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ProductInformation

Anti-Peroxisome Proliferator Activated Receptor γ2 (PPARγ2)
Developed in Rabbit
Affinity Isolated Antibody

Product Number **P 0744**

Product Description

Anti-Peroxisome Proliferator Activated Receptor γ2 (PPARγ2) is developed in rabbit using a highly purified peptide MGETLGDSPIDPESDS(C), corresponding to amino acid residues 1-16 of human PPARγ2 with additional C-terminal cysteine as the immunogen. The antibody was affinity isolated on immobilized immunogen.

Anti-Peroxisome Proliferator Activated Receptor γ2 specifically recognizes PPARγ2 (56 kDa) and may be used for the detection of PPARγ2 protein from mouse tissue by immunoblotting and immunofluorescence. This antibody does not detect PPARα or PPARδ. Additionally, this antibody inhibits PPARγ2 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 PPARγ2 isoform appears to be induced very early in the differentiation of several cultured adipocyte cell lines, and has been suggested to be a dominant regulator of the murine P2 (aP2) gene which encodes an intracellular lipid binding protein which is expressed only in adipose cells. Like several other nuclear hormone receptors, PPARγ2 heterodimerizes with the retinoic X receptor, RXRα.

Reagent

Anti-Peroxisome Proliferator Activated Receptor γ2 is supplied as 100 µl of affinity isolated antibody at 1 mg/ml in phosphate buffered saline containing 1 mg/ml bovine serum albumin and 0.05 % sodium azide.

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 hazardous and safe handling practices.

Storage/Stability

Store at –20 °C. For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing is not recommended. 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

The recommended working dilution is 1:500 for both immunoblotting and immunofluorescence.

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).

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