

## Rabbit Anti-PGC1 alpha + beta antibody

## SL7535R

<b>Product Name:</b>	PGC1 alpha + beta
Chinese Name:	过氧化物酶体增殖物激活受体γ辅激活子1α+β抗体
Alias:	LEM6; Ligand effect modulator 6; PERC; Peroxisome proliferative activated receptor, gamma, coactivator 1 alpha; Peroxisome proliferative activated receptor, gamma, coactivator 1; Peroxisome proliferator activated receptor gamma coactivator 1 alpha; peroxisome proliferator-activated receptor gamma coactivator 1 beta; Peroxisome proliferator-activated receptor gamma coactivator 1-alpha; Peroxisome proliferator-activated receptor gamma coactivator 1-beta; peroxisome proliferator-activated receptor gamma, coactivator 1 beta; PGC 1 (alpha); PGC 1 alpha; PGC 1v; PGC-1(beta); PGC-1-alpha; PGC-1-beta; PGC-1-related estrogen receptor alpha coactivator; PGC1; PGC1(alpha); PGC1A; PGC1v; PPAR gamma coactivator 1 alpha; PPAR gamma coactivator 1 alpha 3 ligand effect modulator 6; PPAR gamma coactivator 1; PPAR gamma coactivator variant form; PPAR gamma coactivator-1beta; PPAR-gamma coactivator 1-alpha; PPAR-gamma coactivator 1-beta; PPARGC-1-alpha; PPARGC-1-beta; PPARGC1; PPARGC1A; Ppargc1b; PRGC1_HUMAN; PRGC2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
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:	88/113kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PGC1 alpha + beta:151-250/798
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:	<u>PubMed</u>
	The protein encoded by this gene is a transcriptional coactivator that regulates the genes involved in energy metabolism. This protein interacts with PPARgamma, which permits the interaction of this protein with multiple transcription factors. This protein can interact with, and regulate the activities of, cAMP response element binding protein (CREB) and nuclear respiratory factors (NRFs). It provides a direct link between external physiological stimuli and the regulation of mitochondrial biogenesis, and is a major factor that regulates muscle fiber type determination. This protein may be also involved in controlling blood pressure, regulating cellular cholesterol homoeostasis, and the development of obesity. [provided by RefSeq].
	Function: Transcriptional coactivator for steroid receptors and nuclear receptors. Greatly increases the transcriptional activity of PPARG and thyroid hormone receptor on the uncoupling protein promoter. Can regulate key mitochondrial genes that contribute to the program of adaptive thermogenesis.
	Subunit: Binds MYBBP1A, which inhibits transcriptional activation by this protein. Interacts with PRDM16. Interacts with LRPPRC. Homooligomer. Interacts with LPIN1.
Product Detail:	Subcellular Location: Nucleus.
	Tissue Specificity: Heart, skeletal muscle, liver and kidney. Expressed at lower levels in brain and pancreas and at very low levels in the intestine and white adipose tissue. In skeletal muscle, levels were lower in obese than in lean subjects and fasting induced a 2-fold increase in levels in the skeletal muscle in obese subjects.
	Post-translational modifications: Phosphorylation by AMPK in skeletal muscle increases activation of its own promoter. Phosphorylated by CLK2.
	Similarity: Contains 1 RRM (RNA recognition motif) domain.
	SWISS: Q9UBK2
	Gene ID:

10891

## Database links:

Entrez Gene: 10891Human

Entrez Gene: 133522Human

Entrez Gene: 170826 Mouse

Entrez Gene: 19017 Mouse

Entrez Gene: 291567Rat

Entrez Gene: 83516Rat

Omim: 604517Human

Omim: 608886Human

SwissProt: Q86YN6Human

SwissProt: Q9UBK2Human

SwissProt: 415302Mouse

SwissProt: O70343Mouse

SwissProt: Q8VHJ7Mouse

SwissProt: Q811R2Rat

SwissProt: Q9QYK2Rat

Unigene: 483816Human

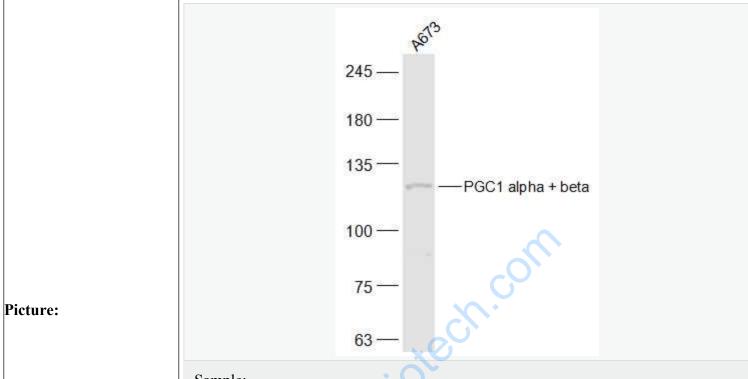
Unigene: 527078Human

Unigene: 163382Rat

## **Important Note:**

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

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Sample:

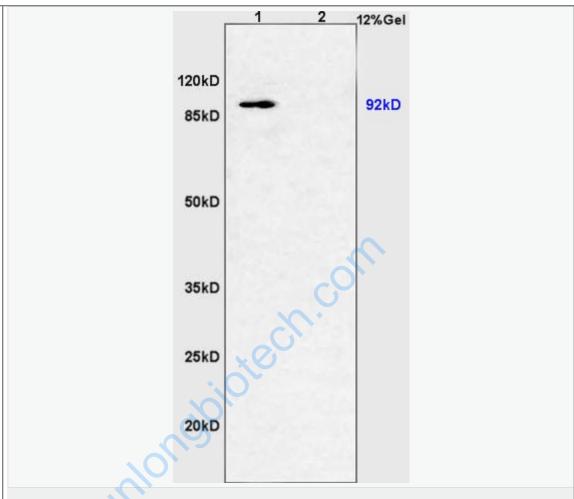
A673(Human) Cell Lysate at 30 ug

Primary: Anti-PGC1 alpha + beta (SL7535R) at 1/500 dilution

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

Predicted band size: 88/113 kD

Observed band size: 113 kD



Sample:

Muscle (Pig) Lysate at 40 ug

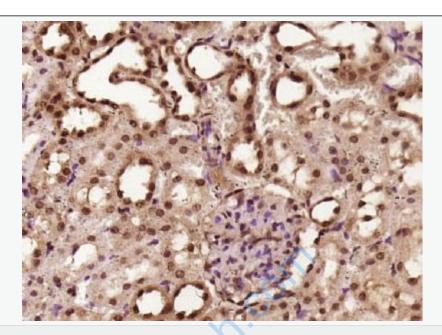
Kidney (Mouse) Lysate at 40 ug

Primary: Anti-PGC1 alpha + beta (SL7535R) at 1/300 dilution

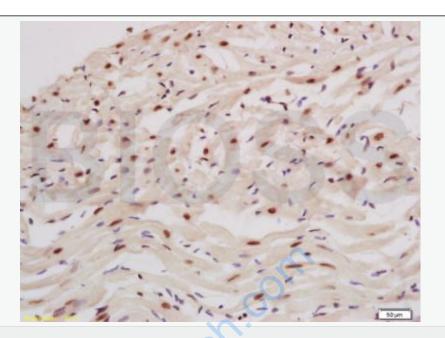
Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL7535R) at 1/5000 dilution

Predicted band size: 88/113 kD

Observed band size: 92 kD

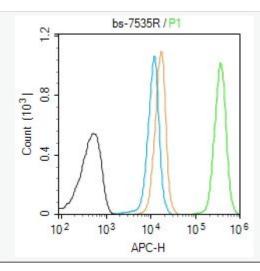


Paraformaldehyde-fixed, paraffin embedded (rat kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PGC1 alpha + beta) Polyclonal Antibody, Unconjugated (SL7535R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat heart 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-PGC1 alpha+beta Polyclonal Antibody, Unconjugated(SL7535R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line):Rabbit Anti-PGC1 alpha+beta antibody (SL7535R)

Dilution: 1µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1µg /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 room temperature. 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.