

Rabbit Anti-PGC1 alpha Polyclonal: RC0021

Intended Use: For Research Use Only

Description: Transcription factors exert their effects by associating with co-activator or corepressor proteins. The co-activator complexes are thought to be constitutively active, requiring only proper positioning in the genome to initiate transcription. Co-activators include the steroid receptor coactivator (SRC) and CREB binding protein (CBP) families that contain histone acetyltransferase (HAT) activity, which modifies chromatin structure. PPARgamma co-activator-1 (PGC-1) is a transcriptional cofactor of nuclear respiratory factor-1 (NRF-1), PPARbeta, PPARalpha and other nuclear receptors that is induced by exposure to cold temperatures and is involved in regulating thermogenic gene expression, protein uncoupling, and mitochondrial biogenesis. PGC-1 has a low inherent transcriptional activity when it is not bound to a transcription factor. Docking of PGC-1 to PPARgamma stimulates an apparent conformational change that then enables PGC-1 to bind to and assemble into complexes, which include the additional cofactors SRC-1 and CBP/p300, and results in a large increase in transcriptional activity.

Specifications:

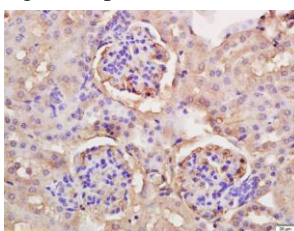
Clone: Polyclonal
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human, mouse, rat
 Immunogen: Synthetic peptide corresponding to Human PGC1 alpha 760-798/798
 Localization: Cytoplasm, nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, IF, WB
 Package:

Description	Catalog No.	Size
PGC1 alpha Polyclonal Concentrated	RC0021	1 ml

IHC Procedure*:

Positive Control Tissue: Kidney
 Concentrated Dilution: 10-50
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: Overnight @ 4°C
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE mouse liver stained with anti-PGC1 alpha using DAB

References:

1. Tumor necrosis factor-like weak inducer of apoptosis regulates quadriceps muscle atrophy and fiber-type alteration in a rat model of chronic obstructive pulmonary disease. Lu, Jun-Juan, et al. Tobacco Induced Diseases 15.1: 43, 2017.
2. Vibration Training Triggers Brown Adipocyte Relative Protein Expression in Rat White Adipose Tissue. Sun, Chao, et al. BioMed Research International 2015.
3. Nanosilver Incurs an Adaptive Shunt of Energy Metabolism Mode to Glycolysis in Tumor and Non-Tumor Cells. Chen, Yue, et al. ACS Nano. 2014.
4. Sulfur dioxide inhalation stimulated mitochondrial biogenesis in rat brains. Qin, Guohua, et al. Toxicology 300.1: 67-74, 2012.

Doc. 100-RC0021
Rev. A