

Datasheet for ABIN3094664

Phospholipase C gamma 1 Protein (AA 2-1290) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	Phospholipase C gamma 1 (PLCG1)
Protein Characteristics:	AA 2-1290
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Phospholipase C gamma 1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>AGAASPCANG CGPGAPSDAE VLHLCRSLEV GTVMTLFYSK KSQRPERKTF QVKLETRQIT WSRGADKIEG AIDIREIKEI RPGKTSRDFD RYQEDPAFRP DQSHCFVILY GMEFRLKTLS LQATSEDEVN MWIKGLTWLM EDTLQAPTPL QIERWLRKQF YSVDRNREDR ISAKDLKNML SQVNYRVPNM RFLRERLTDL EQRSGDITYG QFAQLYRSLM YSAQKTMDLP FLEASTLRAG ERPELCRVSL PEFQQFLLDY QGELWAVDRL QVQEFMLSFL RDPLREIEEP YFFLDEFVTF LFSKENSVMN SQLDAVCPDT MNNPLSHYWI SSSHNTYLTG DQFSSSESSLE AYARCLRMGC RCIELDCWDG PDGMPVIYHG HTLTTKIKFS DVLHTIKEHA FVASEYPVIL SIEDHCSTIAQ QRNMAQYFKK VLGDTLLTKP VEISADGLPS PNQLKRKILI KHKKLAEGSA YEEVPTSMY SENDISNSIK NGILYLEDPV NHEWYPHYFV LTSSKIYSE ETSSDQGNED EEEPKEVSSS TELHSNEKWF HGKLGAGRDG RHIAERLLTE YCIETGAPDG SFLVRESETF VGDYTLFWR NGKVQHCRH SRQDAGTPKF FLTDNLVFDS LYDLITHYQQ VPLRCNEFEM RLSEVPQTN AHESKEWYHA SLTRAQAEHM LMRVPRDGAF LVRKRNEPNS YAISFRAEGK IKHCRVQEG</p>
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QTVMLGNSEF DSLVDLISYY EKHPLYRKMK LRYPIINEAL EKIGTAEPDY GALYEGRNPG
FYVEANPMPT FKCAVKALFD YKAQREDELTK FIKSAIQNV EKQEGGWWRG DYGGKKQLWF
PSNYVEEMVN PVALEPEREH LDENSPLGDL LRGVLDVPAC QIAIRPEGKN NRLFVFSISM
ASVAHWSLDV AADSQEELQD WVKKIREVAQ TADARLTEGK IMERRKIAL ELSELVVYCR
PVPFDEEKIG TERACYRDMS SFPETKAEKY VNKAKGKKFL QYNRLQLSRI YPKGQRDSS
NYDPLPMWIC GSQLVALNFQ TPKPMQMNQ ALFMTGRHCG YVLQPSTMRD EAFDPFDKSS
LRGLEPCAIS IEVLGARHLP KNGRGIVCPF VEIEVAGAEY DSTKQKTEFV VDNGLNPVWP
AKPFHFQISN PEFAFLRFVV YEEDMFSDQN FLAQATFPVK GLKTGYRAVP LKNNYSEDLE
LASLLIKIDI FPAKENGDLSPFSGTSLRER GSDASGQLFH GRAREGSFES RYQQPFEDFR
ISQEHLADHF DSRERRAPRR TRVNGDNRL

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.
- Human PLCG1 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

Product Details

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: Phospholipase C gamma 1 (PLCG1)

Alternative Name: PLCG1 ([PLCG1 Products](#))

Background: Mediates the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). Plays an important role in the regulation of intracellular signaling cascades. Becomes activated in response to ligand-mediated activation of receptor-type tyrosine kinases, such as PDGFRA, PDGFRB, FGFR1, FGFR2, FGFR3 and FGFR4. Plays a role in actin reorganization and cell migration. {ECO:0000269|PubMed:17229814}.

Molecular Weight: 149.4 kDa Including tag.

UniProt: [P19174](#)

Pathways: [RTK Signaling](#), [WNT Signaling](#), [TCR Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Thyroid Hormone Synthesis](#), [Inositol Metabolic Process](#), [Myometrial Relaxation and Contraction](#), [Regulation of Muscle Cell Differentiation](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#), [Skeletal Muscle Fiber Development](#), [G-protein mediated Events](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Interaction of EGFR with phospholipase C-gamma](#), [VEGFR1 Specific Signals](#), [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.

Application Details

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

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