

# PPAR $\gamma$ (m): 293T Lysate: sc-122729

## 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 $\gamma$  is implicated in numerous diseases including obesity, diabetes, atherosclerosis and cancer. PPAR $\gamma$  activators include prostanoids, fatty acids, thiazolidinediones and N-(2-benzoylphenyl) tyrosine analogues. A key component in adipocyte differentiation and fat-specific gene expression, PPAR $\gamma$  may modulate macrophage functions such as proinflammatory activities, and stimulate oxidized low-density lipoprotein (x-LDL) uptake. A Pro12Ala polymorphism of the PPAR $\gamma$ 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 PPAR $\gamma$ 2 gene maybe correlated with abdominal obesity in type 2 diabetes.

## REFERENCES

1. Brun, R.P., et al. 1996. Differential activation of adipogenesis by multiple PPAR isoforms. *Genes Dev.* 10: 974-984.
2. Mansen, A., et al. 1996. Expression of the peroxisome proliferator-activated receptor (PPAR) in the mouse colonic mucosa. *Biochem. Biophys. Res. Commun.* 222: 844-851.
3. Sterchele, P.F., et al. 1996. Regulation of peroxisome proliferator-activated receptor- $\alpha$  mRNA in rat liver. *Arch. Biochem. Biophys.* 326: 281-289.
4. Braissant, O., et al. 1996. Differential expression of peroxisome proliferator-activated receptors (PPARs): tissue distribution of PPAR $\alpha$ ,  $\beta$ , and  $\gamma$  in the adult rat. *Endocrinology* 137: 354-366.
5. Lemberger, T., et al. 1996. Expression of the peroxisome proliferator-activated receptor  $\alpha$  gene is stimulated by stress and follows a diurnal rhythm. *J. Biol. Chem.* 271: 1764-1769.
6. Miyata, K.S., et al. 1996. The orphan nuclear hormone receptor LXR  $\alpha$  interacts with the peroxisome proliferator-activated receptor and inhibits peroxisome proliferator signaling. *J. Biol. Chem.* 271: 9189-9192.
7. Hunter, J., et al. 1996. Crosstalk between the thyroid hormone and peroxisome proliferator-activated receptors in regulating peroxisome proliferator-responsive genes. *Mol. Cell. Endocrinol.* 116: 213-221.

## CHROMOSOMAL LOCATION

Genetic locus: Pparg (mouse) mapping to 6 E3.

## PRODUCT

PPAR $\gamma$  (m): 293T Lysate represents a lysate of mouse PPAR $\gamma$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

PPAR $\gamma$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PPAR $\gamma$  antibodies. Recommended use: 10-20  $\mu$ l per lane.

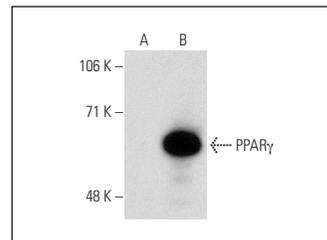
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PPAR $\gamma$  (B-5): sc-271392 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PPAR $\gamma$  expression in PPAR $\gamma$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

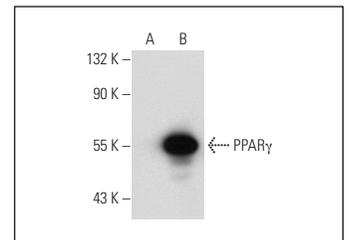
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\lambda$  BP-HRP: sc-516132 or m-IgG $\lambda$  BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



PPAR $\gamma$  (B-5): sc-271392. Western blot analysis of PPAR $\gamma$  expression in non-transfected: sc-117752 (A) and mouse PPAR $\gamma$  transfected: sc-122729 (B) 293T whole cell lysates.



PPAR $\gamma$  (E-8): sc-7273. Western blot analysis of PPAR $\gamma$  expression in non-transfected: sc-117752 (A) and mouse PPAR $\gamma$  transfected: sc-122729 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.