

Datasheet for ABIN3122392

PLA2G4F Protein (AA 1-855) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	PLA2G4F
Protein Characteristics:	AA 1-855
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLA2G4F protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AlIcE®
Sequence:	MPWTLQPKWL AGKGLPLLGA ILLRKTEKSE PQWKHRRQET HPYYDLQVKV LRARNIQHTD KLSKADCYVR LWLPTASVSP SQTRTVVNSS DPEWNETFPY QIHGAVKNVL ELALYDEDVL DSDNVFSILF DTSTLQLGQP CTKNFTRQQD PKELEVEFTL EKSQTPASEV VTNGVLVAHP CLRIQGTVTG DKTASLGELG SRQIQLAVPG AYKQPQLQP TSEGPLPVNF TFHVNPVLS KLHIKLQEQQL QVFHSGPSDE LEAQTSKMDK ASILLSSLPL NEELTKLVDL EEGQQVSLRM KADMSSSGDL DLRLGFDLCD GEQEFLLDKRK QVASKALQRV MGLSEALHCD QVPVVAVLGS GGGTRAMTSL YGSLAGLQEL GLLDAVTYLS GVSGSSWCIS TLYRDPWSWQ KALQGPIKYA SERVCSSKIG MLSPKQFEYY SREKRAWESR GHMSFTDLW GLIIEYFLNQ EENPAKLSDQ QETVSQGQNP YPIYASINVH KNISGDDFAE WCEFTPYEVG FPKYGAYVPT ELFGSEFFMG RLHFWPEPR ICYLQGMWGS AFAASLYEIF LKLGGLSLSF LDWHRGSVSV TDDWPKLRKQ DPTRLPTRLF TPMSSFSQAV LDIFTSRITC AQTFNFTRGL CMYKDYTARK DFVVSEDAWH

SHNYGYPDAC PNQLTPMKDF LSLVDGGFAI NSPFPLVLQP QRAVDLIVSF DYSLEGPFEV
LQVTEKYCRD RGIPFPRIEV DPKDSEDPRE CYLFAEAEDP CSPIVLHFPL VNRTFRTHLA
PGVERQTAAE KAFGDFIING PDTAYGMMDF TYEPKEFDRL VTLSRYNVLN NKETIRHALQ
LALDRRRQAG GRVGG

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 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 against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

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: PLA2G4F

Alternative Name: Pla2g4f ([PLA2G4F Products](#))

Background: Cytosolic phospholipase A2 zeta (cPLA2-zeta) (EC 3.1.1.4) (Phospholipase A2 group IVF),FUNCTION: Has calcium-dependent phospholipase and lysophospholipase activities with a potential role in membrane lipid remodeling and biosynthesis of lipid mediators (PubMed:17293613, PubMed:15866882). Preferentially hydrolyzes the ester bond of the fatty acyl group attached at sn-2 position of phospholipids (phospholipase A2 activity) (PubMed:17293613, PubMed:15866882). Selectively hydrolyzes sn-2 arachidonoyl group from membrane phospholipids, providing the precursor for eicosanoid biosynthesis (PubMed:15866882, PubMed:17293613). In myocardial mitochondria, plays a major role in arachidonate release that is metabolically channeled to the formation of cardioprotective eicosanoids, epoxyeicosatrienoates (EETs) (By similarity). {ECO:0000250|UniProtKB:Q68DD2, ECO:0000269|PubMed:15866882, ECO:0000269|PubMed:17293613}.

Molecular Weight: 96.4 kDa

UniProt: [Q50L41](#)

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.

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Application Details

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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