

Product datasheet

Recombinant Human PGC1 alpha protein ab124541

[1 References](#) [2 Images](#)

Overview

Product name	Recombinant Human PGC1 alpha protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Escherichia coli

Amino Acid Sequence

Accession	Q9UBK2
Species	Human
Sequence	TGELRDSDFS NEQFSKLP MF INSGLAM DGL FDDSEDESDK LSY PWDGTQS YSLFNVSPSC SSFN SPCRDS VSPPKSLFSQ RPQRMRSRSR SFSRHRSCSR SPYSRSRSRS PGSRSSRSC YYESSHYRH RTHRNSPLYW RSRSRSPYSR RPRYDSYEEY QHERLKREEY RREYEKRESE RAKQRERQRQ KAIEERRVIY VGKIRPD TTR TELRDRFEVF GEIEECTVNL RDDGDSYGF I TYRYTDAFA ALENGYTLRR SNETDFELYF CGRKQFFKSN YADLDSNSDD FDPASTKSKY DSLDFD SLLK EAQRSLRR
Molecular weight	38 kDa
Amino acids	481 to 798
Tags	His tag C-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab124541** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
	ELISA
	Western blot

Purity	> 80 % .
Form	Liquid
Additional notes	Product was previously marketed under the MitoSciences sub-brand.

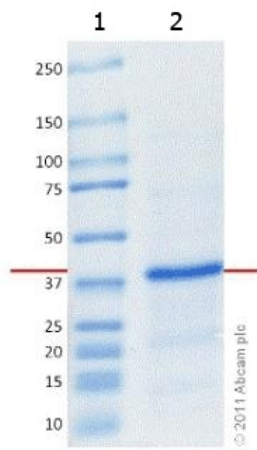
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.40 Constituents: 78% PBS, 20% Glycerol, 1.75% Sodium chloride
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General Info

Function	Transcriptional coactivator for steroid receptors and nuclear receptors. Greatly increases the transcriptional activity of PPAR γ 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.
Tissue specificity	Heart, skeletal muscle, liver and kidney. Expressed at lower levels in brain and pancreas and at very low levels in the intestine and white adipose tissue. In skeletal muscle, levels were lower in obese than in lean subjects and fasting induced a 2-fold increase in levels in the skeletal muscle in obese subjects.
Sequence similarities	Contains 1 RRM (RNA recognition motif) domain.
Post-translational modifications	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.
Cellular localization	Cytoplasm. Nucleus; Nucleus and Nucleus. Nucleus, PML body.

Images



SDS-PAGE - PGC1 alpha protein (His tag)
(ab124541)

Lane 1 : Marker

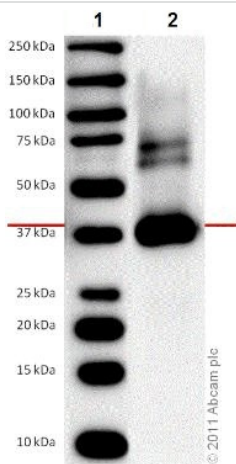
Lane 2 : PGC1 alpha protein (His tag)
(ab124541) at 1 µg

Gel: 10-20% acrylamide separation gel

Predicted band size : 38 kDa

Observed band size : 38 kDa

Stained with Coomassie Blue.



Western blot - PGC1 alpha protein (His tag)
(ab124541)

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

Lane 1 : Marker

Lane 2 : Recombinant Human PGC1 alpha
protein (ab124541) at 0.01 µg

Secondary

All lanes : Goat polyclonal to Rabbit IgG –
H&L – Pre-Adsorbed (HRP) at 1/10000
dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 38 kDa

Observed band size: 38 kDa

Exposure time: 5 minutes

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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