SANTA CRUZ BIOTECHNOLOGY, INC.

PPARγ (H-100): sc-7196

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Peroxisome proliferator-activated receptors (PPARs) are members of the nuclear hormone receptor subfamily of transcription factors. PPARs form heterodimers with retinoid X receptors (RXRs). These heterodimers regulate transcription of genes involved in Insulin action, adipocyte differentiation, lipid metabolism and inflammation. PPARγ is implicated in numerous diseases including obesity, diabetes, atherosclerosis and cancer. PPARγ activators include prostanoids, fatty acids, thiazolidinediones and N-(2-benzoylphenyl) tyrosine analogues. A key component in adipocyte differentiation and fat-specific gene expression, PPARγ may modulate macrophage functions such as proinflammatory activities, and stimulate oxidized low-density lipoprotein (x-LDL) uptake. A Pro12Ala polymorphism of the PPARγ_2 gene has been reported to reduce transactivation activity *in vitro*. This substitution may affect the immune response to ox-LDL and be associated with type 2 diabetes. In addition, the Pro12Ala variant of the PPARγ_2 gene maybe correlated with abdominal obesity in type 2 diabetes.

CHROMOSOMAL LOCATION

Genetic locus: PPARG (human) mapping to 3p25.2; Pparg (mouse) mapping to 6 E3.

SOURCE

PPARγ (H-100) is a rabbit polyclonal antibody raised against amino acids 8-106 of PPARγ of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-7196 AC, 500 µg/0.25 ml agarose in 1 ml; as HRP conjugate for Western blotting, sc-7196 HRP, 200 µg/1 ml; and as TransCruz reagent for Gel Supershift and ChIP applications, sc-7196 X, 200 µg/0.1 ml.

APPLICATIONS

PPARγ (H-100) is recommended for detection of PPARγ_1 and PPARγ_2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PPARγ (H-100) is also recommended for detection of PPARγ_1 and PPARγ_2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PPARγ siRNA (h): sc-29455, PPARγ siRNA (m): sc-29456, PPARγ shRNA Plasmid (h): sc-29455-SH, PPARγ shRNA Plasmid (m): sc-29456-SH, PPARγ shRNA (h) Lentiviral Particles: sc-29455-V and PPARγ shRNA (m) Lentiviral Particles: sc-29456-V.

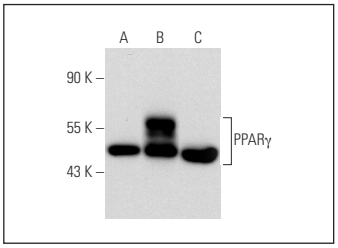
PPARγ (H-100) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PPARγ isoforms: 54/57 kDa.

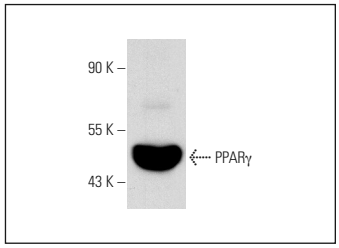
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



PPARγ (H-100): sc-7196. Western blot analysis of PPARγ expression in non-transfected 293T: sc-117752 (**A**), human PPARγ transfecSted 293T: sc-159760 (**B**) and THP-1 (**C**) whole cell lysates.



PPARγ (H-100): sc-7196. Western blot analysis of PPARγ expression in U-937 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Clark, R.B., et al. 2000. The nuclear receptor PPARγ and immunoregulation: PPARγ mediates inhibition of helper T cell responses. J. Immunol. 164: 1364-1371.
2. Matteucci, E., et al. 2012. Bone metastatic process of breast cancer involves methylation state affecting E-cadherin expression through TAZ and WWOX nuclear effectors. Eur. J. Cancer 49: 231-244.
3. Siersbak, M.S., et al. 2012. Genome-wide profiling of peroxisome proliferator-activated receptor γ in primary epididymal, inguinal, and brown adipocytes reveals depot-selective binding correlated with gene expression. Mol. Cell. Biol. 32: 3452-3463.
4. Alimirah, F., et al. 2012. Crosstalk between the peroxisome proliferator-activated receptor γ (PPARγ) and the vitamin D receptor (VDR) in human breast cancer cells: PPARγ binds to VDR and inhibits 1α,25-dihydroxyvitamin D_3 mediated transactivation. Exp. Cell Res. 318: 2490-2497.
5. Rosmaninho-Salgado, J., et al. 2012. Intracellular mechanisms coupled to NPY Y2 and Y5 receptor activation and lipid accumulation in murine adipocytes. Neuropeptides 46: 359-366.
6. Bagley, H.N., et al. 2013. Maternal docosahexaenoic acid increases adiponectin and normalizes IUGR-induced changes in rat adipose deposition. J. Obes. E-published.

RESEARCH USE

For research use only, not for use in diagnostic procedures.