Best Tools for immunology Research

PGC-1α Monoclonal Antibody

Catalog No :	YM0519
Reactivity :	Human
Applications :	WB;ELISA
Target :	PGC-1α
Fields :	>>AMPK signaling pathway;>>Longevity regulating pathway;>>Apelin signaling pathway;>>Thermogenesis;>>Insulin signaling pathway;>>Adipocytokine signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>Alcoholic liver disease;>>Huntington disease
Gene Name :	PPARGC1A
Protein Name :	Peroxisome proliferator-activated receptor gamma coactivator 1-alp
Human Gene Id :	10891
Human Swiss Prot No :	Q9UBK2
Mouse Swiss Prot No :	O70343
Immunogen :	Purified recombinant fragment of human PGC-1α expressed in E. Coli.
Specificity :	PGC-1α Monoclonal Antibody detects endogenous levels of PGC-1α protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	91kD

Cell Pathway : AMPK; Protein_Acetylation

P References : 1. Diabetes Res Clin Pract. 2009 Dec;86(3):168-72.
2.Cell Metab. 2009 Sep;10(3):189-98.

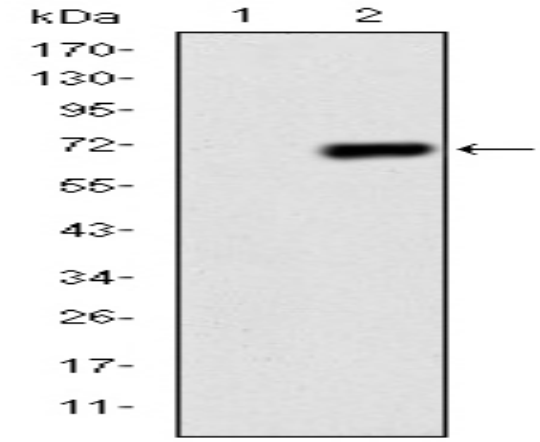
Background : The protein encoded by this gene is a transcriptional coactivator that regulates the genes involved in energy metabolism. This protein interacts with PPARgamma, which permits the interaction of this protein with multiple transcription factors. This protein can interact with, and regulate 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, Jul 2008],

Function : 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.,similarity:Contains 1 RRM (RNA recognition motif) domain.,subunit:Binds MYBBP1A, which inhibits transcriptional activation by this protein (By similarity). Interacts with LRPPRC. Homooligomer.,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.,

Subcellular Location : [Isoform 1]: Nucleus . Nucleus, PML body .; [Isoform B4]: Nucleus .; [Isoform B4-8a]: Cytoplasm . Nucleus .; [Isoform B5]: Nucleus . Nucleus, PML body .; [Isoform 9]: Nucleus .

Expression : 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.

Products Images



Western Blot analysis using PGC-1α Monoclonal Antibody against HEK293 (1) and PGC-1alpha-hIgGFc transfected HEK293 (2) cell lysate.