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Anti-PGC1 alpha PPARGC1A Rabbit Monoclonal Antibody

Catalog # ABO14047

Product Information

Application	WB
Primary Accession	Q9UBK2
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-PGC1 alpha PPARGC1A Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

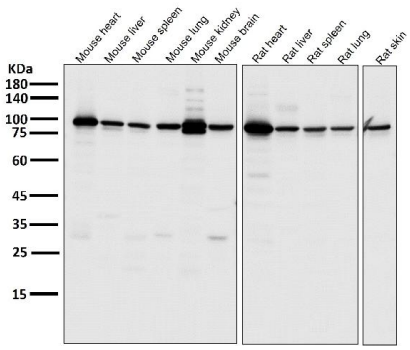
Additional Information

Gene ID	10891
Other Names	Peroxisome proliferator-activated receptor gamma coactivator 1-alpha, PGC-1-alpha, PPAR-gamma coactivator 1-alpha, PPARGC-1-alpha, Ligand effect modulator 6, PPARGC1A
Calculated MW	91027
Application Details	WB 1:500-1:2000
Subcellular Localization	Isoform 1: Nucleus. Nucleus, PML body.
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..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AOBC-16
Immunogen	A synthesized peptide derived from human PGC1 alpha
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	PPARGC1A
Function	Transcriptional coactivator for steroid receptors and nuclear receptors (PubMed:10713165, PubMed:20005308, PubMed:21376232, PubMed:28363985, PubMed:32433991). 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 ESRRA- 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

Images



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

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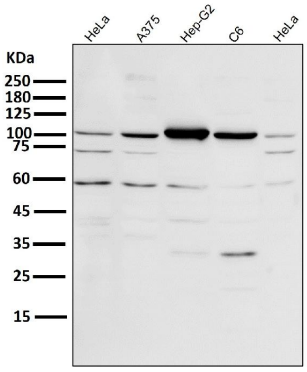

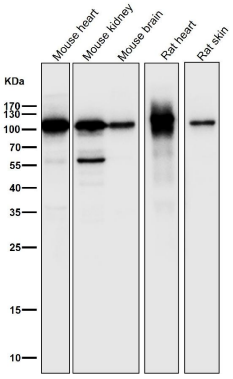

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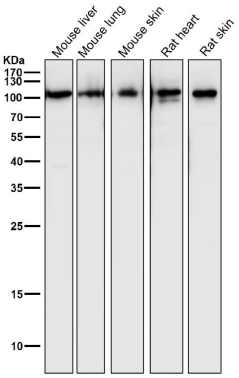

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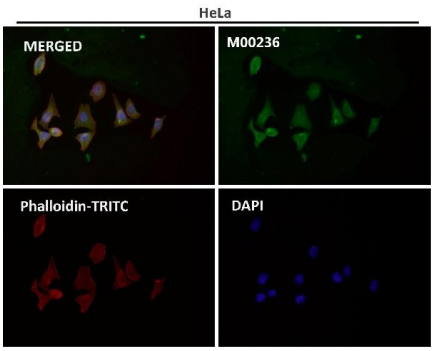
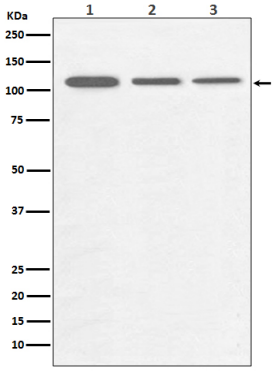


Immunofluorescent analysis using the Antibody at 1:150 dilution.

Western blot analysis of PGC1 alpha/beta expression in (1) HeLa cell lysate; (2) NIH 3T3 cell lysate; (3) C6 cell lysate.



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