

Datasheet for ABIN3137596

Phospholipase C beta 1 Protein (AA 1-1216) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Phospholipase C beta 1 (PLCB1)
Protein Characteristics:	AA 1-1216
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Phospholipase C beta 1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MAGAQPGVHA LQLKPVCVSD SLKKGTFVK WDDDSTIVTP IILRTDPQGF FFYWTDQNKE TELLDLSLVK DARCGKHAKA PKDPKLELL DVGNIGHLEQ RMITVVYGPD LVNISHLNLV AFQEEVAKEW TNEVFSLATN LLAQNMSRDA FLEKAYTKLK LQVTPEGRIP LKNIYRLFSA DRKRVETALE ACSLPSSRND SIPQEDFTPD VYRVFLNNLC PRPEIDNIFS EFGAKSKPYL TVDQMMDFIN LKQRDPRLNE ILYPPLKQEQ VQVLEIKYEP NSSLAKKGQM SVDGFMRYLS GEENGVSPE KLDLNEDEMSQ PLSHYFINSS HNTYLTAGQL AGNSSVEMYR QVLLSGCRCV ELDCWKGRTA EEEPVITHGF TMTTEISFKE VIEAIAECF KTSPFPILLS FENHVDSPKQ QAKMAEYCRL IFGDALLMEP LEKYPLESGV PLPSPMDLMY KILVKNKKKS HKSSEGSQKK KLSEQASNTY SDSSSVFEPSPGAGEADTE SDDDDDDDDC KKSSMDEGTA GSEAMATEEM SNLVNYIQPV KFESFEISKK RNKSFEMSSF VETKGLEQLT KSPVEFVEYN KMQLSRIYPK GTRVDSSNYM PQLFWNAGCQ MVALNFQTVL LAMQINMGMY EYNGKSGYRL KPEFMRRPDK HFDPFTEGIV DGIVANTLSV KIISGQFLSD KKVGTVEVD MFGLPVDTRR KAFKTKTSQG
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NAVNPVWEEE PIVFKKVLP SLACLRIAY EEGGKFIGHR ILPVQAIRPG YHYICLRNER
NQPLTLPVAVF VYIEVKDYVP DTYADVIEAL SNPIRYVNLNMQRAKQLAAL TLEDEEEVKK
EADPGETSSE APSETRTPA ENGVNHTASL APKPPSQAPH SQPAPGSVKA PAKTEDLIQS
VLTEVEAQTIEELKQKQSFV KLQKKHYKEM KDLVKRHHKK TTELIKEHTT KYNEIQNDYL
RRRAALEKSA KKDSKKKSEP SSPDHGSSAI EQDLAALDAE MTQKLIDLKD KQQQQLLNLR
QEQQYSEKYQ KREHIKLLIQ KLTDVAEECQ NNQLKKLKEI CEKEKKELKK KMDKKRQEKI
TEAKSKDKSQ MEEKTEMIR SYIQEVVQYI KRLEEAQSKR QEKLVEKHNE IRQQILDEKP
KLQTELEQY QDKFKRLPLE ILEFVQEAMK GKISEDNSHG SAPPASLASDA AKVNLKSPSS
EEIERENPGR EFDTPL

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Plcb1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate

Product Details

- 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: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: Phospholipase C beta 1 (PLCB1)

Alternative Name: Plcb1 ([PLCB1 Products](#))

Background: The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. {ECO:0000250}.

Molecular Weight: 139.4 kDa Including tag.

UniProt: [Q9Z1B3](#)

Pathways: [WNT Signaling](#), [AMPK Signaling](#), [Thyroid Hormone Synthesis](#), [Inositol Metabolic Process](#), [Regulation of Muscle Cell Differentiation](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#), [Proton Transport](#), [Skeletal Muscle Fiber Development](#), [CXCR4-mediated Signaling Events](#), [G-protein mediated Events](#)

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: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process