Datasheet for ABIN3136747

PPARGC1B Protein (AA 1-1014) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	PPARGC1B
Protein Characteristics:	AA 1-1014
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
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 YLSDTQGGDS GEEQLCADLP ELDLSQLDAS DFDSATCFGE LQWCPETSET EPSQYSPDDS ELFQIDSENE ALLAALTKTL DDIPEDDVGL AAFPELDEGD TPSCTPASPA PLSAPPSPTL ERLLSPASDV DELSLLQKLL LATSSPTASS DALKDGATWS QTSLSSRSQR PCVKVDGTQD KKTPTLRAQS RPCTELHKHL TSVLPCPRVK ACSPTPHPSP RLLSKEEEEE VGEDCPSPWP TPASPQDSLA QDTASPDSAQ PPEEDVRAMV QLIRYMHTYC LPQRKLPQRA PEPIPQACSS LSRQVQPRSR HPPKAFWTEF SILRELLAQD ILCDVSKPYR LAIPVYASLT PQSRPRPPKD SQASPAHSAM AEEVRITASP KSTGPRPSLR PLRLEVKRDV NKPTRQKREE DEEEEEEEEE EEEEKEEEEE EWGRKRPGRG LPWTKLGRKM DSSVCPVRRS RRLNPELGPW LTFTDEPLGA LPSMCLDTET HNLEEDLGSL TDSSQGRQLP QGSQIPALES PCESGCGDTD EDPSCPQPTS RDSSRCLMLA LSQSDSLGKK SFEESLTVEL CGTAGLTPPT TPPYKPMEED PFKPDTKLSP GQDTAPSLPS PEALPLTATP GASHKLPKRH PERSELLSHL QHATTQPVSQ AGQKRPFSCS FGDHDYCQVL RPEAALQRKV LRSWEPIGVH LEDLAQQGAP

LPTETKAPRR EANQNCDPTH KDSMQLRDHE IRASLTKHFG LLETALEGED LASCKSPEYD TVFEDSSSSS GESSFLLEEE EEEEEGGEED DEGEDSGVSP PCSDHCPYQS PPSKASRQLC SRSRSSSGSS SCSSWSPATR KNFRRESRGP CSDGTPSVRH ARKRREKAIG EGRVVYIRNL SSDMSSRELK KRFEVFGEIV ECQVLTRSKR GQKHGFITFR CSEHAALSVR NGATLRKRNE PSFHLSYGGL RHFRWPRYTD YDPTSEESLP SSGKSKYEAM DFDSLLKEAQ QSLH

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®): 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:	Peroxisome proliferator-activated receptor gamma coactivator 1-beta (PGC-1-beta) (PPAR-gamma coactivator 1-beta) (PPARGC-1-beta) (ERR ligand 1),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 part of the pathways regulating the elevation of gluconeogenesis, beta-oxidation of fatty acids and ketogenesis during fasting. Stimulates SREBP-mediated lipogenic gene expression in the liver. Induces energy expenditure and antagonizes obesity when overexpressed. Induces also the expression of mitochondrial genes involved in oxidative metabolism. Induces the expression of PERM1 in the skeletal muscle in an ESRRA-dependent manner. {ECO:0000269|PubMed:11733490, ECO:0000269|PubMed:12678921, ECO:0000269|PubMed:14530391, ECO:0000269|PubMed:15680331}.
Molecular Weight:	112.1 kDa
UniProt:	Q8VHJ7

Target Details

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)