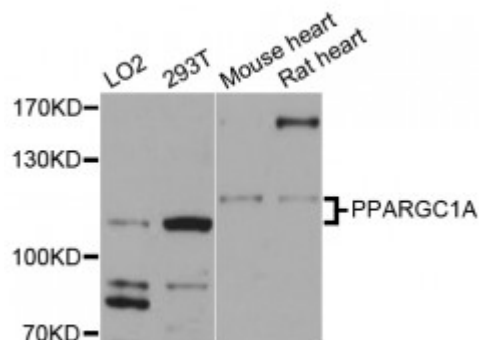


Anti-PPARGC1A Antibody



Description

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 homeostasis, and the development of obesity.

Model	STJ114227
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 700 to the C-terminus of human PPARGC1A (NP_037393.1).
Gene ID	10891
Gene Symbol	PPARGC1A
Dilution range	WB 1:500 - 1:2000
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

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Peroxisome proliferator-activated receptor gamma coactivator 1-alpha PGC-1-alpha PPAR-gamma coactivator 1-alpha PPARGC-1-alpha Ligand effect modulator 6
Molecular Weight	91.027 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9237OMIM:604517Reactome:R-HSA-1368082
Alternative Names	Peroxisome proliferator-activated receptor gamma coactivator 1-alpha PGC-1-alpha PPAR-gamma coactivator 1-alpha PPARGC-1-alpha Ligand effect modulator 6
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, 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, Induces the expression of PERM1 in the skeletal muscle in an ESRRA-dependent manner, Also involved in the integration of the circadian rhythms and energy metabolism, Required for oscillatory expression of clock genes, such as ARNTL/BMAL1 and NR1D1, through the coactivation of RORA and RORC, and metabolic genes, such as PDK4 and PEPCCK,
Cellular Localization	Nucleus, Nucleus, PML body
Post-translational Modifications	Phosphorylation by AMPK in skeletal muscle increases activation of its own promoter, Phosphorylated by CLK2,