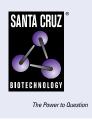
SANTA CRUZ BIOTECHNOLOGY, INC.

PPARγ (D1H8H4): sc-81152



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. PPAR_Y is implicated in numerous diseases including obesity, diabetes, atherosclerosis and cancer. PPAR_Y activators include prostanoids, fatty acids, thiazolidinediones and N-(2-benzoylphenyl) tyrosine analogues. A key component in adipocyte differentiation and fatspecific gene expression, PPAR_Y may modulate macrophage functions such as proinflammatory activities, and stimulate oxidized low-density lipoprotein (x-LDL) uptake. A Pro12Al α polymorphism of the PPAR_Y2 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 Pro12Al α variant of the PPAR_Y2 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

PPARy (8D1H8H4) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 77-272 of PPARy of human origin.

PRODUCT

Each vial contains 200 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PPARγ (8D1H8H4) is recommended for detection of PPARγ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for PPARy siRNA (h): sc-29455, PPARy siRNA (m): sc-29456, PPARy siRNA (r): sc-156077, PPARy shRNA Plasmid (h): sc-29455-SH, PPARy shRNA Plasmid (m): sc-29456-SH, PPARy shRNA Plasmid (r): sc-156077-SH, PPARy shRNA (h) Lentiviral Particles: sc-29455-V, PPARy shRNA (m) Lentiviral Particles: sc-29456-V and PPARy shRNA (r) Lentiviral Particles: sc-156077-V.

Molecular Weight of PPARy isoforms: 54/57 kDa.

Positive Controls: THP-1 cell lysate: sc-2238 or U-937 cell lysate: sc-2239.

STORAGE

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

RESEARCH USE

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

SELECT PRODUCT CITATIONS

- 1. Pati, F., et al. 2014. Printing three-dimensional tissue analogues with decellularized extracellular matrix bioink. Nat. Commun. 5: 3935.
- 2. Cho, S.J., et al. 2015. Peroxisome proliferator-activated receptor γ upregulates galectin-9 and predicts prognosis in intestinal-type gastric cancer. International journal of cancer. Int. J. Cancer 136: 810-820.
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- Konieczna, A., et al. 2015. Thiazolidinediones regulate the level of ABC transporters expression on lung cancer cells. Klin. Onkol. 28: 431-438.
- Hernández-Bule, M.L., et al. 2016. Antiadipogenic effects of subthermal electric stimulation at 448 kHz on differentiating human mesenchymal stem cells. Mol. Med. Rep. 13: 3895-3903.
- Li, B., et al. 2017. TGF-β2-induced ANGPTL4 expression promotes tumor progression and osteoclast differentiation in giant cell tumor of bone. Oncotarget 8: 54966-54977.
- Xi, J., et al. 2018. Epigallocatechin-3-gallate protects against secondary osteoporosis in a mouse model via the Wnt/β-catenin signaling pathway. Mol. Med. Rep. 18: 4555-4562.
- 8. Wang, Z., et al. 2020. The protective effects of the β 3 adrenergic receptor agonist BRL37344 against liver steatosis and inflammation in a rat model of high-fat diet-induced nonalcoholic fatty liver disease (NAFLD). Mol. Med. 26: 54.
- Liang, K., et al. 2020. Contrary roles of Wnt/β-catenin signaling in BMP9induced osteogenic and adipogenic differentiation of 3T3-L1 preadipocytes. Cell Biochem. Biophys. 78: 347-356.
- 10.Li, N., et al. 2020. Immunoregulation of microglial polarization: an unrecognized physiological function of α -synuclein. J. Neuroinflammation 17: 272.
- Seidu, T., et al. 2021. DHT causes liver steatosis via transcriptional regulation of SCAP in normal weight female mice. J. Endocrinol. 250: 49-65.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CONJUGATES

See $PPAR_{\gamma}$ (E-8): sc-7273 for PPAR $_{\gamma}$ antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor $^{\circ}$ 488, 546, 594, 647, 680 and 790.