

Product Information



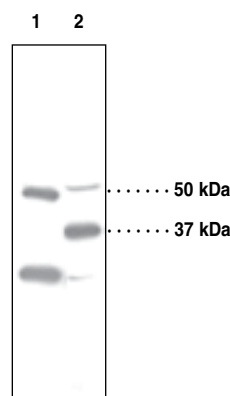
PPAR δ Polyclonal Antibody

Item No. 101720 • Lot No. XXXX

Synonyms:	FAAR, NUC1, Nuclear Hormone Receptor 1, PPAR β
Contents:	This vial contains (100-500 μ g of peptide affinity-purified IgG, <i>lot specific</i>) in 500 μ l TBS, pH 7.4, containing 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Antigen:	This antibody was raised against human PPAR δ amino acids 39-54 (SSSYTDLSRSSSPPSL). The antigen alignment with sequences from other species is as follows: Human PPAR δ SSSYTDLSRSSSPPSL Mouse PPAR δ SSSc a DLS qnSSP s SL Porcine PPAR δ SSSc TDLS q S c SPP a L Rat PPAR δ SSSc TDLS qnSSP s SL
Cross-reactivity:	(+) Human, mouse, ovine, porcine, and rat PPAR δ ; other species not tested
Stability:	\geq 1 year at -20 $^{\circ}$ C
Applications:	Recommended dilutions for western blot (<i>lot specific</i> μ g/ml), immunohistochemistry, and immunocytochemistry (4 μ g/ml). Other applications were not attempted and therefore optimal working dilutions should be determined empirically.
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 δ is one of three peroxisome proliferator-activated receptor (PPAR) subtypes that possess a domain structure common to other members of the nuclear receptor gene family. It was first cloned from *Xenopus laevis* and named PPAR β .¹ PPAR δ is ubiquitously expressed but is particularly abundant in tissues such as liver, intestine, kidney, abdominal adipose, and skeletal muscle, all of which are involved in lipid metabolism.² PPAR δ is a mediator of diverse physiological functions including lipid and cholesterol homeostasis, embryo implantation, and cancer development.³⁻⁶ Most recently, attention has been focused on the role of PPAR δ in obesity.⁷

Cayman's PPAR δ polyclonal antibody can be used for western blot, immunohistochemistry, and immunocytochemistry to study the expression and functions of this protein. The antibody recognizes PPAR δ at 50 kDa from human samples. An additional smaller size of PPAR δ (~40 kDa)⁸ is also detected in certain mouse tissues.



Lane 1: Human cerebral cortex (30 μ g)
Lane 2: Murine liver (30 μ g)

Laboratory Procedures

Immunofluorescent staining of cultured cells

1. Wash (attached) cells briefly with TBS and fix cells 10 minutes in 1% formalin in TBS, pH 7.4.
2. Wash cells 3 times in TBS, pH 7.4, 5 minutes each.
3. Incubate cells with 5% normal serum from the same species as the host of the secondary antibody in TBS, pH 7.4, containing 0.1% Triton X-100 for 30 minutes.
4. Incubate cells with 4 μ g/ml PPAR δ polyclonal antibody in TBS, pH 7.4, containing 0.1% Triton X-100 (recommended starting dilution. Optimal dilution to be determined by end user) for 1 hour at room temperature.
5. Wash cells 3 times in TBS, pH 7.4, containing 0.1% Triton X-100, 5 minutes each.
6. Incubate cells for 1 hour with an anti-rabbit IgG fluorochrome conjugate in TBS, pH 7.4, containing 0.1% Triton X-100, using a dilution as recommended by provider.
7. Wash cells 3 times in TBS, pH 7.4, containing 0.1% Triton X-100, 5 minutes each.
8. Counter-stain cells if desired.

The stained cells are now ready to be examined under a fluorescent microscope.

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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References

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