**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 (ox-LDL) uptake. A PPARγ polymorphism has been reported to reduce trans-activation activity in vitro, which may affect the immune response to ox-LDL and be associated with type 2 diabetes.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

p-PPARγ (Ser 112)-R is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 112 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. Blocking peptide available for competition studies, sc.28001 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**RESEARCH USE**

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

**APPLICATIONS**

p-PPARγ (Ser 112)-R is recommended for detection of Ser 112 phosphorylated PPARγ2, also designated Ser 84 phosphorylated PPARγ1 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).

p-PPARγ (Ser 112)-R is also recommended for detection of correspondingly phosphorylated Ser on PPARγ2 and PPARγ1 in additional species, including equine and canine.

Suitable for use as control antibody for PPARγ siRNA (h): sc-29455, PPARγ siRNA (m2): sc-43530, PPARγ shRNA Plasmid (h): sc-29455-SH, PPARγ shRNA Plasmid (m2): sc-43530-SH, PPARγ shRNA (h) Lentiviral Particles: sc-29455-V and PPARγ shRNA (m2) Lentiviral Particles: sc-43530-V.

Molecular Weight of p-PPARγ1: 54 kDa.

Molecular Weight of p-PPARγ2: 57 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:1500), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2093 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-3004 (dilution range 1:50-1:500) and goat anti-rabbit IgG-TR: sc-2780 (dilution range 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**SELECT PRODUCT CITATIONS**


**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 or our catalog for detailed protocols and support products.