

Product datasheet

Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade ab41928

★★★★★ 2 Abreviews 19 References 4 Images

Overview

Product name	Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade
Description	Mouse monoclonal [A3409A] to PPAR gamma 1+2 - ChIP Grade
Host species	Mouse
Specificity	This antibody specifically recognizes PPAR gamma 1 and 2. The specificity for each subtype regarding to alpha, gamma -1, -2 , delta was confirmed by each cDNA transfected to CHO cell and the lysate reacted with corresponding antibody in a panel; the antibody was found not to react with alpha or delta forms.
Tested applications	Suitable for: IHC-P, WB, ELISA, IP, ChIP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Baculovirus-expressed recombinant fragment, corresponding to amino acids 3-105 of Human PPAR gamma 1+2.
Positive control	IHC: Rat adipose cells and rat placenta. WB: Nuclear lysate of 3T3L1 cells induced for adipocyte differentiation

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.1% Sodium azide Physiological saline.
Purification notes	Purified from ascites via ammonium sulfate fractionation.
Clonality	Monoclonal
Clone number	A3409A
Isotype	IgG2a

Applications

Our [Abpromise guarantee](#) covers the use of **ab41928** 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
IHC-P		Use a concentration of 10 µg/ml. Perform antigen retrieval by autoclave to preserve reproducibility. Sections should be fixed with formalin for no longer than 48 hours.
EMSA		Use at an assay dependent concentration.
WB	★★★★★	Use a concentration of 1 µg/ml. Predicted molecular weight: 58 kDa. A nuclear extraction is recommended.
ELISA		Use a concentration of 0.012 µg/ml.
IP		Use at an assay dependent concentration.
ChIP		Use at an assay dependent concentration. PubMed: 16197558

Target

Function

Receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the receptor binds to a promoter element in the gene for acyl-CoA oxidase and activates its transcription. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis.

Tissue specificity

Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.

Involvement in disease

Note=Defects in PPARG can lead to type 2 insulin-resistant diabetes and hypertension. PPARG mutations may be associated with colon cancer. Defects in PPARG may be associated with susceptibility to obesity (OBESITY) [MIM:601665]. It is a condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat. Defects in PPARG are the cause of familial partial lipodystrophy type 3 (FPLD3) [MIM:604367]. Familial partial lipodystrophies (FPLD) are a heterogeneous group of genetic disorders characterized by marked loss of subcutaneous (sc) fat from the extremities. Affected individuals show an increased preponderance of insulin resistance, diabetes mellitus and dyslipidemia. Genetic variations in PPARG can be associated with susceptibility to glioma type 1 (GLM1) [MIM:137800]. Gliomas are central nervous system neoplasms derived from glial cells and comprise astrocytomas, glioblastoma multiforme, oligodendrogliomas, and ependymomas. Note=Polymorphic PPARG alleles have been found to be significantly over-represented among a cohort of American patients with sporadic glioblastoma multiforme suggesting a possible contribution to disease susceptibility.

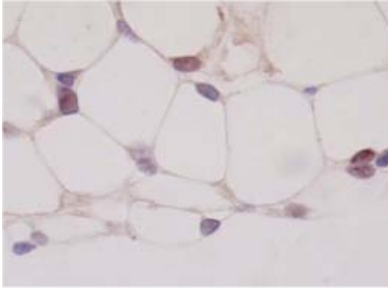
Sequence similarities

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

Cellular localization

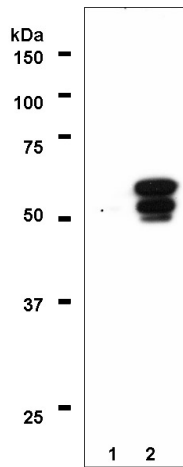
Nucleus.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade (ab41928)

ab41928 staining PPAR gamma 1+2 in rat adipose cells (10 ug/mL) by immunohistochemistry, formalin-fixed paraffin embedded sections.



Western blot - Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade (ab41928)

All lanes : Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade (ab41928) at 1 µg/ml

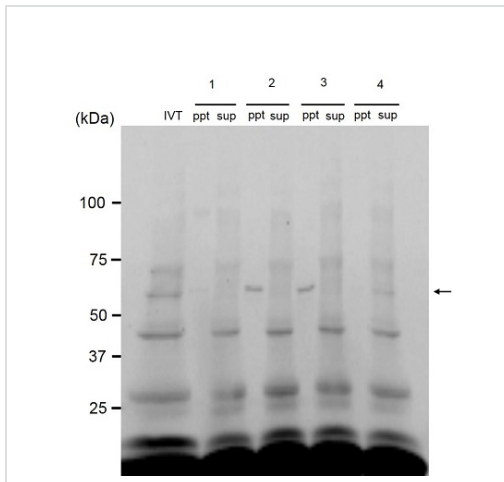
Lane 1 : Nuclear lysate of non induced 3T3L1 cells

Lane 2 : Nuclear lysate of 3T3L1 cells induced for adipocyte differentiation

Lysates/proteins at 20 µg per lane.

Predicted band size: 58 kDa

Two bands are visible: PPAR gamma 1 and PPAR gamma 2.



Immunoprecipitation - Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade (ab41928)

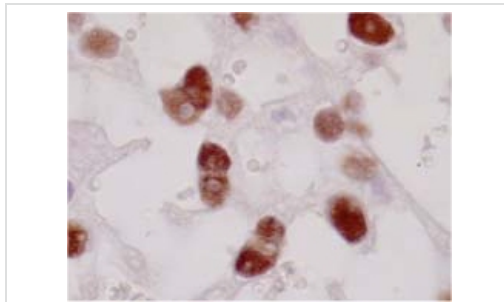
Lane 1: FLAG-M2

Lane 2: ab41928

Lane 3: ab41928

Lane 4: Control IgG

Immunoprecipitation analysis using Fluorescence labeled PPAR gamma generated in vitro translation. Anti-PPAR gamma antibody (ab41928) is diluted with translation production and mixed with protein G Sepharose beads. It is then rotated at 4°C for 1 hour and precipitates are eluted with addition of SDS loading buffer. Samples are incubated for 10minutes at 70°C and analyzed with Fluorescence imager.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PPAR gamma 1+2 antibody [A3409A] - ChIP Grade (ab41928)

ab41928 staining PPAR gamma 1+2 in rat placenta(10 ug/mL) by immunohistochemistry, formalin-fixed paraffin embedded sections.

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