

ARG59247 anti-PGC1 alpha antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PGC1 alpha
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PGC1 alpha
Species	Human
Immunogen	Synthetic peptide within aa. 700 to the C-terminus of Human PGC1 alpha (NP_037393.1).
Conjugation	Un-conjugated
Alternate Names	Ligand effect modulator 6; PGC1; PPARGC-1-alpha; PPARGC1; PGC1A; PPAR-gamma coactivator 1-alpha; PGC-1v; LEM6; PGC-1-alpha; Peroxisome proliferator-activated receptor gamma coactivator 1-alpha; PGC-1(alpha)

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293T	
Observed Size	~ 110 kDa	

Properties

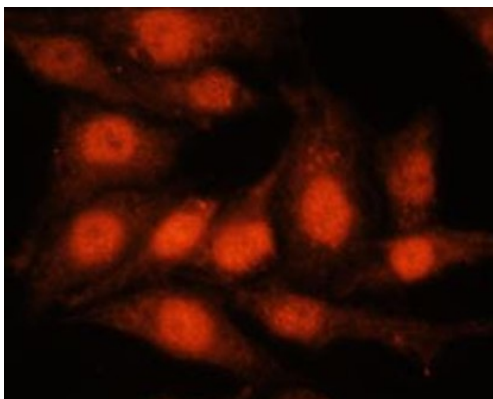
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

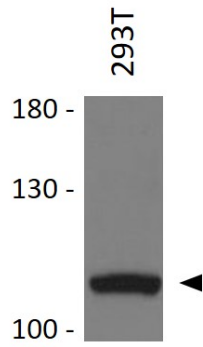
Gene Symbol	PPARGC1A
Gene Full Name	peroxisome proliferator-activated receptor gamma, coactivator 1 alpha
Background	The protein encoded by this gene is a transcriptional coactivator that regulates the genes involved in energy metabolism. This protein interacts with PPARgamma, which permits the interaction 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 homeostasis, and the development of obesity. [provided by RefSeq, Jul 2008]
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 PEPCK. [UniProt]
Calculated Mw	91 kDa
PTM	Phosphorylation by AMPK in skeletal muscle increases activation of its own promoter. Phosphorylated by CLK2. Heavily acetylated by GCN5 and biologically inactive under conditions of high nutrients. Deacetylated by SIRT1 in low nutrients/high NAD conditions. Ubiquitinated. Ubiquitination by RNF34 induces proteasomal degradation. [UniProt]
Cellular Localization	Nucleus, Nucleus, PML body, Cytoplasm. [UniProt]

Images



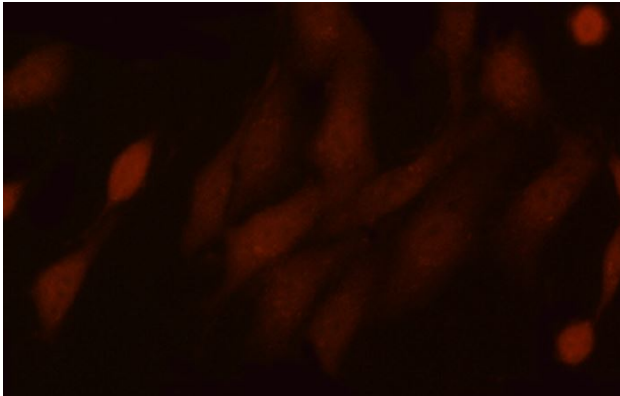
ARG59247 anti-PGC1 alpha antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG59247 anti-PGC1 alpha antibody at 1:100 dilution.



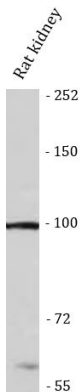
ARG59247 anti-PGC1 alpha antibody WB image

Western blot: 25 µg of 293T cell lysate stained with ARG59247 anti-PGC1 alpha antibody at 1:1000 dilution.



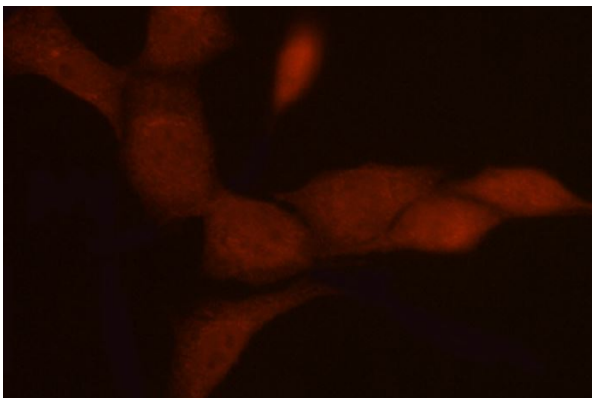
ARG59247 anti-PGC1 alpha antibody IHC-P image

Immunohistochemistry: PC-12 stained with ARG59247 anti-PGC1 alpha antibody.



ARG59247 anti-PGC1 alpha antibody WB image

Western blot: Rat kidney stained with ARG59247 anti-PGC1 alpha antibody.



ARG59247 anti-PGC1 alpha antibody ICC/IF image

Immunofluorescence: NIH/3T3 stained with ARG59247 anti-PGC1 alpha antibody at dilution.

ARG59247 anti-PGC1 alpha antibody WB image

Western blot: Mouse kidney stained with ARG59247 anti-PGC1 alpha antibody.

