


Anti-PGC1 alpha + beta antibody ab72230

★★★★★ [2 Abreviews](#) [38 References](#) [4 图像](#)

概述

产品名称	Anti-PGC1 alpha + beta抗体
描述	兔多克隆抗体to PGC1 alpha + beta
宿主	Rabbit
特异性	The immunogen design for ab72230 is shown to cross-react with both PGC1 alpha (ID: 124782 and Swissprot Q9UBK2) and PGC1 beta (ID: 240776 and SwissProt Q86YN6). From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. You may also be interested in our alternative recombinant antibody, ab188102 .
经测试应用	适用于: ELISA, WB, ICC/IF
种属反应性	与反应: Mouse, Rat, Human 预测可用于: Chicken, Cow, Dog, Pig, Rhesus monkey 
免疫原	Synthetic peptide conjugated to KLH derived from within residues 750 to the C-terminus of Human PGC1 alpha.参阅Abcam的 专有抗原政策 (Peptide available as ab73600 .)
阳性对照	This antibody gave a positive signal in the following Tissue Lysates: Human Skeletal Muscle Mouse Testis Mouse Colon Mouse Skeletal Muscle Rat Ovary Rat Thymus
常规说明	PGC1 alpha has a predicted MW of 92 kDa and PGC1 beta has a predicted MW of 113 kDa.

This product may be covered by one or more of the following U.S. Patents.

6,166,192
6,426,411
6,525,178
6,872,391
6,908,987
7,250,283
7,091,006
7,354,738
8,105,774
8,445,233

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用 ab72230 于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ELISA		Use a concentration of 1 µg/ml.
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 110 kDa (predicted molecular weight: 91 kDa).
ICC/IF		1/100.

靶标

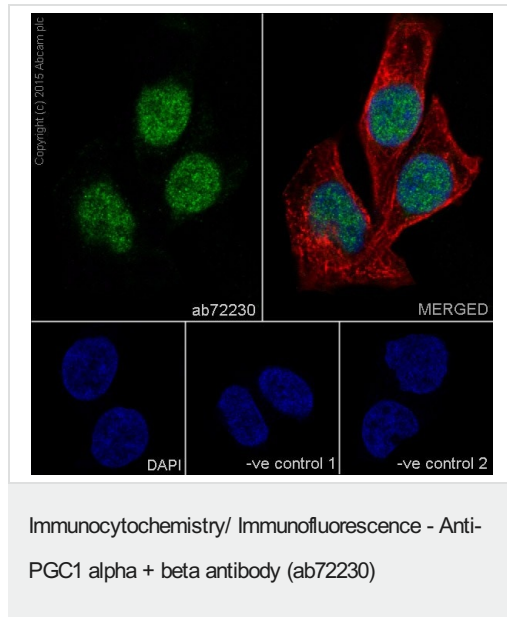
相关性 PGC1 alpha - The protein encoded by this gene is a transcriptional coactivator that regulates the genes involved in energy metabolism. This protein interacts with PPARgamma, which permits the interaction of this protein with multiple transcription factors. This protein can interact with, and regulate 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 (referenced from entrez gene). PGC1 beta - Plays a role of stimulator of transcription factors and nuclear receptors activities. Activates transcriptional 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.

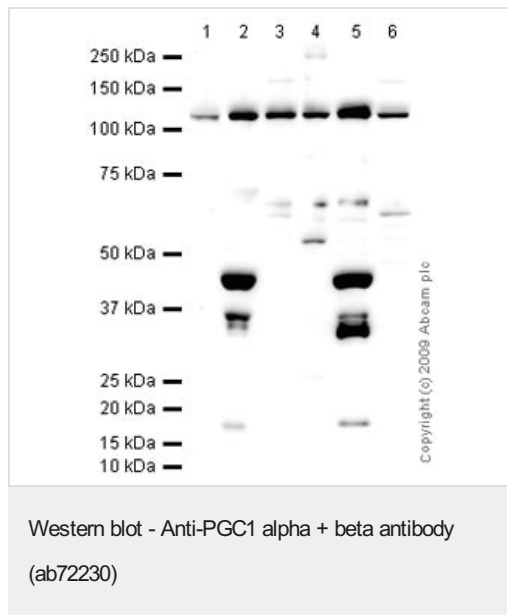
细胞定位

Nucleus

图片



Immunofluorescence analysis of 4% paraformaldehyde fixed HeLa cells (Human epithelial cells from cervix adenocarcinoma) labeling PGC1 alpha+beta with ab72230 at a 1/100 dilution showing nuclear staining. Permeabilisation using 0.1% tritonX-100. Secondary ab: Anti-Rabbit Alexa Fluor® 488 (**ab150077**) at 1/500 dilution. Counter stain is labeling tubulin (red) with **ab7291** at 1/1000 dilution with secondary antibody Anti-Mouse AlexaFluor® 594 (**ab150120**) at 1/500 dilution. DAPI stains the nucleus in blue. -ve control 1 is ab72230 at 1/100 dilution, Anti-Mouse AlexaFluor® 594 (**ab150120**) at 1/500 dilution. -ve control 2 is **ab7291** at 1/1000 dilution, Anti-Rabbit Alexa Fluor® 488 (**ab150077**) at 1/500 dilution.



All lanes : Anti-PGC1 alpha + beta antibody (ab72230) at 1 µg/ml

Lane 1 : Testis (Mouse) Tissue Lysate

Lane 2 : Human skeletal muscle tissue lysate - total protein (**ab29330**)

Lane 3 : Ovary (Rat) Tissue Lysate

Lane 4 : Colon (Mouse) Tissue Lysate

Lane 5 : Skeletal Muscle (Mouse) Tissue Lysate

Lane 6 : Thymus (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

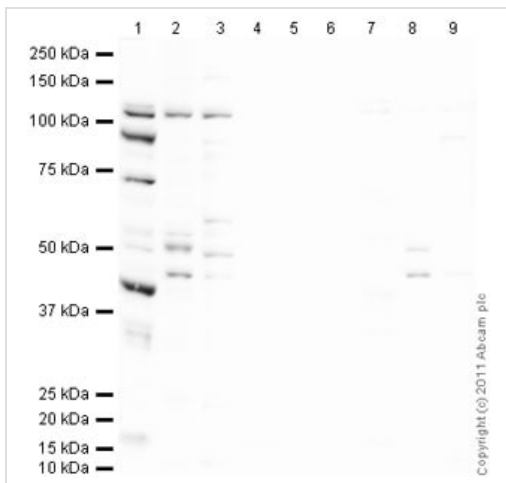
Predicted band size: 91 kDa

Observed band size: 110 kDa

Additional bands at: 35 kDa, 45 kDa, 55 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 2 minutes

We have occasionally observed bands in the region of 90 kDa in batches of this antibody, which corresponds to the molecular weight based on primary sequence.



Western blot - Anti-PGC1 alpha + beta antibody (ab72230)

All lanes : Anti-PGC1 alpha + beta antibody (ab72230) at 1 µg/ml

Lane 1 : Human skeletal muscle tissue lysate - total protein (**ab29330**)

Lane 2 : Colon (Mouse) Tissue Lysate

Lane 3 : Thymus (Rat) Tissue Lysate

Lane 4 : Human skeletal muscle tissue lysate - total protein

(**ab29330**) with Human PGC1 alpha peptide (**ab73600**) at 1 µg/ml

Lane 5 : Colon (Mouse) Tissue Lysate with Human PGC1 alpha peptide (**ab73600**) at 1 µg/ml

Lane 6 : Thymus (Rat) Tissue Lysate with Human PGC1 alpha peptide (**ab73600**) at 1 µg/ml

Lane 7 : Human skeletal muscle tissue lysate - total protein (**ab29330**) with PGC1 beta peptide at 1 µg/ml

Lane 8 : Colon (Mouse) Tissue Lysate with PGC1 beta peptide at 1 µg/ml

Lane 9 : Thymus (Rat) Tissue Lysate with PGC1 beta peptide at 1 µg/ml

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

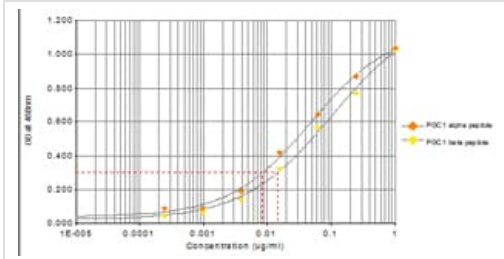
Predicted band size: 91 kDa

Observed band size: 110 kDa

Additional bands at: 45 kDa, 73 kDa, 90 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

Western Blot showing equal blocking with the PGC1 alpha and PGC1 beta peptides.



ELISA - Anti-PGC1 alpha + beta antibody (ab72230)

ab72230 was tested using an Indirect ELISA approach. The wells were coated with peptide (1 µg/ml at 100 µl/well) overnight at 4°C, followed by a 5% BSA blocking step for 1 hour at room temperature. The primary Ab was then added at a dilution range of 1- 0.00025 µg/ml (100 µl/well) for 1 hr at room temperature. A HRP-conjugated anti-rabbit IgG (heavy and light chain) was used as a secondary antibody at 1:20,000 dilution for 1 hr at room temperature.

Ab72230 gave a positive result in ELISA against PGC1 alpha peptide and PGC1 beta peptide. This indicates that it recognises both forms.

Orange line: ELISA against immunising peptide **ab73600**

Yellow line: ELISA against **ab88232**

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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