

Product Information



PPAR α Polyclonal Antibody

Item No. 101710 • Lot No. XXXXX

- Contents:** This vial contains (100-500 μ g of peptide affinity purified IgG, *lot specific*) in 500 μ l TBS, pH 7.4, containing 50% glycerol, 0.05% BSA, and 0.02% sodium azide.
- Host:** Rabbit
- Antigen:** The anti-PPAR α polyclonal antibody was raised against a peptide corresponding to amino acids 22-36 of human/mouse/rat PPAR α .¹⁻³
- Cross Reactivity:** (+) Human, mouse, rat, ovine, and porcine PPAR α ; (-) PPAR γ
- Stability:** \geq 1 year at -20°C
- Application:** This polyclonal antibody can be used for detection of PPAR α by western blot at a dilution of 1:*lot specific*.
- Concentration:** Varies by lot, from 0.2-1.0 mg/ml (100-500 μ g/vial). Always 100 ml final working volume for western blotting.

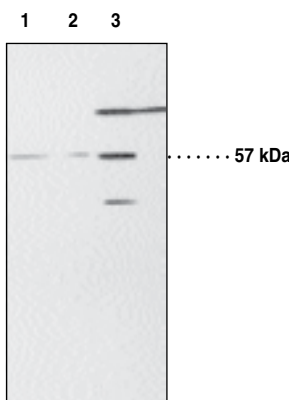
PPAR α is a ligand-activated transcription factor involved in the regulation of lipid homeostasis.^{4,5} Fatty acids, NSAIDs, prostaglandins, leukotriene B₄ (LTB₄), WY 14643, and hypolipidemic drugs are PPAR α ligands.⁶⁻⁸ PPAR α transcriptionally regulates a variety of genes for enzymes and proteins involved in fatty acid metabolism and oxidation, such as acyl-CoA oxidase, enol-CoA hydratase, medium chain fatty acyl-CoA dehydrogenase, fatty acid transport protein, and cytochrome P450 4A isozymes.^{5,9,10} Northern blot analysis reveals that PPAR α is expressed predominately in liver, skeletal muscle, heart, and kidney.² The molecular weight of PPAR α is approximately 52,000 based on the deduced amino acid sequence.

References

1. Sher, T., Yi, H.-F., McBride, O.W., *et al.* cDNA cloning, chromosomal mapping, and functional characterization of the human peroxisome proliferator activated receptor. *Biochemistry* **32**, 5598-5604 (1993).
2. Mukherjee, R., Jow, L., Noonan, D., *et al.* Human and rat peroxisome proliferator activated receptors (PPARs) demonstrate similar tissue distribution but different responsiveness to PPAR activators. *J. Steroid Biochem. Molec. Biol.* **51**, 157-166 (1994).
3. Gearing, K.L., Crickmore, A., and Gustafsson, J.-Å. Structure of the mouse peroxisome proliferator activated receptor α gene. *Biochem. Biophys. Res. Commun.* **199**, 255-263 (1994).
4. Latruffe, N. and Vamecq, J. Peroxisome proliferators and peroxisome proliferator activated receptors (PPARs) as regulators of lipid metabolism. *Biochimie* **79**, 81-94 (1997).
5. Lemberger, T., Desvergne, B., and Wahli, W. Peroxisome proliferator-activated receptors: A nuclear receptor signaling pathway in lipid physiology. *Annu. Rev. Cell Dev. Biol.* **12**, 335-363 (1996).
6. Devchand, P.R., Keller, H., Peters, J.M., *et al.* The PPAR α -leukotriene B₄ pathway to inflammation control. *Nature* **384**, 39-43 (1996).
7. Lehmann, J.M., Lenhard, J.M., Oliver, B.B., *et al.* Peroxisome proliferator-activated receptors α and γ are activated by indomethacin and other non-steroidal anti-inflammatory drugs. *J. Biol. Chem.* **272**, 3406-3410 (1997).
8. Forman, B.M., Chen, J., and Evans, R.M. Hypolipidemic drugs, polyunsaturated fatty acids, and eicosanoids are ligands for peroxisome proliferator-activated receptors α and δ . *Proc. Natl. Acad. Sci. USA* **94**, 4312-4317 (1997).
9. Martin, G., Schoonjans, K., Lefebvre, A.-M., *et al.* Coordinate regulation of the expression of the fatty acid transport protein and acyl-CoA synthetase genes by PPAR α and PPAR γ activators. *J. Biol. Chem.* **272**, 28210-28217 (1997).
10. Kroetz, D.L., Yook, P., Costet, P., *et al.* Peroxisome proliferator-activated receptor α controls the hepatic CYP4A induction adaptive response to starvation and diabetes. *J. Biol. Chem.* **273**, 31581-31589 (1998).

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Lane 2: Baboon myometrium (50 μ g)
Lane 3: K-562 cell lysate (75 μ g)

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