Datasheet for ABIN3094586

PLCz1 Protein (AA 1-608) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	PLCz1
Protein Characteristics:	AA 1-608
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLCz1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	MEMRWFLSKI QDDFRGGKIN LEKTQRLLEK LDIRCSYIHV KQIFKDNDRL KQGRITIEEF RAIYRIITHR EEIIEIFNTY SENRKILLAS NLAQFLTQEQ YAAEMSKAIA FEIIQKYEPI EEVRKAHQMS LEGFTRYMDS RECLLFKNEC RKVYQDMTHP LNDYFISSSH NTYLVSDQLL GPSDLWGYVS ALVKGCRCLE IDCWDGAQNE PVVYHGYTLT SKLLFKTVIQ AIHKYAFMTS DYPVVLSLEN HCSTAQQEVM ADNLQATFGE SLLSDMLDDF PDTLPSPEAL KFKILVKNKK IGTLKETHER KGSDKRGDNQ DKETGVKKLP GVMLFKKKKT RKLKIALALS DLVIYTKAEK FKSFQHSRLY QQFNENNSIG ETQARKLSKL RVHEFIFHTR KFITRIYPKA TRADSSNFNP QEFWNIGCQM VALNFQTPGL PMDLQNGKFL DNGGSGYILK PHFLRESKSY FNPSNIKEGM PITLTIRLIS GIQLPLTHSS SNKGDSLVII EVFGVPNDQM KQQTRVIKKN AFSPRWNETF TFIIHVPELA LIRFVVEGQG LIAGNEFLGQ YTLPLLCMNK GYRRIPLFSR MGESLEPASL FVYVWYVR **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human PLCZ1 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 receival 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 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:	PLCz1
Alternative Name:	PLCZ1 (PLCz1 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. In vitro, hydrolyzes PtdIns(4,5)P2 in a Ca(2+)-dependent manner. Triggers intracellular Ca(2+) oscillations in oocytes solely during M phase and is involved in inducing oocyte activation and initiating embryonic development up to the blastocyst stage. Is therefore a strong candidate for the egg-activating soluble sperm factor that is transferred from the sperm into the egg cytoplasm following gamete membrane fusion. May exert an inhibitory effect on phospholipase-C-coupled processes that depend on calcium ions and protein kinase C, including CFTR trafficking and function. {ECO:0000250|UniProtKB:Q8K4D7, ECO:0000269|PubMed:12416999, ECO:0000269|PubMed:14697805, ECO:0000269|PubMed:15579586, ECO:0000305}.
Molecular Weight:	71.4 kDa Including tag.
UniProt:	Q86YW0

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 gurantee though.
Comment:	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

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

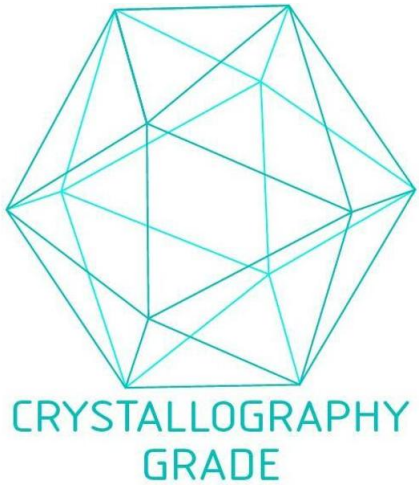

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process