**BACKGROUND**

Peroxisome proliferator-activated receptors (PPARs), members of the nuclear hormone receptor subfamily of transcription factors, 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 diseases including obesity, diabetes, atherosclerosis and cancer. PPARγ activators include prostanoids, fatty acids, thiazolidinediones and N-(2-benzoylphenyl) tyrosine analogues. PPARγ is a key component in adipocyte differentiation and fat-specific gene expression. A Pro12Ala polymorphism of the PPARγ2 gene may 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 PPARγ2 gene may be correlated with abdominal obesity in type 2 diabetes.

**CHROMOSOMAL LOCATION**

Genetic locus: PPARγ (human) mapping to 3p25.2; Pparg (mouse) mapping to 12 chromosome (identical to corresponding mouse sequence).

**SOURCE**

PPARγ (E-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 480-505 at the C-terminus of PPARγ of human origin (identical to corresponding mouse sequence).

**PRODUCT**

Each vial contains 200 µg IgGκ 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-7273 X, 200 µg/0.1 ml. PPARγ (E-8) is available conjugated to agarose (sc-7273 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-7273 PE), fluorescein (sc-7273 FITC), Alexa Fluor® 488 (sc-7273 AF488), Alexa Fluor® 546 (sc-7273 AF546), Alexa Fluor® 594 (sc-7273 AF594) or Alexa Fluor® 647 (sc-7273 AF647), 200 µg/ml, for WB, IHC (IF) and FCM; and to either Alexa Fluor® 680 (sc-7273 AF680) or Alexa Fluor® 790 (sc-7273 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, PPARγ (E-8) is available conjugated to biotin (sc-7273 B), 200 µg/ml, for WB, IHC (IF) and ELISA; and to either TRITC (sc-7273 TRITC, 200 µg/ml) or Alexa Fluor® 405 (sc-7273 AF405), 100 µg/2 ml, for IF, IHC (IF) and FCM.

Blocking peptide available for competition studies, sc-7273 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**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**

PPARγ (E-8) is recommended for detection of PPARγ1 and PPARγ2 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), 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).

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 (E-8) X TransCruz antibody is recommended for Gel Supershift and ChiP applications.

Molecular Weight of PPARγ isoforms: 54/57 kDa.

Positive Controls: PPARγ (h): 293T Lysate: sc-159760, U-937 cell lysate: sc-2239 and THP-1 cell lysate: sc-2238.

**DATA**

PPARγ (E-8): sc-7273. Western blot analysis of PPARγ expression in non-transfected 293T: sc-117752 and transfected 293T: sc-159760 (A) and THP-1: sc-7273 (B). Immunoperoxidase staining of human PPARγ transfected 293T: sc-159760 (C) and THP-1 whole cell lysates.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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