3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-Peroxisome Proliferator Activated Receptor α
produced in rabbit, affinity isolated antibody

Catalog Number **P0369**

Synonym: Anti- PPARα

Product Description
Anti-Peroxisome Proliferator Activated Receptor α is produced in rabbit using as immunogen a highly purified peptide MVDTESPICPLSPLEADD(C), corresponding to amino acid residues 1-18 of mouse PPARα with an additional C-terminal cysteine. The human protein is 95% (17/18 amino acids) identical in this region. The antibody was affinity isolated on immobilized immunogen.

Anti-Peroxisome Proliferator Activated Receptor α specifically recognizes PPARα (52 kDa) and may be used for the detection of PPARα protein from mouse tissue by immunoblotting and immunohistochemistry. Additionally, this antibody inhibits PPARα DNA binding.

Peroxisome proliferators are non-genotoxic carcinogens that exert their effect on cells through interaction with members of the nuclear hormone receptor family termed peroxisome proliferator activated receptors (PPAR's). 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, and by some fatty acids. It has also been shown that PPAR's can induce transcription of acyl coenzyme A oxidase & CYP450 A6 through interaction with specific response elements. The PPARα isoform appears to be induced by free fatty acids which leads to a reduction in blood triglyceride levels. Like several other nuclear hormone receptors, PPARα heterodimerizes with the retinoic X receptor, RXRα.

Reagent
Supplied at 1 mg/ml in phosphate buffered saline containing 1 mg/ml bovine serum albumin and 0.05 % sodium azide.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
Store at –20 °C. For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing, or storage in “frost-free” freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile
Immunoblotting: a working dilution of 1.0 µg/mL is recommended.

Immunofluorescence: a working dilution of 1:100 is recommended.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

Reference
1. Kilgore, M.W., et al., *Mol. Cell Endocrinol*., **129**, 229-235 (1997).
2. Braissant, O., et al., *Endocrinology*, **137**, 354-366 (1996).
3. Yanase, T., et al*., Biochem. Biophys. Res. Comm*., **233**, 320-324 (1997).

IDC,PHC 08/12-1