

Goat Anti-PGC1A Antibody (internal region)
Purified Goat Polyclonal Antibody
Catalog # AF4150a

Specification

Goat Anti-PGC1A Antibody (internal region) - Product Information

Application	WB
Primary Accession	O9UBK2
Other Accession	19017(mouse) , 83516(rat) , NP_037393.1
Reactivity	Human
Predicted	Human, Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5
Calculated MW	91027

Goat Anti-PGC1A Antibody (internal region) - Additional Information

Gene ID 10891

Other Names

PGC1A; PPARGC1A; peroxisome proliferator-activated receptor gamma, coactivator 1 alpha; LEM6; PGC-1(alpha); PGC-1v; PGC1; PPARGC1; PPAR gamma coactivator variant form; PPAR gamma coactivator-1; ligand effect modulator-6; peroxisome proliferative activated receptor; gamma, coactivator 1; peroxisome proliferative activated receptor, gamma, coactivator 1, alpha

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

Peptide with sequence C-DGLFDDSEDESDK, from the internal region of the protein sequence according to NP_037393.1.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-PGC1A Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PGC1A Antibody (internal region) - Protein Information

Name PPARGC1A

Function

Transcriptional coactivator for steroid receptors and nuclear receptors (PubMed:10713165, PubMed:20005308, PubMed:21376232). Greatly increases the transcriptional activity of PPARG and thyroid hormone receptor on the uncoupling protein promoter (PubMed:10713165, PubMed:20005308, PubMed:21376232). Can regulate key mitochondrial genes that contribute to the program of adaptive thermogenesis (PubMed:10713165, PubMed:20005308, PubMed:21376232). Plays an essential role in metabolic reprogramming in response to dietary availability through coordination of the expression of a wide array of genes involved in glucose and fatty acid metabolism (PubMed:10713165, PubMed:20005308, PubMed:21376232). Acts as a key regulator of gluconeogenesis: stimulates hepatic gluconeogenesis by increasing the expression of gluconeogenic enzymes, and acting together with FOXO1 to promote the fasting gluconeogenic program (PubMed:16753578, PubMed:23142079). Induces the expression of PERM1 in the skeletal muscle in an ESRRB-dependent manner (PubMed:23836911). Also involved in the integration of the circadian rhythms and energy metabolism (By similarity). Required for oscillatory expression of clock genes, such as BMAL1 and NR1D1, through the coactivation of RORA and RORC, and metabolic genes, such as PDK4 and PEPCK (By similarity).

Cellular Location

[Isoform 1]: Nucleus. Nucleus, PML body {ECO:0000250|UniProtKB:O70343} [Isoform B4-8a]: Cytoplasm. Nucleus [Isoform 9]: Nucleus

Tissue Location

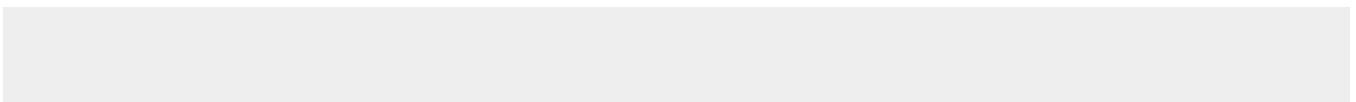
Heart, skeletal muscle, liver and kidney. Expressed at lower levels in brain and pancreas and at very low levels in the intestine and white adipose tissue. In skeletal muscle, levels were lower in obese than in lean subjects and fasting induced a 2-fold increase in levels in the skeletal muscle in obese subjects

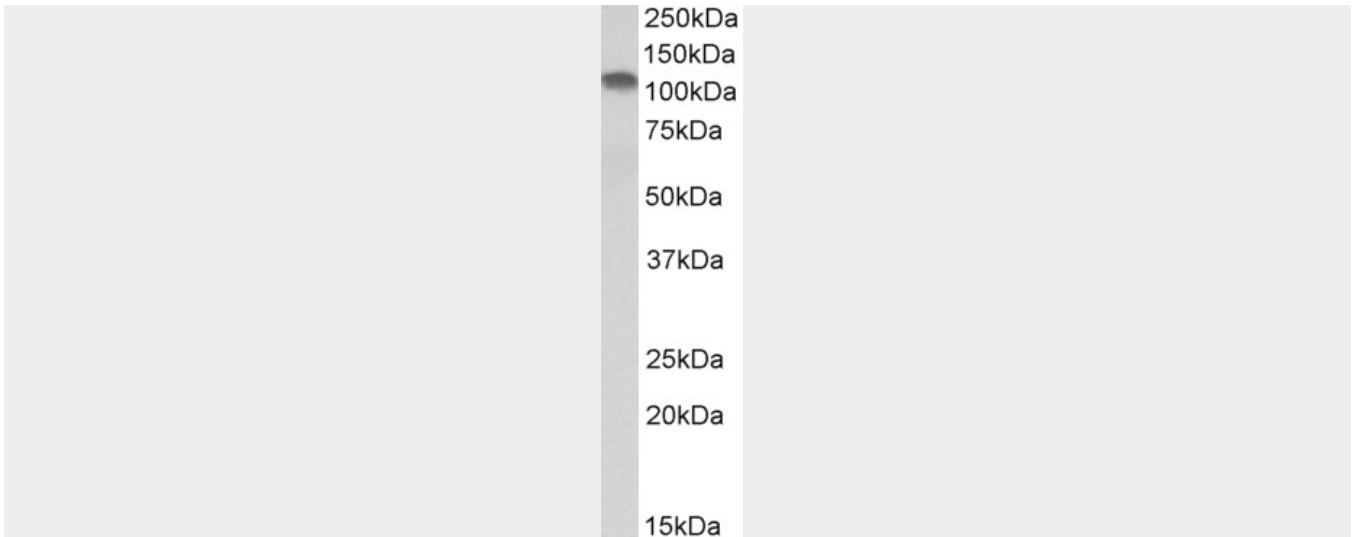
Goat Anti-PGC1A Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-PGC1A Antibody (internal region) - Images





AF4150a (0.1 $\mu\text{g/ml}$) staining of Human Skeletal Muscle lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-PGC1A Antibody (internal region) - References

PGC-1alpha regulates the neuromuscular junction program and ameliorates Duchenne muscular dystrophy. Handschin C, Kobayashi YM, Chin S, Seale P, Campbell KP, Spiegelman BM. Genes Dev. 2007 Apr 1;21(7):770-83.