**PPARγ2 (A-1): sc-166731**

**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 prostanooids, 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 pro-inflammatory activities and stimulate oxidized low-density lipoprotein (x-LDL) uptake. A Pro12Ala polymorphism of the PPARγ 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 gene maybe correlated with abdominal obesity in type 2 diabetes.

**CHROMOSOMAL LOCATION**

Genetic locus: PPARG (human) mapping to 3p25.2.

**SOURCE**

PPARγ2 (A-1) is a mouse monoclonal antibody raised against a peptide mapping at the N-terminus of PPARγ2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-166731 X, 200 µg/0.1 ml.

PPARγ2 (A-1) is available conjugated to agarose (sc-166731 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166731 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycoerythrin (sc-166731 PE), fluorescein (sc-166731 FITC), Alexa Fluor® 488 (sc-166731 AF488), Alexa Fluor® 546 (sc-166731 AF546), Alexa Fluor® 594 (sc-166731 AF594) or Alexa Fluor® 647 (sc-166731 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-166731 AF680) or Alexa Fluor® 790 (sc-166731 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166731 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

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

**PROTOCOLS**

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

**APPLICATIONS**

PPARγ2 (A-1) is recommended for detection of PPARγ2 of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with PPARγ1.

Suitable for use as control antibody for PPARγ2 siRNA (h): sc-29455, PPARγ2 siRNA Plasmid (h): sc-29455-SH and PPARγ2 siRNA (h) Lentiviral Particles: sc-29455-V.

PPARγ2 (A-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PPARγ2: 60 kDa.

Positive Controls: U-937 cell lysate: sc-2239.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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