

Rabbit Anti-PPAR gamma antibody

SL0530R

Product Name:	PPAR gamma
Chinese Name:	过氧化酶活化增生受体γ抗体
Alias:	CIMT1; HUMPPARG; NR1C3; Nuclear receptor subfamily 1 group C member 3; PAX8/PPARG Fusion Gene; Peroxisome Proliferator Activated Receptor gamma; PPAR gamma; PPARG; PPARG1; PPARG2; PPARG3; CIMT1; GLM1; HUMPPARG; NR1C3; Nuclear receptor subfamily 1 group C member 3; PAX8/PPARG Fusion Gene; Peroxisome proliferator activated nuclear receptor gamma variant 1; Peroxisome proliferator activated receptor gamma 1; Peroxisome Proliferator Activated Receptor gamma; Peroxisome proliferator-activated receptor gamma; PPAR gamma; PPAR gamma; PPAR gamma 1; PPAR gamma 2; PPAR gamma 3; PPAR gamma-1; PPAR gamma-2; PPAR gamma-3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PPAR Gamma:101-200/505
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:

PubMed

The PPAR gamma antibody mainly is exist in the white fat organization, the fat for the PPAR gamma is born, blood sugar stability, the disease respond, the artery gruel kind hardens to rise the important function with the tumor occurrence of etc. all, but concerning the PPAR gamma to bone of function is a new research heat to order in recent years. A PPAR of many researches report gamma was go together with the body is after activate can the function promote many capable cells divided to increase to living but repress the ossification cell to divide to cause the bone measure the decrease or bone softs toward the fat cell in the marrow, the PPAR gamma promotes the ability and bones that the fat cell divide metabolize closely related, the performance is increasing along with the growth marrow fat content of the age, the ossification cell metabolism the outcome reduce, the different construction PPAR gamma 2 have the important function.

Function:

Receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the receptor binds to a promoter element in the gene for acyl-CoA oxidase and activates its transcription. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis.

Subunit:

Forms a heterodimer with the retinoic acid receptor RXRA called adipocyte-specific transcription factor ARF6. Interacts with NCOA6 coactivator, leading to a strong increase in transcription of target genes. Interacts with coactivator PPARBP, leading to a mild increase in transcription of target genes. Interacts with FAM120B. Interacts with PRDM16 (By similarity). Interacts with NOCA7 in a ligand-inducible manner. Interacts with NCOA1 LXXLL motifs. Interacts with TGFB1I1. Interacts with DNTTIP2. Interacts with PRMT2.

Subcellular Location:

Nucleus.

Tissue Specificity:

Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.

DISEASE:

Note=Defects in PPARG can lead to type 2 insulin-resistant diabetes and hyptertension. PPARG mutations may be associated with colon cancer.

Defects in PPARG may be associated with susceptibility to obesity (OBESITY) [MIM:601665]. It is a condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat.

Defects in PPARG are the cause of familial partial lipodystrophy type 3 (FPLD3) [MIM:604367]. Familial partial lipodystrophies (FPLD) are a heterogeneous group of genetic disorders characterized by marked loss of subcutaneous (sc) fat from the

Product Detail:

extremities. Affected individuals show an increased preponderance of insulin resistance, diabetes mellitus and dyslipidemia.

Genetic variations in PPARG can be associated with susceptibility to glioma type 1 (GLM1) [MIM:137800]. Gliomas are central nervous system neoplasms derived from glial cells and comprise astrocytomas, glioblastoma multiforme, oligodendrogliomas, and ependymomas. Note=Polymorphic PPARG alleles have been found to be significantly over-represented among a cohort of American patients with sporadic glioblastoma multiforme suggesting a possible contribution to disease susceptibility.

Similarity:

Belongs to the nuclear hormone receptor family. NR1 subfamily. Contains 1 nuclear receptor DNA-binding domain.

SWISS:

P37231

Gene ID:

5468

Database links:

Entrez Gene: 5468Human

Entrez Gene: 19016Mouse

Entrez Gene: 25664Rat

SwissProt: P37231Human

SwissProt: P37238Mouse

SwissProt: O88275Rat

Unigene: 162646Human

Unigene: 3020Mouse

Unigene: 23443Rat

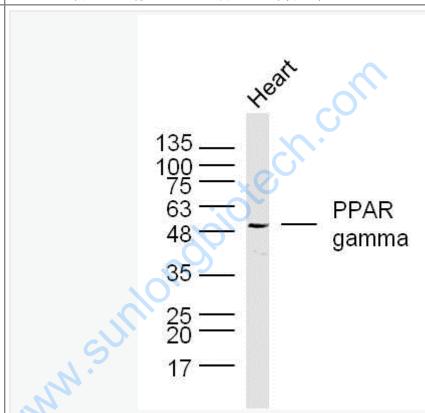
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

类固醇受体(Steroid Receptors)

过氧化物酶体增殖物激活受体γ(PPARγ)主要存在于白色脂肪组织, PPARγ对于脂肪生成、血糖稳定、炎症反应、动脉粥样硬化和Tumour等的发生都起到重要的作用。主要在脂肪细胞内表达。PPARγ是噻唑烷二酮类药物(TZDs)作用的药靶, 又是脂肪Cell

differentiation的重要调节因子。经研究发现,PPARγ在肥胖及胰岛素抵抗的发病机制中具有十分重要的意义,是治疗Diabetes、肥胖等代谢性疾病的重要药靶。过氧化物酶体增殖物激活受体γ(PPARγ)属 II 型核受体超家族成员,主要在脂肪细胞内表达。PPARγ是噻唑烷二酮类药物(TZDs)作用的药靶,又是脂肪Cell differentiation的重要调节因子。现有研究(包括一次于美国加州大学进行的研究)发现PPARγ在肥胖及胰岛素抵抗的发病机制中具有十分重要的意义,是治疗Diabetes、肥胖等代谢性疾病的重要药靶。目前,该受体蛋白质水平的筛选模式已经建立,并正在建立该受体的报告基因的细胞水平筛选评价模式。



Picture:

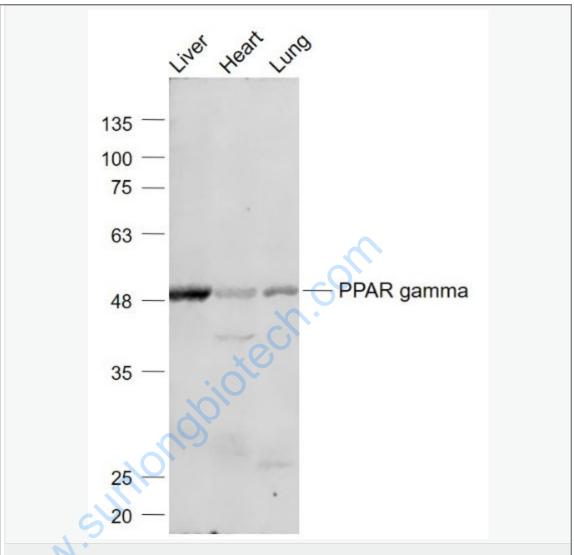
Sample: Heart (Mouse) Lysate at 30 ug

Primary: Anti- PPAR gamma (SL0530R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 51 kD



Sample:

Liver (Mouse) Lysate at 40 ug

Heart (Mouse) Lysate at 40 ug

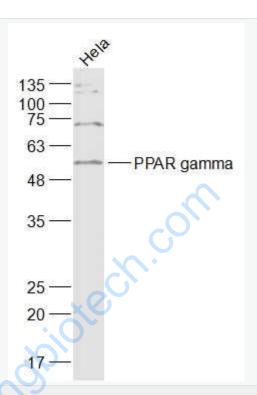
Lung (Mouse) Lysate at 40 ug

Primary: Anti- PPAR gamma (SL0530R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 51 kD



Sample:

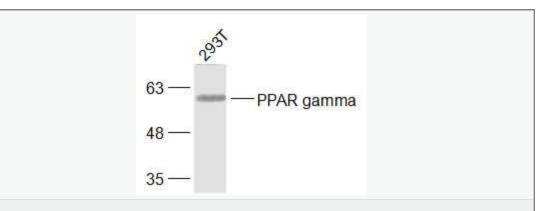
Hela(Human) Cell Lysate at 30 ug

Primary: Anti-PPAR gamma (SL0530R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 57 kD



Sample:

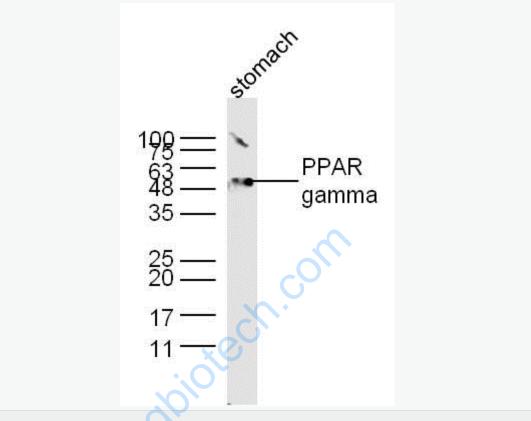
293T(Human) Cell Lysate at 30 ug

Primary: Anti-PPAR gamma (SL0530R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 57 kD

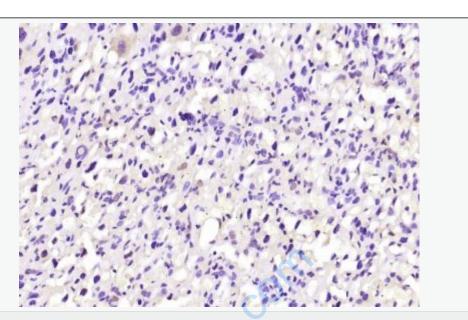


Sample: Stomach (Mouse) Lysate at 30 ug

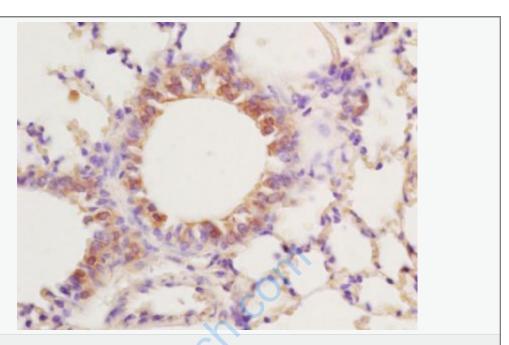
Primary: Rabbit Anti- PPAR gamma (SL0530R) at 1:300 dilution;

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size:57 kD Observed band size:55 kD

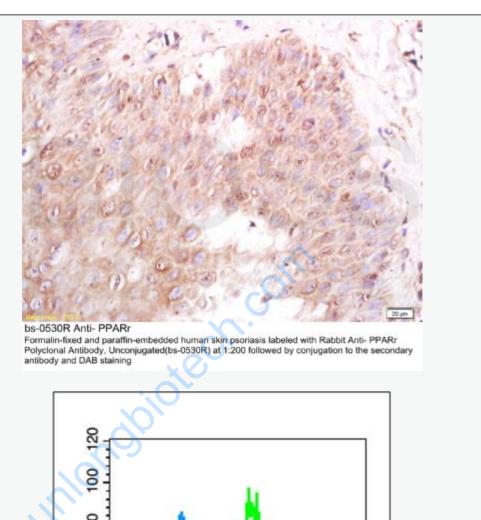


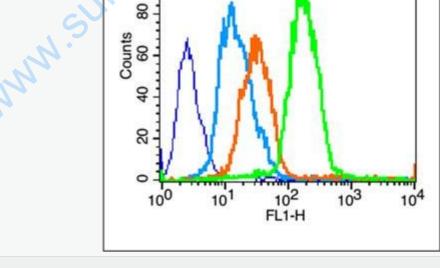
Paraformaldehyde-fixed, paraffin embedded (mouse placenta); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PPAR gamma) Polyclonal Antibody, Unconjugated (SL0530R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: mouse lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-PPAR Gamma Polyclonal Antibody, Unconjugated(SL0530R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining





Blank control (blue line): U251

Primary Antibody (green line): Rabbit Anti-PPARG/PPAR gamma antibody

(SL0530R)

Dilution: $1\mu g / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC

Dilution: 1µg /test.

Protocol

The cells were fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min on ice. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.