

Rabbit Anti-phospho-PPAR alpha (Ser12) antibody

SL4055R

Product Name:	phospho-PPAR alpha (Ser12)
Chinese Name:	磷酸化α型-过氧化酶活化增生受体抗体
Alias:	PPAR alpha (phospho-Ser12); PPAR alpha (phospho-S12); p-PPAR alpha (Ser12); p-PPAR alpha (S12); hPPAR; MGC2237; MGC2452; NR1C1; Nuclear receptor subfamily 1 group C member 1; Peroxisome Proliferator Activated Receptor alpha; PPAR; PPAR alpha; PPARA; OTTHUMP00000197740; OTTHUMP00000197741; Peroxisome proliferator-activated receptor alpha; PPAR-alpha; PPARA_HUMAN; PPARalpha.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	52kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human PPAR alpha around the phosphorylation site of ser12:PL(p-S)PL
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

Peroxisome proliferators are nongenotoxic carcinogens which are purported to exert their effect on cells through their interaction with members of the nuclear hormone receptor family, termed Peroxisome Proliferator Activated Receptors (PPARs). Nuclear hormone receptors are ligand dependent intracellular proteins that stimulate transcription of specific genes by binding to specific DNA sequences following activation by the appropriate ligand. Studies indicate that PPARs are activated by peroxisome proliferators such as clofibric acid, nafenopin, and WY-14,643, as well as by some fatty acids. It has also been shown that PPARs can induce transcription of acyl coenzyme A oxidase and cytochrome P450 A6 (CYP450 A6) through interaction with specific response elements. PPAR alpha is activated by free fatty acids including linoleic, arachidonic, and oleic acids. Induction of peroxisomes by this mechanism leads to a reduction in blood triglyceride levels. PPAR alpha is expressed mainly in skeletal muscle, heart, liver, and kidney and is thought to regulate many genes involved in the beta-oxidation of fatty acids. Activation of rat liver PPAR alpha has been shown to suppress hepatocyte apoptosis. PPAR alpha, like several other nuclear hormone receptors, heterodimerizes with retinoic X receptor (RXR) alpha to form a transcriptionally competent complex.

| | Product Detail:

Function:

Ligand-activated transcription factor. Key regulator of lipid metabolism. Activated by the endogenous ligand 1-palmitoyl-2-oleoyl-sn-glycerol-3-phosphocholine (16:0/18:1-GPC). Activated by oleylethanolamide, a naturally occurring lipid that regulates satiety (By similarity). Receptor for peroxisome proliferators such as hypolipidemic drugs and fatty acids. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as transcription activator for the ACOX1 and P450 genes. Transactivation activity requires heterodimerization with RXRA and is antagonized by NR2C2.

Subunit:

Heterodimer; with RXRA. This heterodimerization is required for DNA binding and transactivation activity. Interacts with AKAP13, LPIN1 and PRDM16. Also interacts with PPARBP coactivator in vitro. Interacts with CITED2; the interaction stimulates its transcriptional activity (By similarity). Interacts with NCOA3 and NCOA6 coactivators. Interacts with ASXL1 AND ASXL2.

Subcellular Location:

Nucleus.

Tissue Specificity:

Skeletal muscle, liver, heart and kidney.

Similarity:

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

SWISS:

Q07869

Gene ID:

5465

Database links:

Entrez Gene: 5465 Human

Entrez Gene: 19013 Mouse

Entrez Gene: 25747 Rat

Omim: 170998 Human

SwissProt: Q07869 Human

SwissProt: Q6I9S0 Human

SwissProt: P23204 Mouse

SwissProt: Q542P9 Mouse

SwissProt: P37230 Rat

Unigene: 103110 Human

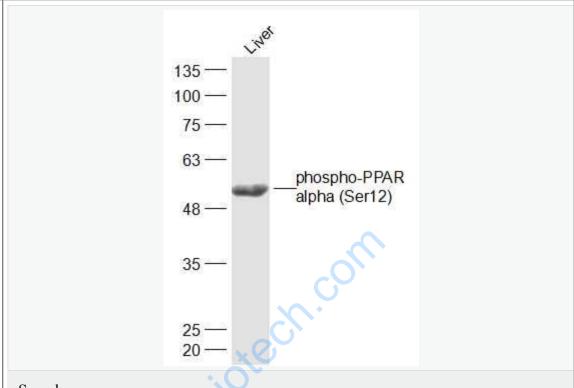
Unigene: 710044 Human

Unigene: 212789 Mouse

Unigene: 9753 Rat

Important Note:

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



Picture:

Sample:

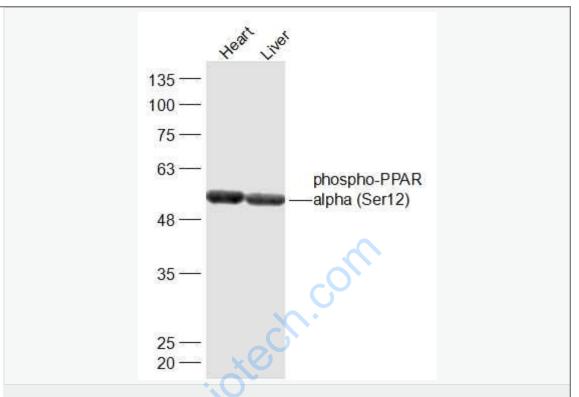
Liver (Rat) Lysate at 40 ug

Primary: Anti-phospho-PPAR alpha (Ser12) (SL4055R) at 1/300 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 40 ug

Liver (Mouse) Lysate at 40 ug

Primary: Anti-phospho-PPAR alpha (Ser12) (SL4055R) at 1/300 dilution

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

Predicted band size: 52 kD

Observed band size: 52 kD



Sample:

Colon carcinoma (Human) Lysate at 40 ug

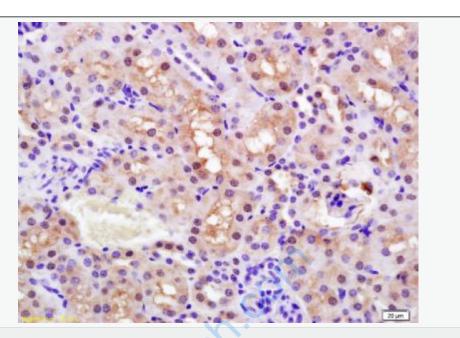
Embryo (Mouse) Lysate at 40 ug

Primary: Anti- phospho-PPAR alpha (Ser12) (SL4055R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL4055R) at 1/5000 dilution

Predicted band size: 52 kD

Observed band size: 52 kD



Tissue/cell: rat kidney 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-phospho-PPAR alpha(Ser12) Polyclonal Antibody,
Unconjugated(SL4055R) 1:200, overnight at 4°C, followed by conjugation to the
secondary antibody(SP-0023) and DAB(C-0010) staining

