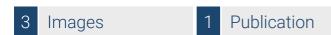


# Datasheet for ABIN872354

# anti-PPARGC1B antibody (AA 901-1023)





Go to Product page

#### Overview

Quantity:	100 μL
Target:	PPARGC1B
Binding Specificity:	AA 901-1023
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPARGC1B antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))
Product Details	

#### **Product Details**

Immunogen:	KLH conjugated synthetic peptide derived from human PGC1 beta
Isotype:	IgG
Predicted Reactivity:	Human,Mouse,Rat,Dog,Cow,Pig,Rabbit,Guinea Pig
Purification:	Purified by Protein A.

# **Target Details**

Target:	PPARGC1B
Alternative Name:	PGC1 beta (PPARGC1B Products)

## **Target Details**

Background:
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Synonyms: PERC, peroxisome prolerative activated receptor, gamma, coactivator 1, peroxisome prolerator-activated receptor gamma coactivator 1 beta, Peroxisome prolerator-activated receptor gamma coactivator 1-beta, peroxisome prolerator-activated receptor gamma, coactivator 1 beta, PGC-1-beta, PGC-1-beta, PGC-1-related estrogen receptor alpha coactivator, PGC1, PPAR gamma coactivator-1beta, PPAR-gamma coactivator 1-beta, PPARGC-1-beta, PPARGC1, Ppargc1b, PRGC2\_HUMAN.

Background: Plays a role of stimulator of transcription factors and nuclear receptors activities. Activates transcritional activity of estrogen receptor alpha, nuclear respiratory factor 1 (NRF1) and glucocorticoid receptor in the presence of glucocorticoids. May play a role in constitutive non-adrenergic-mediated mitochondrial biogenesis as suggested by increased basal oxygen consumption and mitochondrial number when overexpressed. May be involved in fat oxidation and non-oxidative glucose metabolism and in the regulation of energy expenditure. Tissue specificity: Ubiquitous with higher expression in heart, brain and skeletal muscle.

Molecular Weight:

113kDa

Gene ID:

133522

Pathways:

AMPK Signaling, Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Lipid

Metabolism by PPARalpha

## Application Details

Application Notes:

WB 1:300-5000

ELISA 1:500-1000

IHC-P 1:200-400

IHC-F 1:100-500

IF(IHC-P) 1:50-200

IF(IHC-F) 1:50-200

IF(ICC) 1:50-200

Restrictions:

For Research Use only

# Handling

Format:

Liquid

Concentration:

1 μg/μL

Buffer:

0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

# Handling

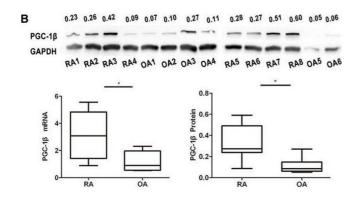
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

### **Publications**

Product cited in:

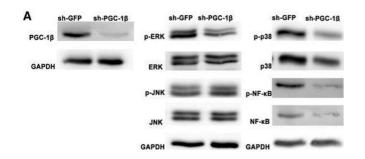
Zhou, Ma, Mo, Zheng, Chen, Wei, Dai et al.: "Down-regulating peroxisome proliferator-activated receptor-gamma coactivator-1 beta alleviates the proinflammatory effect of rheumatoid arthritis fibroblast-like synoviocytes through inhibiting ..." in: **Arthritis research & therapy**, Vol. 16, Issue 5, pp. 472, (2015) (PubMed).

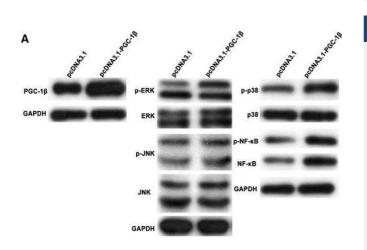
# **Images**



#### **Western Blotting**

Image 1. Expression of peroxisome proliferator-activated receptor-gamma coactivator-1  $\beta$  (PGC-1 $\beta$ ) is overexpressed in rheumatoid arthritis (RA)-fibrolast-like synoviocytes (FLS). (A) Immunofluorescence staining of PGC-1β in primary cultures of FLS from osteoarthritis (OA) and RA patients. (a, DAPI (blue), b, PGC-1β (green), c, neutral light, d, merged a, b with c. a, b, c: original magnificationx400). (B) Left panel: PGC-1β mRNA expression in FLS from RA (n = 8) compared with that from OA (n =6) evaluated by qPCR. Right panel: PGC-1β protein level in FLS from RA patients (n = 8) and OA controls (n = 6) was detected by western blot. The intensity for each band was densitometrically quantified and normalized against the intensity of glyceraldehyde-3-phosphate dehydrogenase (GAPDH). The data are represented by mean±SD. \*P <0.05. figure provided by CiteAb. Source: PMID25367151





#### **Western Blotting**

Image 2. Peroxisome proliferator-activated receptorgamma coactivator-1 β (PGC-1β) knockdown attenuates proinflammatory cytokines, matrix metalloproteinases (MMPs) and receptor activator of nuclear factor-kappa B ligand (RANKL) production in rheumatoid arthritis (RA)fibrolast-like synoviocytes (FLS). (A) After PGC-1B knockdown, the protein level of mitogen-activated protein kinases (MAPKs) in FLS was detected by western blot. (B) After PGC-18 knockdown, the proinflammatory cytokines, MMPs and RANKL mRNA expression in FLS was evaluated by qPCR. (C) After PGC-1β knockdown, the protein level of proinflammatory cytokines was examined by cytometric bead array, while the level of MMP-3, MMP-13 and RANKL was detected by western blot. The data are represented by mean±SD from three independent experiments. \*P <0.05, \*\*P <0.01, \*\*\*P <0.001. - figure provided by CiteAb. Source: PMID25367151

#### **Western Blotting**

Image 3. Peroxisome proliferator-activated receptor-gamma coactivator-1  $\beta$  (PGC-1 $\beta$ ) overexpression enhances proinflammatory cytokines, matrix metalloproteinases (MMPs) and receptor activator of nuclear factor-kappa B ligand (RANKL) production in rheumatoid arthritis (RA)-fibrolast-like synoviocytes (FLS). (A) After PGC-1 $\beta$  overexpression, the protein level of mitogen-activated protein kinases (MAPKs) in FLS was detected by western blot. (B) After PGC-1 $\beta$  overexpression, the proinflammatory cytokines, MMPs and RANKL mRNA expression in FLS was evaluated by qPCR. (C) After PGC-1 $\beta$  overexpression, the protein level of proinflammatory cytokines was examined by cytometric bead array, while the level of MMP-3, MMP-13 and RANKL was detected by western blot. The data are represented by mean±SD from three independent

experiments. \*P <0.05, \*\*P <0.01, \*\*\*P <0.001. - figure provided by CiteAb. Source: PMID25367151