

Datasheet for ABIN3094725

PPARGC1B Protein (AA 1-1023) (Strep Tag)



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Overview

Quantity:	250 μg
Target:	PPARGC1B
Protein Characteristics:	AA 1-1023
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPARGC1B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MAGNDCGALL DEELSSFFLN YLADTQGGGS GEEQLYADFP ELDLSQLDAS DFDSATCFGE
	LQWCPENSET EPNQYSPDDS ELFQIDSENE ALLAELTKTL DDIPEDDVGL AAFPALDGGD
	ALSCTSASPA PSSAPPSPAP EKPSAPAPEV DELSLLQKLL LATSYPTSSS DTQKEGTAWR
	QAGLRSKSQR PCVKADSTQD KKAPMMQSQS RSCTELHKHL TSAQCCLQDR GLQPPCLQSP
	RLPAKEDKEP GEDCPSPQPA PASPRDSLAL GRADPGAPVS QEDMQAMVQL IRYMHTYCLP
	QRKLPPQTPE PLPKACSNPS QQVRSRPWSR HHSKASWAEF SILRELLAQD VLCDVSKPYR
	LATPVYASLT PRSRPRPPKD SQASPGRPSS VEEVRIAASP KSTGPRPSLR PLRLEVKREV
	RRPARLQQQE EEDEEEEEE EEEEKEEEEE WGRKRPGRGL PWTKLGRKLE SSVCPVRRSR
	RLNPELGPWL TFADEPLVPS EPQGALPSLC LAPKAYDVER ELGSPTDEDS GQDQQLLRGP
	QIPALESPCE SGCGDMDEDP SCPQLPPRDS PRCLMLALSQ SDPTFGKKSF EQTLTVELCG
	TAGLTPPTTP PYKPTEEDPF KPDIKHSLGK EIALSLPSPE GLSLKATPGA AHKLPKKHPE

RSELLSHLRH ATAQPASQAG QKRPFSCSFG DHDYCQVLRP EGVLQRKVLR SWEPSGVHLE
DWPQQGAPWA EAQAPGREED RSCDAGAPPK DSTLLRDHEI RASLTKHFGL LETALEEEDL
ASCKSPEYDT VFEDSSSSSG ESSFLPEEEE EEGEEEEEDD EEEDSGVSPT CSDHCPYQSP
PSKANRQLCS RSRSSSGSSP CHSWSPATRR NFRCESRGPC SDRTPSIRHA RKRREKAIGE
GRVVYIQNLS SDMSSRELKR RFEVFGEIEE 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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 posttranslational 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 against its specific reference buffer.

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	We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made
Target Details	
Target:	PPARGC1B
Alternative Name:	PPARGC1B (PPARGC1B Products)
Background:	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 receptor activities. Activates transcriptional activity of estrogen receptor alpha, nuclear respiratory factor (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 ESRRA-dependent manner. (ECO:0000269 PubMed:11854298, ECO:0000269 PubMed:12678921, ECO:0000269 PubMed:15546003, ECO:0000269 PubMed:23836911}.
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

Application Details

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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months