



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**GLM1; CIMT1; NR1C3; PPARG; PPARG1; PPARG2; PPARG5; PPARgamma; Nuclear receptor subfamily 1 group C member 3; PAX8/PPARG Fusion Gene; Peroxisome Proliferator Activated Receptor gamma; 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; PPARG_HUMAN; PPAR- γ ; PPAR γ ; PPAR γ ;**Research Area**

immunology Signal transduction transcriptional regulatory factor Kinases and Phosphatases Diabetes Endocrinopathy

Immunogen Species

Rabbit

Clonality

Polyclonal

React Species

Human, Mouse, Rat, (predicted: Chicken, Pig, Cow, Rabbit, Sheep,)

ApplicationsWB=1:500-2000,ICC/IF=1:100-500,Flow-Cyt=1 μ g/Test (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight**

57kDa

Cellular localization

The nucleus

Form

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

Buffer Solution

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

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

PubMed

[PubMed](#)

This gene encodes a member of the peroxisome proliferator-activated receptor (PPAR) subfamily of nuclear receptors. PPARs form heterodimers with retinoid X receptors (RXRs) and these heterodimers regulate transcription of various genes. Three subtypes of PPARs are known: PPAR-alpha, PPAR-delta, and PPAR-gamma. The protein encoded by this gene is PPAR-gamma and is a regulator of adipocyte differentiation. Additionally, PPAR-gamma has been implicated in the pathology of numerous diseases including obesity, diabetes, atherosclerosis and cancer. Alternatively spliced transcript variants that encode different isoforms have been described. [provided by RefSeq, Jul 2008]

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.

Product Detail

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 hypertension. 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 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: 5468](#) Human

[Entrez Gene: 19016](#) Mouse

[Entrez Gene: 25664](#) Rat

[SwissProt: P37231](#) Human

[SwissProt: P37238](#) Mouse

[SwissProt: O88275](#) Rat

[Unigene: 162646](#) Human

[Unigene: 3020](#) Mouse

[Unigene: 23443](#) Rat

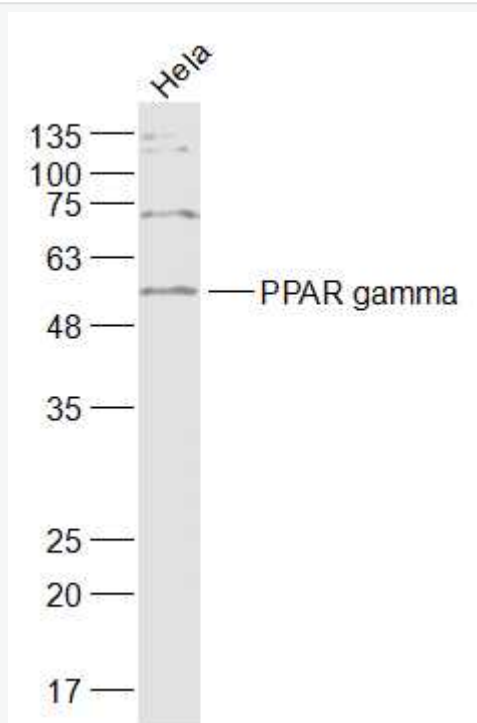
类固醇受体 (Steroid Receptors)

过氧化物酶体增殖物激活受体 γ (PPAR γ) 主要存在于白色脂肪组织, PPAR γ 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。PPAR γ 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, PPAR γ 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。

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**Product
Picture**



Sample:

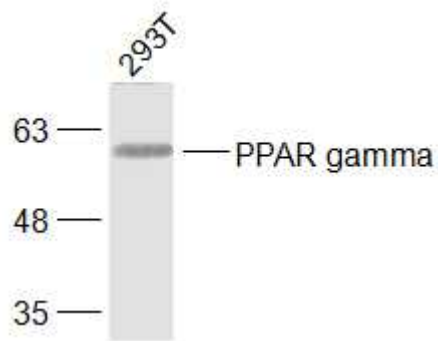
HeLa(Human) Cell Lysate at 30 ug

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:

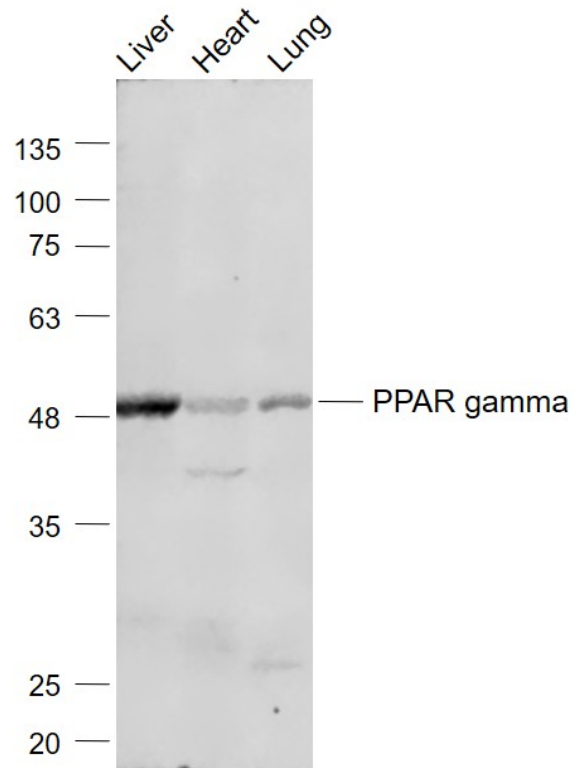
293T(Human) Cell Lysate at 30 ug

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:

Liver (Mouse) Lysate at 40 ug

Heart (Mouse) Lysate at 40 ug

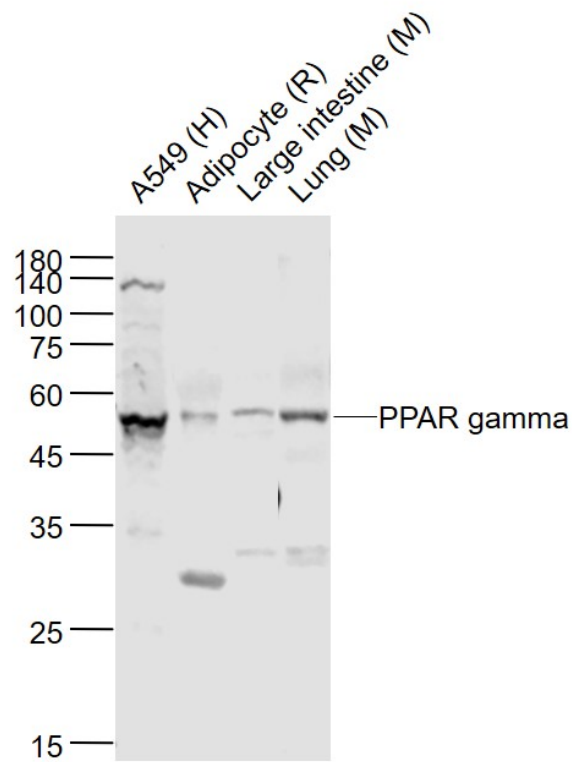
Lung (Mouse) Lysate at 40 ug

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:

Lane 1: A549 (Human) Cell Lysate at 30 ug

Lane 2: Adipocyte (Rat) Lysate at 40 ug

Lane 3: Large intestine (Mouse) Lysate at 40 ug

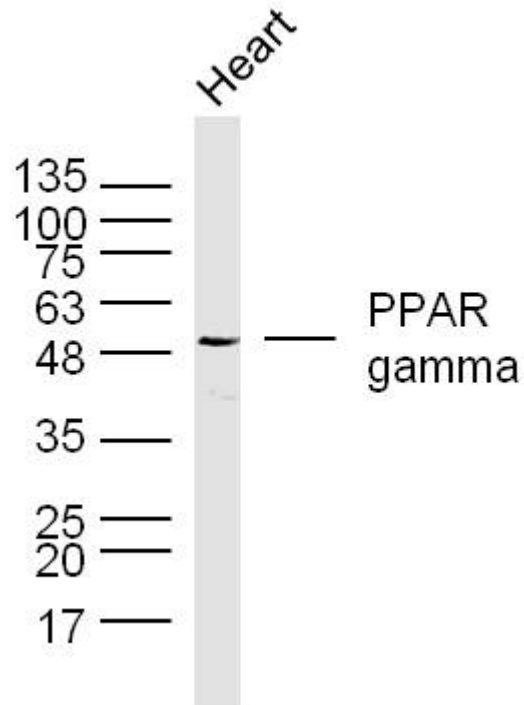
Lane 4: Lung (Mouse) Lysate at 40 ug

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

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

Predicted band size: 52 kD

Observed band size: 52 kD



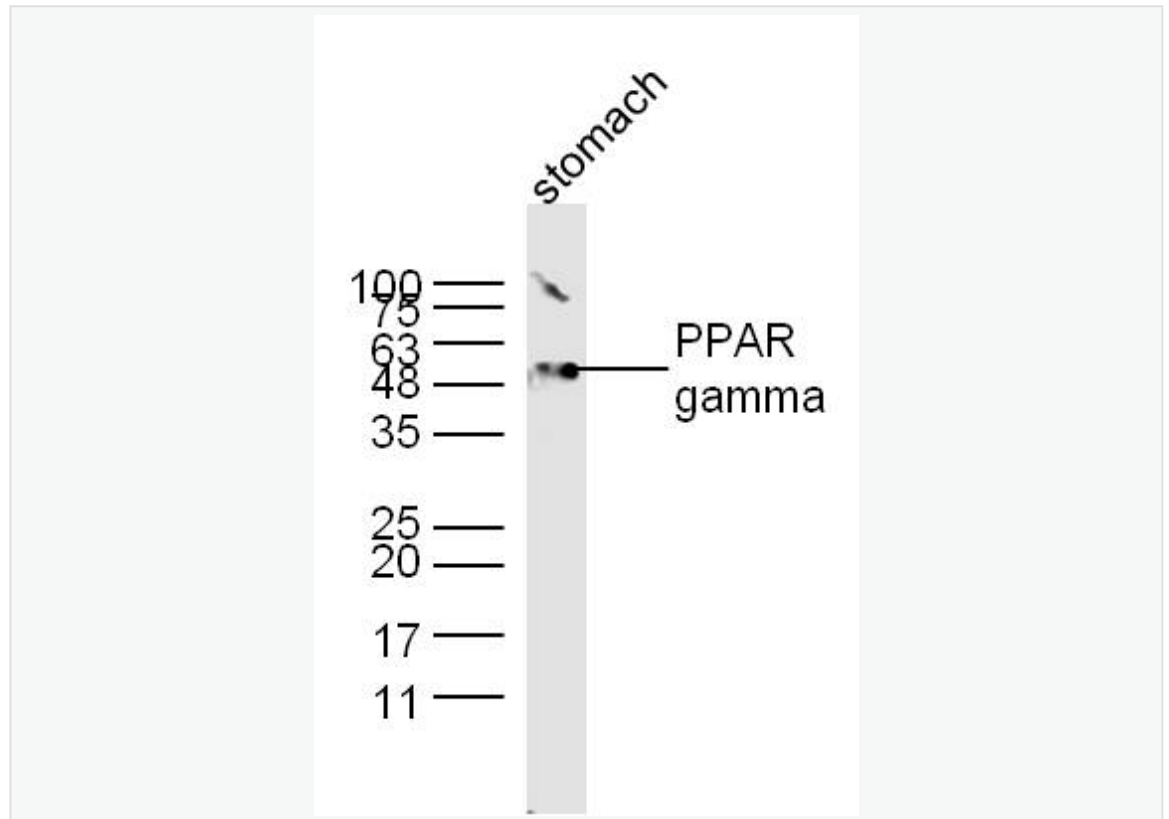
Sample: Heart (Mouse) Lysate at 30 ug

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

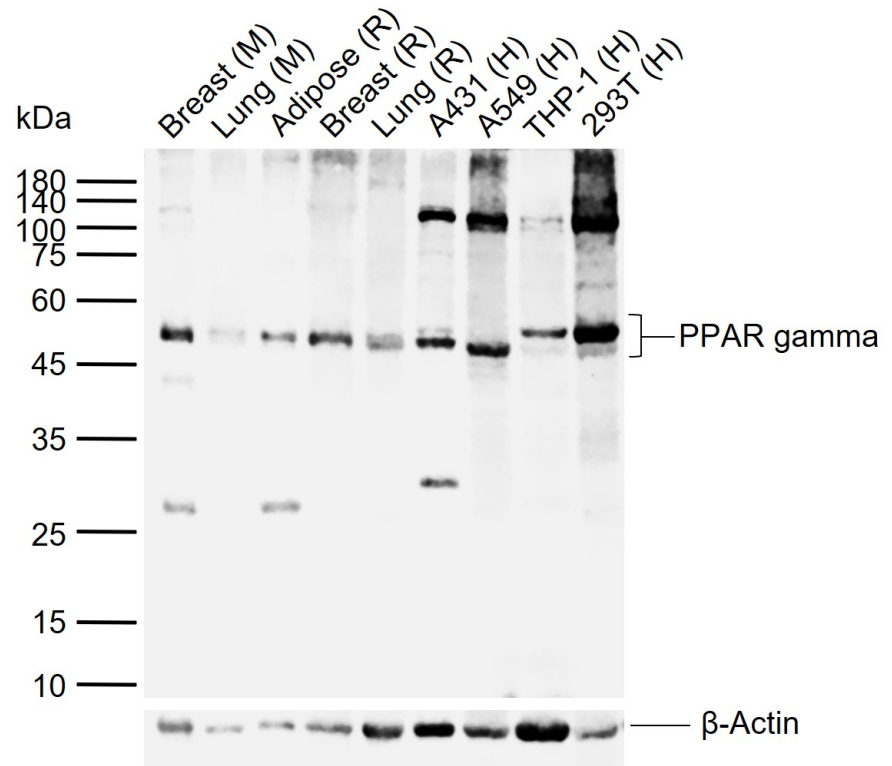


Sample: Stomach (Mouse) Lysate at 30 ug

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



Sample:

Lane 1: Mouse Breast tissue lysates

Lane 2: Mouse Lung tissue lysates

Lane 3: Rat Adipose tissue lysates

Lane 4: Rat Breast tissue lysates

Lane 5: Rat Lung tissue lysates

Lane 6: Human A431 cell lysates

Lane 7: Human A549 cell lysates

Lane 8: Human THP-1 cell lysates

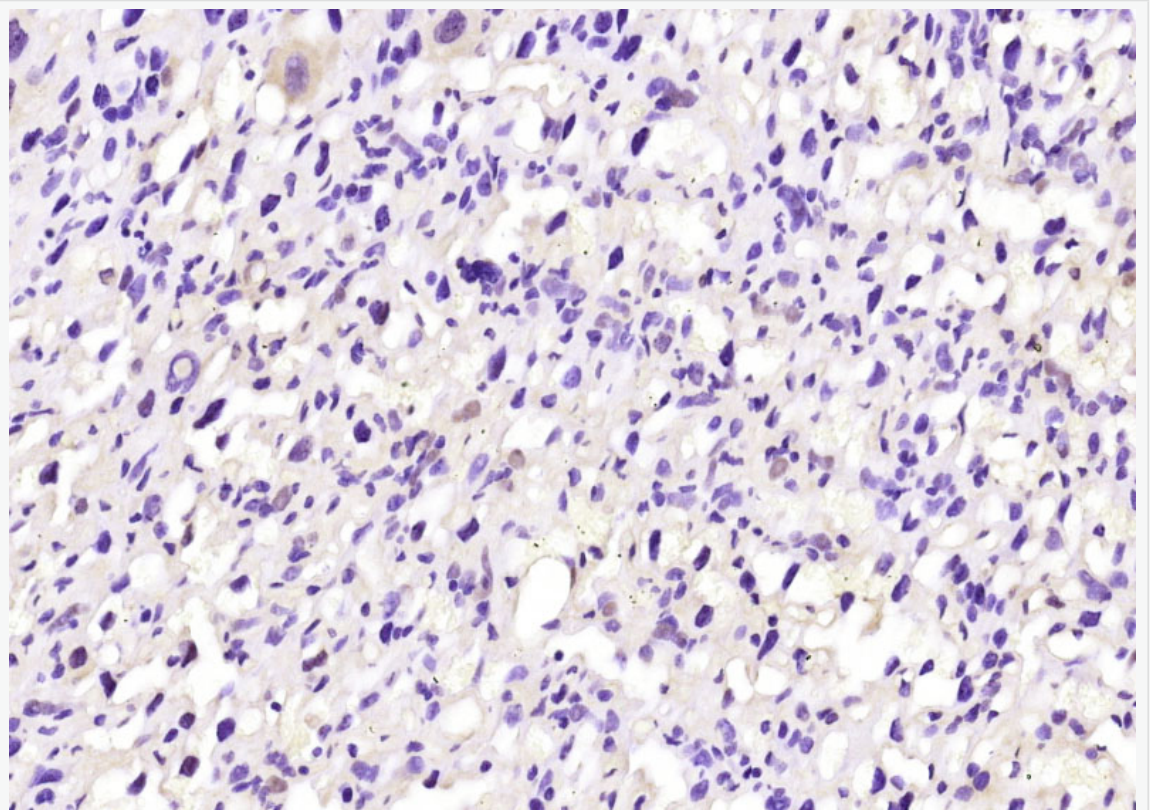
Lane 9: Human 293T cell lysates

Primary: Anti-PPAR gamma (SL0530R) at 1/500 dilution

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

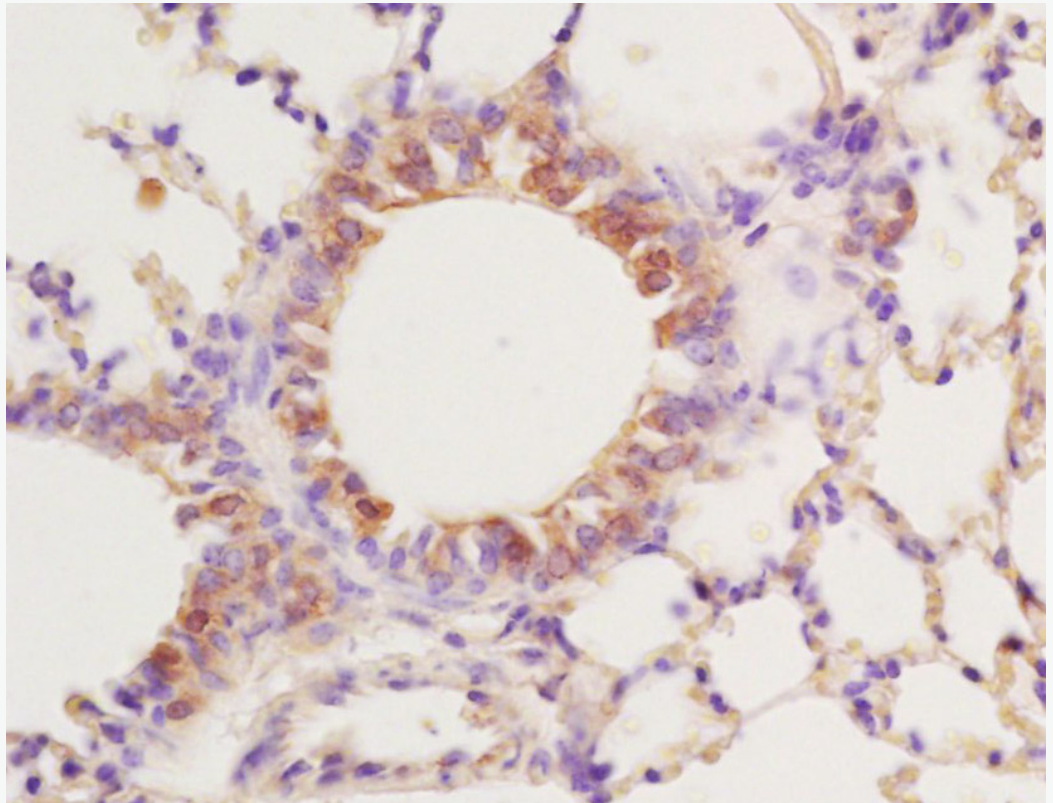
Predicted band size: 57 kDa

Observed band size: 52 kDa

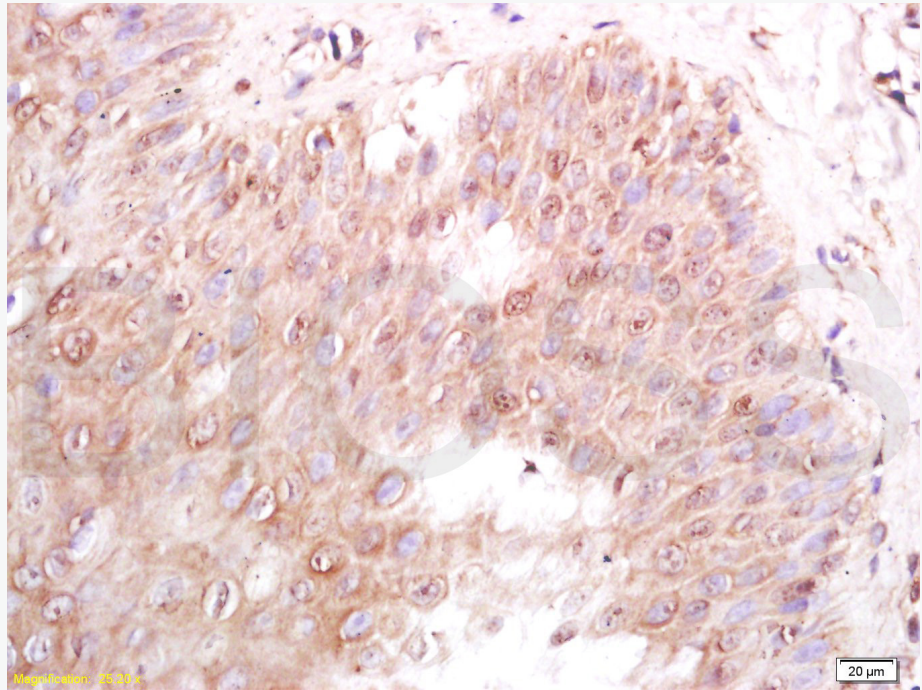


Paraformaldehyde-fixed, paraffin embedded (mouse placenta); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PPAR gamma) Polyclonal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

Kit(Rabbit) (sp-0023) instructions and DAB staining.

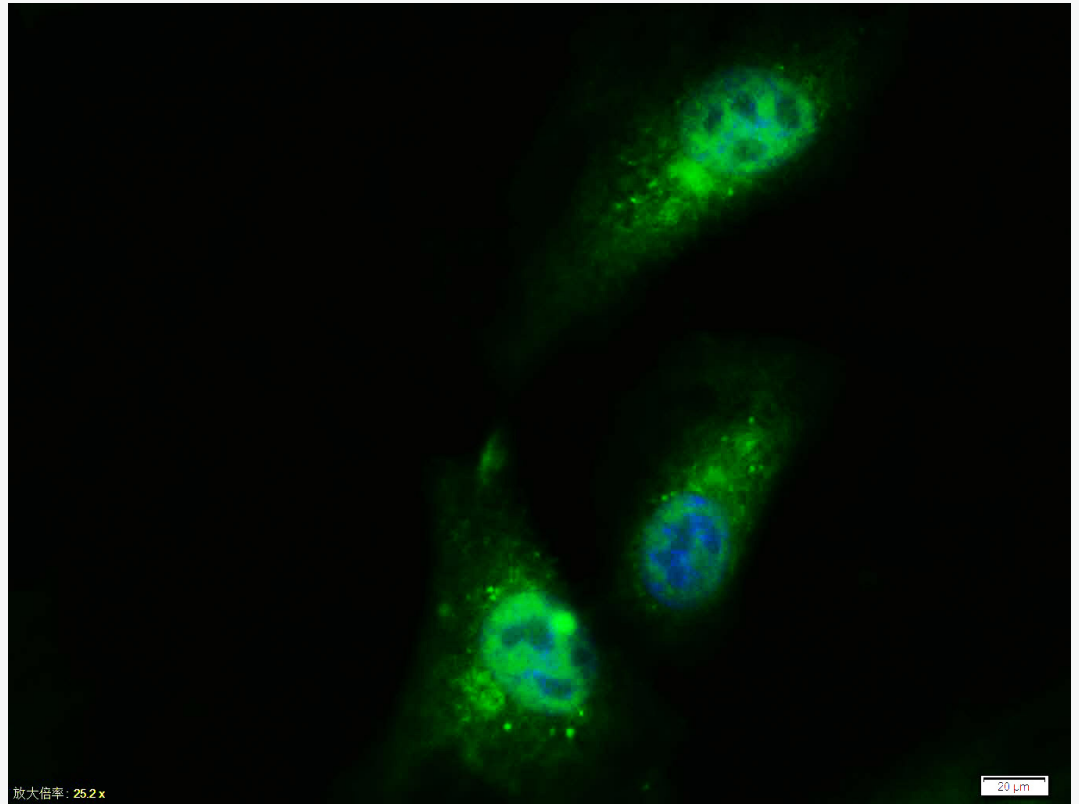


Tissue/cell: mouse lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-PPAR 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

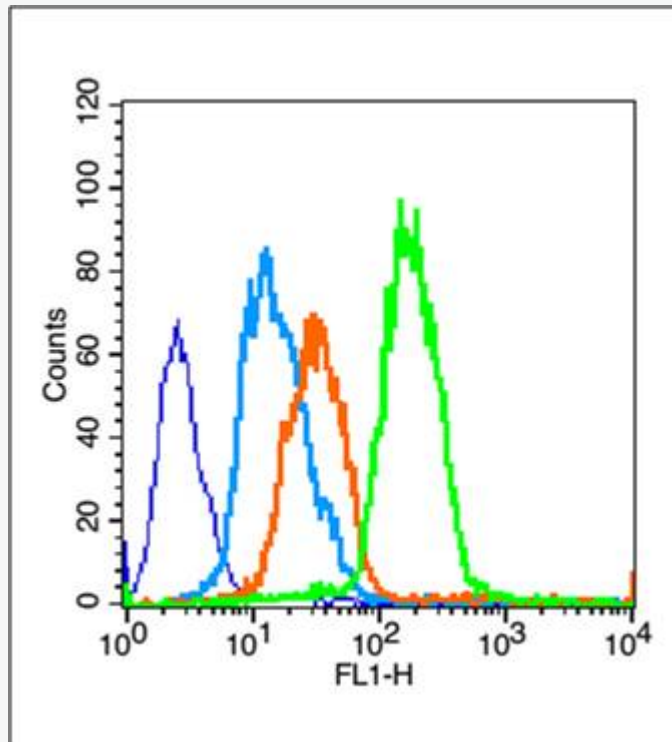


bs-0530R Anti- PPARr

Formalin-fixed and paraffin-embedded human skin psoriasis labeled with Rabbit Anti- PPARr Polyclonal Antibody, Unconjugated(bs-0530R) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Tissue/cell: A549 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (PPAR gamma) polyclonal Antibody, Unconjugated (SL0530R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control (blue line): U251

Primary Antibody (green line): Rabbit Anti-PPARG/PPAR gamma antibody
(SL0530R)

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

Isotype Control Antibody (orange line): Rabbit IgG .

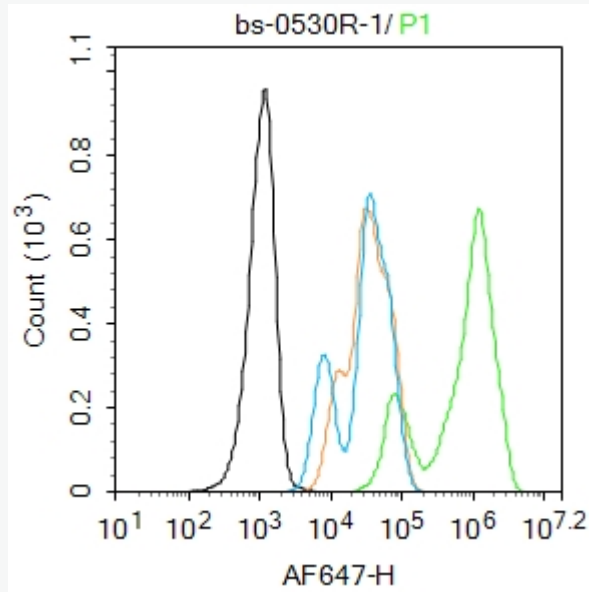
Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC

Dilution: $1\mu\text{g}/\text{test}$.

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.



Blank control: A431.

Primary Antibody (green line): Rabbit Anti-PPAR gamma antibody (SL0530R)

Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in



5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.