



Product Information

ANTI-PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR

Developed in Rabbit
Diluted Antiserum

Product Number **P-249**

Product Description

Anti-Peroxisome Proliferator Activated Receptor (PPAR) was developed by immunizing rabbits with a synthetic peptide (Ile-Lys-Lys-Thr-Glu-Thr-Asp-Met-Ser-Leu-His-Pro-Leu-Leu-Gln) corresponding to amino acids 484-498 of the C-terminal region of PPAR γ 2 as the immunogen. This sequence is highly conserved in mouse, human and rat PPAR γ 1, PPAR α and NUC1.

This antibody detects the PPAR γ 2 isoform in mouse 3T3-L1 cells in immunoblotting and gel-mobility super-shift assays. Also reacts with rat recombinant PPAR α in immunoblotting and recombinant mouse PPAR γ 1 in immunoprecipitation.

Peroxisome proliferators are non-genotoxic 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 (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 PPAR's 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 PPAR's can induce transcription of acyl coenzyme A oxidase & CYP450 A6 through interaction with specific response elements. PPAR, like several other nuclear hormone receptors, heterodimerizes with RXR α .

Reagents

Anti-Peroxisome Proliferator Activated Receptor is supplied as diluted antiserum containing 0.05% sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage, solution may be frozen in working aliquots. Storage in "frost-free" freezers is not recommended. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Product Profile

Recommended starting titer for Anti-Peroxisome Proliferator Activated Receptor is 1:2,000 for immunoblotting. However, optimal working concentration should be determined by serial dilutions.

References

1. Braissant, O. et al. "Differential expression of peroxisome proliferator-activated receptors (PPARs): tissue distribution of PPAR- α , - β , and - γ in the adult rat." *Endocrinology* **137**, 354-366 (1996).
2. Gimble, J.M. et al. "Peroxisome proliferator-activated receptor- γ activation by thiazolidinediones induces adipogenesis in bone marrow stromal cells." *Mol. Pharmacol.* **50**, 1087-1094 (1996).

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