abcam

Product datasheet

# Anti-PPAR alpha (phospho S12) antibody ab3484

4 Abreviews 26 References 6 Images

## Overview

| | |
|---|---|
| **Product name** | Anti-PPAR alpha (phospho S12) antibody |
| **Description** | Rabbit polyclonal to PPAR alpha (phospho S12) |
| **Host species** | Rabbit |
| **Specificity** | The antibody is expected to bind both phospho and non phospho forms. |
| **Tested applications** | **Suitable for:** WB, ICC/IF |
| **Species reactivity** | **Reacts with:** Mouse, Human<br>**Predicted to work with:** Guinea pig, Dog |
| **Immunogen** | Synthetic peptide corresponding to Mouse PPAR alpha aa 1-100 (phospho S12).<br>Database link: **P23204**<br>Run BLAST with Run BLAST with |
| **Positive control** | WB: human U-87, MCF7, MDA-MB-231, C2C12, HepG2, and mouse NIH-3T3 ICC/IF: C2C12, 3T3-L1, U-87 MG cells |
| **General notes** | The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.<br>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As |

## Properties

| | |
|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| **Storage buffer** | Preservative: 0.05% Sodium azide<br>Constituents: 0.1% BSA, 99% PBS |
| **Purity** | Immunogen affinity purified |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab3484 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **WB** | ★★★★☆ (2) | 1/100 - 1/1000. Predicted molecular weight: 52 kDa. |
| **ICC/IF** | ★★★★☆ (1) | 1/100 - 1/500. |

## Target

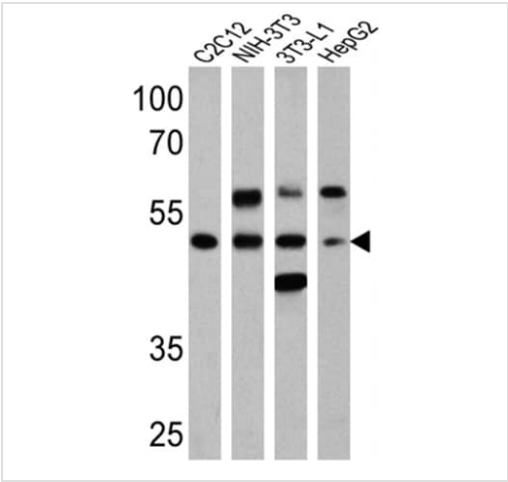
**Function** Ligand-activated transcription factor. Key regulator of lipid metabolism. Activated by the endogenous ligand 1-palmitoyl-2-oleoyl-sn-glycerol-3-phosphocholine (16:0/18:1-GPC). Activated by oleylethanolamide, a naturally occurring lipid that regulates satiety (By similarity). Receptor for peroxisome proliferators such as hypolipidemic drugs and fatty acids. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as transcription activator for the ACOX1 and P450 genes. Transactivation activity requires heterodimerization with RXRA and is antagonized by NR2C2.

**Tissue specificity** Skeletal muscle, liver, heart and kidney.

**Sequence similarities** Belongs to the nuclear hormone receptor family. NR1 subfamily.
Contains 1 nuclear receptor DNA-binding domain.

**Cellular localization** Nucleus.

## Images



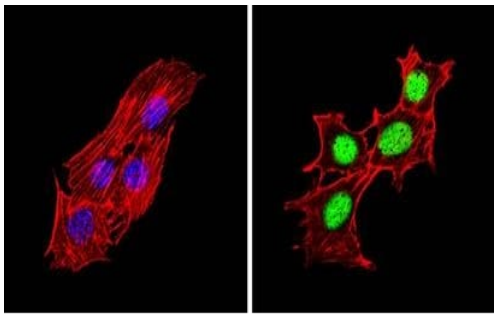

Western blot - Anti-PPAR alpha (phospho S12) antibody (ab3484)

**All lanes :** Anti-PPAR alpha (phospho S12) antibody (ab3484) at 1/200 dilution

**Lane 1 :** C2C12 cell lysate
**Lane 2 :** NIH-3T3 cell lysate
**Lane 3 :** 3T3-L1 cell lysate
**Lane 4 :** HepG2 cell lysate

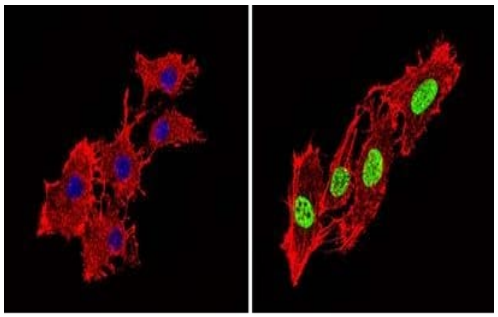
Lysates/proteins at 25 µg per lane.

**Predicted band size:** 52 kDa
**Observed band size:** 52 kDa



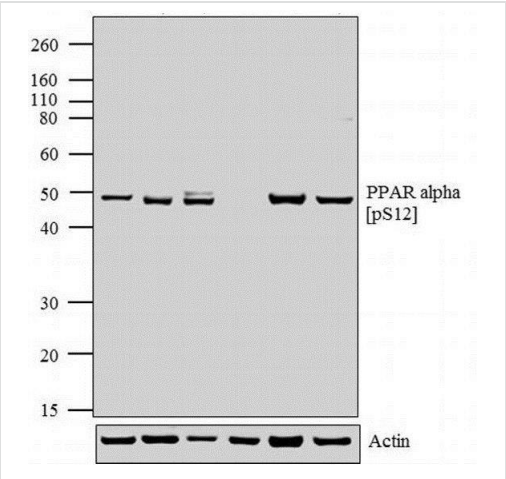
Immunocytochemistry/ Immunofluorescence - Anti-PPAR alpha (phospho S12) antibody (ab3484)

Immunofluorescent analysis of Phospho-PPAR alpha pSer12 (green) showing staining in the nucleus of C2C12 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Phospho-PPAR alpha pSer12 polyclonal antibody (ab3484) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



Immunocytochemistry/ Immunofluorescence - Anti-PPAR alpha (phospho S12) antibody (ab3484)

Immunofluorescent analysis of Phospho-PPAR alpha pSer12 (green) showing staining in the nucleus of 3T3-L1 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Phospho-PPAR alpha pSer12 polyclonal antibody (ab3484) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.




Western blot - Anti-PPAR alpha (phospho S12) antibody (ab3484)

**All lanes :** Anti-PPAR alpha (phospho S12) antibody (ab3484) at 1/1000 dilution

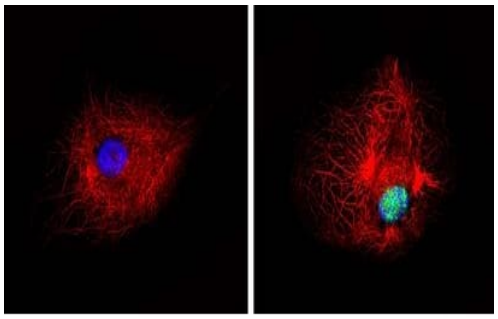
**Lane 1 :** U-87 MG with Skimmed milk
**Lane 2 :** MCF7 with Skimmed milk
**Lane 3 :** MDA-MB-231 with Skimmed milk
**Lane 4 :** C2C12 with Skimmed milk
**Lane 5 :** Hep G2 with Skimmed milk
**Lane 6 :** NIH/3T3 with Skimmed milk

Lysates/proteins at 20 µg per lane.

Blocking peptides at 5 % per lane.

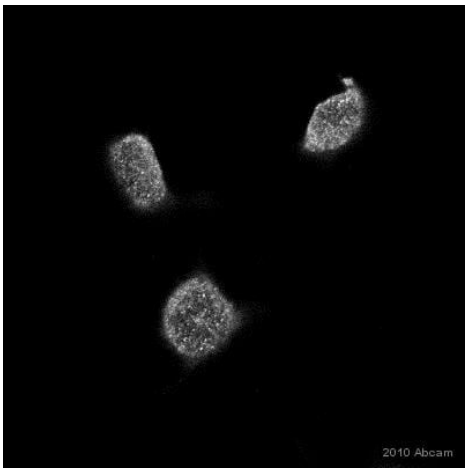
**Secondary**
**All lanes :** Goat anti-rabbit IgG (H+L) at 1/2500 dilution

**Predicted band size:** 52 kDa



Immunocytochemistry/ Immunofluorescence - Anti-PPAR alpha (phospho S12) antibody (ab3484)

Immunofluorescent analysis of Phospho-PPAR alpha pSer12 (green) showing staining in the nucleus of U-87 MG cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Phospho-PPAR alpha pSer12 polyclonal antibody (ab3484) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.




Immunocytochemistry/ Immunofluorescence - Anti-PPAR alpha (phospho S12) antibody (ab3484)
This image is courtesy of an anonymous Abreview

ab3484 staining PPAR alpha (phospho S12) in Mouse neuronal cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde and blocked with 10% serum for 20 minutes at 25°C. Samples were incubated with primary antibody (1/100 in PBS) for 18 hours at 4°C. A Cy2®-conjugated Donkey anti-rabbit IgG polyclonal (1/100) was used as the secondary antibody.



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