

Datasheet for 600-401-DS1**PPARGC1A Antibody****Overview**

Description:	Anti-PPARGC1A (RABBIT) Antibody - 600-401-DS1
Item No.:	600-401-DS1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PPARGC1A), also known as LEM-6, is a transcriptional coactivator that regulates the genes involved in energy metabolism (1). PPARGC1A interacts with PPARGgamma, which permits the interaction of PPARGC1A with multiple transcription factors. PPARGC1A 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 (2). PPARGC1A may be also involved in the development of obesity (3).
Synonyms:	PPARGC1A Antibody, LEM6, PGC1, PGC1A, PGC-1v, PPARGC1, PGC-1(alpha), LEM6, Peroxisome proliferator-activated receptor gamma coactivator 1-alpha, Ligand effect modulator 6, PGC-1-alpha
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PPARGC1A
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-PPARGC1A antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid peptide near the N-terminus of human PPARGC1A.
Purity/Specificity:	Anti-PPARGC1A antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. PPARGC1A antibody is human, mouse and rat reactive. At least three isoforms of PPARGC1A are known to exist; this antibody will detect all three isoforms.
Relevant Links:	• UniProtKB - Q9UBK2 • GeneID - 10891 • NCBI - NP_037393

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PPARGC1A Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 91 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	1-2 µg/mL
WB:	1-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

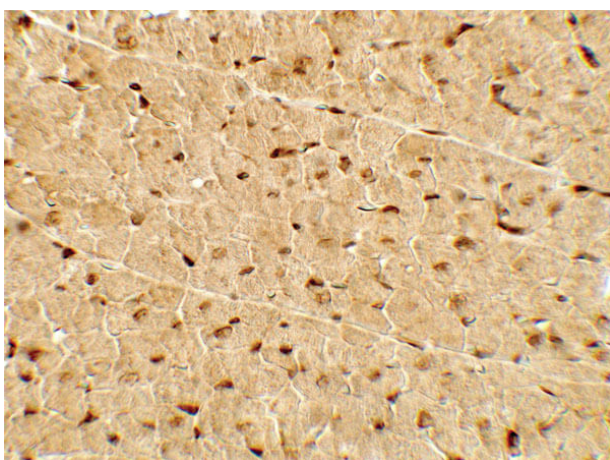
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

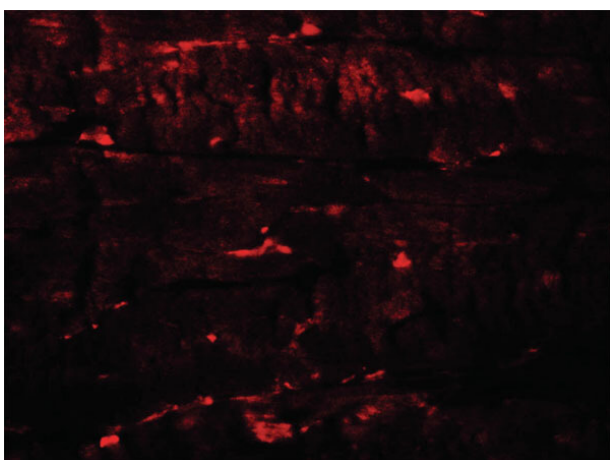
Expiration: Expiration date is one (1) year from date of receipt.

Images



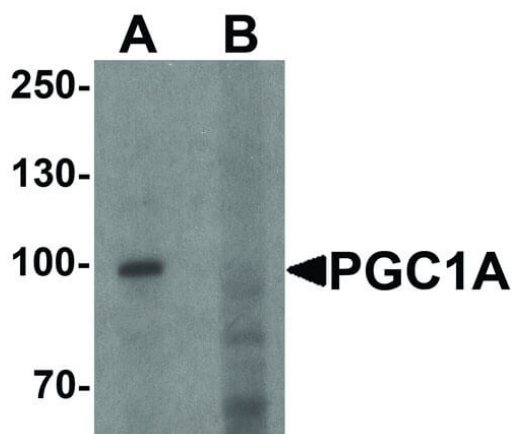
Immunohistochemistry

Immunohistochemistry of Rabbit anti-PPARGC1A antibody. Tissue: rat heart. Primary antibody: PPARGC1A antibody at 5 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:5,000. Localization: PPARGC1A is nuclear and occasionally cytoplasmic. Staining: PPARGC1A as precipitated brown signal.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of Rabbit anti-PPARGC1A antibody. Tissue: rat heart tissue. Primary antibody: PPARGC1A antibody at 20 µg/mL. Secondary antibody: Fluorescein rabbit secondary antibody at 1:20,000. Localization: PPARGC1A is nuclear and occasionally cytoplasmic. Staining: PPARGC1A as red fluorescent signal.

**Western Blot**

Western Blot of Rabbit anti-PPARGC1A antibody. Lane A: human heart tissue lysate in the absence of blocking peptide. Lane B: human heart tissue lysate in the presence of blocking peptide. Primary antibody: PPARGC1A antibody at 1 µg/mL overnight at 4°C. Secondary antibody: Goat anti-Rabbit HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 88 kDa, 96 kDa for PPARGC1A.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.