

Datasheet for ABIN3094694

PPARG Protein (AA 1-505) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	PPARG
Protein Characteristics:	AA 1-505
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPARG protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence: MGETLGDSPI DPESDSFTDT LSANISQEMT MVDTEMPFWP TNFGISSVDL SVMEDHSHSF
DIKPFTTVDF SSISTPHYED IPFTRTDPVW ADYKYDLKLQ EYQSAIKVEP ASPPPYSEKT
QLYNKPHEEP SNSLMAIECR VCGDKASGFH YGVHACEGCK GFFRRTIRLK LIYDRCDLNC
RIHKKSRNKC QYCRFQKCLA VGMSHNAIRF GRMPQAEKEK LLAEISSDID QLNPEADLR
ALAKHLYDSY IKSFPLTKAK ARAILTGKTT DKSPFVIYDM NSLMMGEDKI KFKHITPLQE
QSKEVAIRIF QGCQFRSVEA VQEITEYAKS IPGFVNLDLN DQVTLLKYGV HEIYTMLAS
LMNKDGVLLIS EGQGFMTREF LKSLRKPFGE FMEPKFEFAV KFNALDDSD DLAIFIIVII
LSGDRPGLLN VKPIEDIQDN LLQALELQLK LNHPESSQLF AKLLQKMTDL RQIVTEHVQL
LQVIKKTETD MSLHPLLQEI YKDLY

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 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

Product Details

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: PPARG

Alternative Name: PPARG ([PPARG Products](#))

Background: Peroxisome proliferator-activated receptor gamma (PPAR-gamma) (Nuclear receptor subfamily 1 group C member 3),FUNCTION: Nuclear receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the nuclear receptor binds to DNA specific PPAR response elements (PPRE) and modulates the transcription of its target genes, such as acyl-CoA oxidase. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis. ARF6 acts as a key regulator of the tissue-specific adipocyte P2 (aP2) enhancer. Acts as a critical regulator of gut homeostasis by suppressing NF-kappa-B-mediated pro-inflammatory responses. Plays a role in the regulation of cardiovascular circadian rhythms by regulating the transcription of BMAL1 in the blood vessels (By similarity). {ECO:0000250|UniProtKB:P37238, ECO:0000269|PubMed:16150867, ECO:0000269|PubMed:20829347, ECO:0000269|PubMed:23525231, ECO:0000269|PubMed:9065481}., FUNCTION: (Microbial infection) Upon treatment with M.tuberculosis or its lipoprotein LpqH, phosphorylation of MAPK p38 and IL-6 production are modulated, probably via this protein. {ECO:0000269|PubMed:25504154}.

Molecular Weight: 57.6 kDa

UniProt: [P37231](#)

Pathways: [MAPK Signaling](#), [Nuclear Receptor Transcription Pathway](#), [Steroid Hormone Mediated Signaling Pathway](#), [Negative Regulation of Hormone Secretion](#), [Carbohydrate Homeostasis](#), [Regulation of Lipid Metabolism by PPARalpha](#), [Positive Regulation of Endopeptidase Activity](#), [Brown Fat Cell Differentiation](#), [Positive Regulation of fat Cell Differentiation](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment:

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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