



PGC-1 α Monoclonal Antibody

Catalog No	YP-mAb-03259
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PPARGC1A
Protein Name	Peroxisome proliferator-activated receptor gamma coactivator 1- α
Immunogen	Purified recombinant fragment of human PGC-1 α expressed in E. Coli.
Specificity	PGC-1 α Monoclonal Antibody detects endogenous levels of PGC-1 α protein.
Formulation	Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	PPARGC1A; LEM6; PGC1; PGC1A; PPARGC1; Peroxisome proliferator-activated receptor gamma coactivator 1- α ; PGC-1- α ; PPAR- γ coactivator 1- α ; PPARGC-1- α ; Ligand effect modulator 6
Calculated Molecular Weight	91kD
Cell Pathway	[Isoform 1]: Nucleus . Nucleus, PML body .; [Isoform B4]: Nucleus .; [Isoform B4-8a]: Cytoplasm . Nucleus .; [Isoform B5]: Nucleus . Nucleus, PML body .; [Isoform 9]: 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.
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.,

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],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

