Product datasheet

Anti-PPAR gamma antibody ab59256

Overview

Product name: Anti-PPAR gamma antibody
Description: Rabbit polyclonal to PPAR gamma
Host species: Rabbit
Specificity: ab59256 detects endogenous levels of total PPAR gamma protein.

Tested applications:
Suitable for: WB, ICC/IF, ELISA, IHC-P

Species reactivity:
Reacts with: Mouse, Human

Immunogen: Synthetic non-phosphopeptide derived from human PPAR gamma around the phosphorylation site of serine 112 (P-A-S\(^{\text{P}}\)-P-P).

Positive control: Human placenta tissue.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer:
- pH: 7.40
- Preservative: 0.02% Sodium azide
- Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

Without Mg\(^{2+}\) and Ca\(^{2+}\)

Purity: Immunogen affinity purified

Purification notes: ab59256 was affinity purified from rabbit antiserum by affinity chromatography using epitope specific immunogen.

Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab59256 in the following tested applications.

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

Target

Application | Abreviews | Notes
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WB | 1/500 - 1/1000. Predicted molecular weight: 57 kDa. | |
ICC/IF | Use a concentration of 5 µg/ml. | |
ELISA | 1/10000. | |
IHC-P | ★★★★★ 1/50 - 1/100. | |
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PPAR gamma antibody (ab59256)

ab59256, at 1/50 dilution, staining PPAR gamma in paraffin embedded human placenta tissue by Immunohistochemistry in the absence or presence of the immunising peptide.

Western blot - Anti-PPAR gamma antibody (ab59256)

All lanes: Anti-PPAR gamma antibody (ab59256) at 1/500 dilution

Lane 1: HUVEC (human umbilical vein endothelial cell line) whole cell lysate

Lane 2: HUVEC (blocked with immunizing peptide), whole cell lysate

Predicted band size: 57 kDa

Immunocytochemistry/ Immunofluorescence - Anti-PPAR gamma antibody (ab59256)

ICC/IF image of ab59256 stained MCF7 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab59256, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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