

- **[IF=6.7]** Wei Xiao. et al.Multiomics combined analysis reveals protective effect of 7-O-α-L-rhamnopyranosyl-kaempferol-3-O-β-D-glucopyranoside on autoimmune hepatitis..PHYTOMEDICINE.2025 Apr:139:156460. IHC ;Mouse. 39923428

- **[IF=7.129]** Qixuan Dong. et al. Hexafluoropropylene oxide tetramer acid (HFPO-TeA)-induced developmental toxicities in chicken embryo: Peroxisome proliferator-activated receptor Alpha (PPARα) is involved. ECOTOX ENVIRON SAFE. 2023 Mar;253:114671 WB ;Chicken. 36822062