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ProductInformation

Anti-phospho-Peroxisome Proliferator Activated Receptor α (PPARα) (pSer^{12})
Developed in Rabbit, Affinity Isolated Antibody

Product Number **P 8496**

Product Description

Anti-phospho-Peroxisome Proliferator Activated Receptor α (PPARα) (pSer^{12}) is developed in rabbit using a synthetic peptide: I(8)CPL(pS)PLEADDL(19) as immunogen. The peptide corresponds to amino acid residues 8-19 from mouse PPARα with serine 12 being phosphorylated. The antibody is affinity purified.

Anti-PPARα (pSer^{12}) specifically recognizes a ~52 kDa protein which corresponds to phospho-PPARα S12 from mouse adipose tissue extract by immunoblotting.

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 (PPARs)[1]. 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 PPARs can induce transcription of acyl coenzyme A oxidase and cytochrome P450 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.[2] Like several other nuclear hormone receptors, PPARα heterodimerizes with the retinoic X receptor, RXRα.

Reagents

The antibody is provided as 100 µg of epitope affinity purified IgG in PBS containing 1 mg/ml BSA and 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 hazardous and safe handling.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze 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 2 µg/ml for immunoblotting.

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

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. Yanase, T., et al., Differential expression of PPAR γ1 and γ2 isoforms in human adipose tissue, Biochem. Biophys. Res. Comm., **233**, 320-324 (1997).

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