Datasheet for ABIN3094316

PLA2G4B Protein (AA 1-781) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	PLA2G4B
Protein Characteristics:	AA 1-781
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLA2G4B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MAVAEVSRTC LLTVRVLQAH RLPSKDLVTP SDCYVTLWLP TACSHRLQTR TVKNSSSPVW NQSFHFRIHR QLKNVMELKV FDQDLVTGDD PVLSVLFDAG TLRAGEFRRE SFSLSPQGEG RLEVEFRLQS LADRGEWLVS NGVLVARELS CLHVQLEETG DQKSSEHRVQ LVVPGSCEGP QEASVGTGTF RFHCPACWEQ ELSIRLQDAP EEQLKAPLSA LPSGQVVRLV FPTSQEPLMR VELKKEAGLR ELAVRLGFGP CAEEQAFLSR RKQVVAAALR QALQLDGDLQ EDEIPVVAIM ATGGGIRAMT SLYGQLAGLK ELGLLDCVSY ITGASGSTWA LANLYEDPEW SQKDLAGPTE LLKTQVTKNK LGVLAPSQLQ RYRQELAERA RLGYPSCFTN LWALINEALL HDEPHDHKLS DQREALSHGQ NPLPIYCALN TKGQSLTTFE FGEWCEFSPY EVGFPKYGAF IPSELFGSEF FMGQLMKRLP ESRICFLEGI WSNLYAANLQ DSLYWASEPS QFWDRWVRNQ ANLDKEQVPL LKIEEPPSTA GRIAEFFTDL LTWRPLAQAT HNFLRGLHFH KDYFQHPHFS TWKATTLDGL PNQLTPSEPH LCLLDVGYLI NTSCLPLLQP TRDVDLILSL DYNLHGAFQQ LQLLGRFCQE

QGIPFPPISP SPEEQLQPRE CHTFSDPTCP GAPAVLHFPL VSDSFREYSA PGVRRTPEEA AAGEVNLSSS DSPYHYTKVT YSQEDVDKLL HLTHYNVCNN QEQLLEALRQ AVQRRRQRRP H

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.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	PLA2G4B
Alternative Name:	PLA2G4B (PLA2G4B Products)
Background:	Cytosolic phospholipase A2 beta (cPLA2-beta) (EC 3.1.1.4) (Lysophospholipase A1 group IVB) (EC 3.1.1.5) (Phospholipase A2 group IVB),FUNCTION: Calcium-dependent phospholipase A1 and A2 and lysophospholipase that may play a role in membrane phospholipid remodeling. {ECO:0000269|PubMed:10085124, ECO:0000269|PubMed:10358058, ECO:0000269|PubMed:16617059}., FUNCTION: [Isoform 3]: Calcium-dependent phospholipase A2 and lysophospholipase. Cleaves the ester bond of the fatty acyl group attached to the sn-2 position of phosphatidylethanolamines, producing lysophospholipids that may be used in deacylation-reacylation cycles. Hydrolyzes lysophosphatidylcholines with low efficiency but is inefficient toward phosphatidylcholines. {ECO:0000269|PubMed:16617059}., FUNCTION: [Isoform 5]: Calcium-dependent phospholipase A1 and A2 and lysophospholipase. Cleaves the ester bond of the fatty acyl group attached to the sn-1 or sn-2 position of diacyl phospholipids (phospholipase A1 and A2 activity, respectively), producing lysophospholipids that may be used in deacylation-reacylation cycles. Can further hydrolyze lysophospholipids enabling complete deacylation. Has no activity toward alkylacyl phospholipids. {ECO:0000269|PubMed:10085124, ECO:0000269|PubMed:10358058, ECO:0000269|PubMed:16617059}.
Molecular Weight:	88.0 kDa
UniProt:	P0C869
Pathways:	ER-Nucleus Signaling, VEGF Signaling

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

Application Details

	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