

Datasheet for ABIN3094725
PPARGC1B Protein (AA 1-1023) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	PPARGC1B
Protein Characteristics:	AA 1-1023
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPARGC1B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MAGNDCGALL DEELSSFFLN YLADTQGGGS GEEQLYADFP ELDLSQLDAS DFDSATCFGE LQWCPENSET EPNQYSPDDS ELFQIDSENE ALLAE LTKTL DDIPEDDVGL AAFPALDGGD ALSCTSASPA PSSAPPSPAP EKPSAPAPEV DELSLLQKLL LATSYP TSSS DTQKEGTAWR QAGLRSKSQR PCVKADSTQD KKAPMMQS QS RSCTELHKHL TSAQCCLQDR GLQPPCLQSP RLPAKEDKEP GEDCPSQPA PASPRDSLAL GRADPGAPVS QEDMQAMVQL IRYMHTYCLP QRKLPPQTPE PLPKACSNPS QQVRSR PWSR HHSKASWAEF SILRELLAQD VLCDVSKPYR LATPVYASLT PRSRPRPPKD SQASPGRPSS VEEVRIAASP KSTGPRPSLR PLRLEVKREV RRPARLQQQE EEEEEEEEE EEEEEEEEE WGRKR PGRGL PWTKLGRKLE SSVCPVRRSR RLNPELGPWL TFADEPLVPS EPQ GALPSLC LAPKAYDVER ELGSPTDEDS GQDQQLLRGP QIPALESPCE SGGGDMDEDP SCPQLPPRDS PRCLMLALSQ SDPTFGKKS F EQTLTVELCG TAGLTPPTTP PYKPT EEDPF KPDIKHSLGK EIALSLPSPE GLSLKATPGA AHKLPKKHPE RSELLSHLRH ATAQPASQAG QKRPFSCSFG DHDYCVLRLP EGVLRQKVL R SWEPSGVHLE
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DWPQQGAPWA EAQAPGREED RSCDAGAPPK DSTLLRDHEI RASLTKHFGL LETALEEEDL
ASCKSPPEYDT VFEDSSSSSG ESSFLPEEEEE EEEEEEEEDD EEEDSGVSPT CSDHCPYQSP
PSKANRQLCS RSRSSSGSSP CHSWSPATRR NFRCESRGPC SDRTPSIRHA RKRREKAIGE
GRVVIQNLSDMSSRELKR RFEVFGIEE CEVLTRNRRG EKYGFITYRC SEHAALSLTK
GAALRKRNEP SFQLSYGGLR HFCWPRYTDY DSNSEEALPA SGKSKYEAMD FDSLLKEAQQ SLH

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its

Product Details

specific reference buffer.

- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®): <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	PPARGC1B
Alternative Name:	PPARGC1B (PPARGC1B Products)
Background:	<p>Peroxisome proliferator-activated receptor gamma coactivator 1-beta (PGC-1-beta) (PPAR-gamma coactivator 1-beta) (PPARGC-1-beta) (PGC-1-related estrogen receptor alpha coactivator),FUNCTION: 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. Induces the expression of PERM1 in the skeletal muscle in an ESRRB-dependent manner. {ECO:0000269 PubMed:11854298, ECO:0000269 PubMed:12678921, ECO:0000269 PubMed:15546003, ECO:0000269 PubMed:23836911}.</p>
Molecular Weight:	113.2 kDa
UniProt:	Q86YN6
Pathways:	AMPK Signaling , Intracellular Steroid Hormone Receptor Signaling Pathway , Regulation of Lipid Metabolism by PPARalpha

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process