abcam

Product datasheet

Anti-PPAR alpha (phospho S12) antibody ab3484

2 Abreviews 15 References 7 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:** ICC/IF, WB, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Guinea pig, Dog
Immunogen	Synthetic peptide corresponding to Mouse PPAR alpha aa 8-19. Sequence: ICPLS$_p$PLEADDL (Peptide available as ab4998) Run BLAST with Run BLAST with

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 Constituents: 0.1% BSA, 99% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

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
EMSA		Use at an assay dependent concentration.
ICC/IF	★★★★☆	Use at an assay dependent concentration.
WB	★★★★☆	1/100 - 1/1000. Predicted molecular weight: 52 kDa.
Flow Cyt		Use 3-5µg for 10^6 cells.

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.

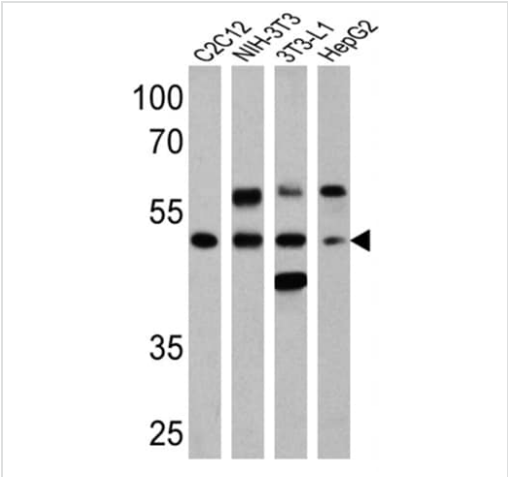
Sequence similarities

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

Cellular localization

Nucleus.

Images



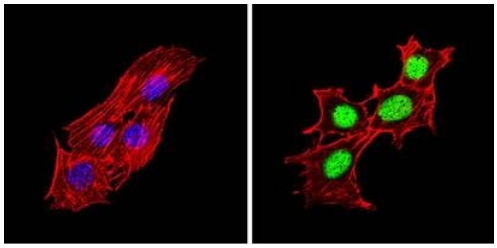
Western blot - Anti-PPAR alpha (phospho S12) antibody (ab3484)

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

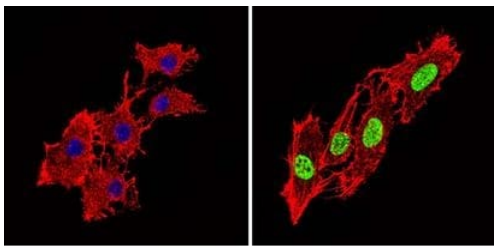
Lysates/proteins at 25 µg per lane.

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



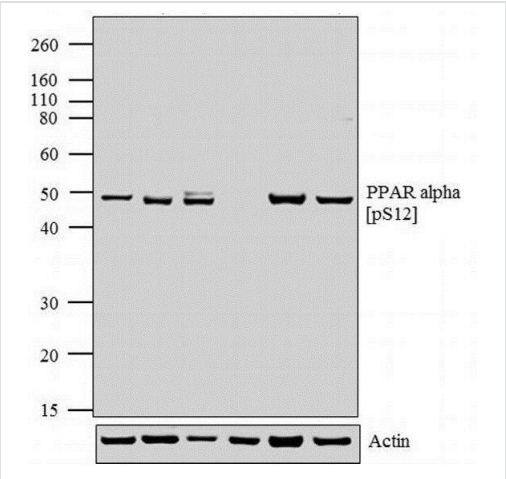
Immunocytochemistry/ Immunofluorescence - Anti-PPAR alpha (phospho S12) antibody (ab3484)

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

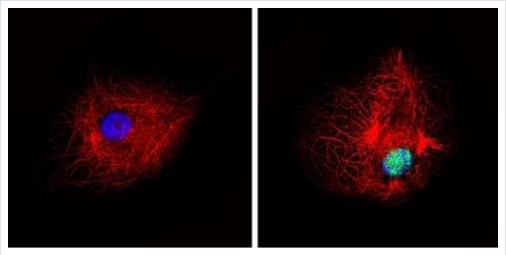
Lane 1 : U-87 MG with Skimmed milk
Lane 2 : MCF7 with Skimmed milk
Lane 3 : MDA-MB-231 with Skimmed milk
Lane 4 : C2C12 with Skimmed milk
Lane 5 : Hep G2 with Skimmed milk
Lane 6 : NIH/3T3 with Skimmed milk

Lysates/proteins at 20 µg per lane.

Blocking peptides at 5 % per lane.

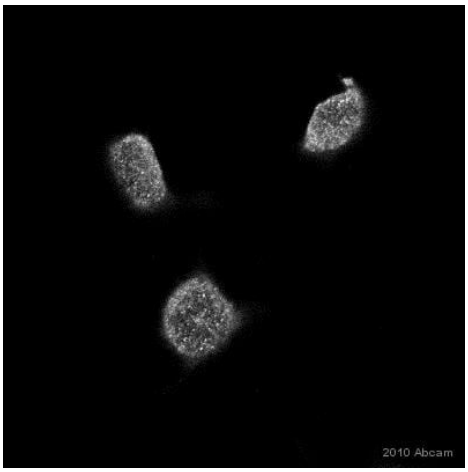
Secondary
All lanes : Goat anti-rabbit IgG (H+L) at 1/2500 dilution

Predicted band size: 52 kDa



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

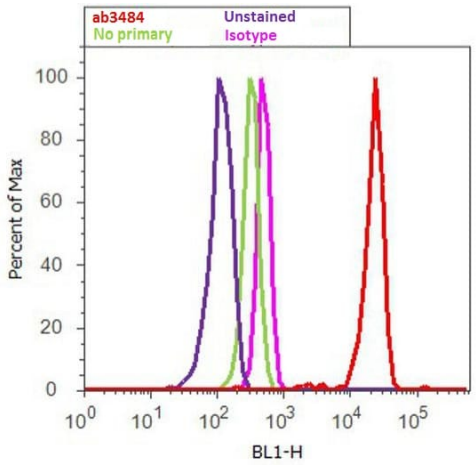
Immunofluorescent analysis of Phospho-PPAR alpha pSer12 (green) showing staining in the nucleus of U-87 MG cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 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.



Flow Cytometry - Anti-PPAR alpha (phospho S12) antibody (ab3484)

ab3484 staining PPAR alpha (phospho S12) in MCF7 cells by Flow Cytometry. The sample was incubated with the primary antibody (3-5 ug/million cells in 2.5% BSA) for 2 hours at room temperature. An Alexa Fluor® 488-conjugated Goat anti-rabbit was used as the secondary antibody (1/400). Red histogram represents ab3484, pink histogram represents isotype control, purple histogram represents unstained control and green histogram represents no primary antibody control.

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