Datasheet for ABIN3093479
PKC beta Protein (AA 2-671) (His tag)


## Overview

| Quantity: | 1 mg |
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| Target: | PKC beta (PRKCB) |
| Protein Characteristics: | AA 2-671 |
| Origin: | Human |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This PKC beta protein is labelled with His tag. |
| Application: | ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS) |

Product Details

Sequence:
ADPAAGPPPS EGEESTVRFA RKGALRQKNV HEVKNHKFTA RFFKQPTFCS HCTDFIWGFG KQGFQCQVCC FVVHKRCHEF VTFSCPGADK GPASDDPRSK HKFKIHTYSS PTFCDHCGSL LYGLIHQGMK CDTCMMNVHK RCVMNVPSLC GTDHTERRGR IYIQAHIDRD VLIVLVRDAK NLVPMDPNGL SDPYVKLKLI PDPKSESKQK TKTIKCSLNP EWNETFRFQL KESDKDRRLS VEIWDWDLTS RNDFMGSLSF GISELQKASV DGWFKLLSQE EGEYFNVPVP PEGSEANEEL RQKFERAKIS QGTKVPEEKT TNTVSKFDNN GNRDRMKLTD FNFLMVLGKG SFGKVMLSER KGTDELYAVK ILKKDVVIQD DDVECTMVEK RVLALPGKPP FLTQLHSCFQ TMDRLYFVME YVNGGDLMYH IQQVGRFKEP HAVFYAAEIA IGLFFLQSKG IIYRDLKLDN VMLDSEGHIK IADFGMCKEN IWDGVTTKTF CGTPDYIAPE IIAYQPYGKS VDWWAFGVLL YEMLAGQAPF EGEDEDELFQ SIMEHNVAYP KSMSKEAVAI CKGLMTKHPG KRLGCGPEGE RDIKEHAFFR YIDWEKLERK EIQPPYKPKA RDKRDTSNFD KEFTRQPVEL TPTDKLFIMN LDQNEFAGFS YTNPEFVINV

|  | 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. <br> - Human PRKCB Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. <br> - State-of-the-art algorithm used for plasmid design (Gene synthesis). <br> 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. <br> 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. <br> 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). <br> 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. <br> The concentration of our recombinant proteins is measured using the absorbance at 280 nm . <br> The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. <br> 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: <br> 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. <br> 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: | $0.22 \mu \mathrm{~m}$ filtered |
| Endotoxin Level: | Protein is endotoxin free. |
| Grade: | Crystallography grade |


| Target: | PKC beta (PRKCB) |
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| Alternative Name: | PRKCB (PRKCB Products) |
| Background: | Calcium-activated, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein |
|  | kinase involved in various cellular processes such as regulation of the B-cell receptor (BCR) |
|  | signalosome, oxidative stress-induced apoptosis, androgen receptor-dependent transcription |
|  | regulation, insulin signaling and endothelial cells proliferation. Plays a key role in B-cell |
|  | activation by regulating BCR-induced NF-kappa-B activation. Mediates the activation of the |
|  | canonical NF-kappa-B pathway (NFKB1) by direct phosphorylation of CARD11/CARMA1 at 'Ser- |
|  | 559', 'Ser-644' and 'Ser-652'. Phosphorylation induces CARD11/CARMA1 association with lipid |
|  | rafts and recruitment of the BCL10-MALT1 complex as well as MAP3K7/TAK1, which then |

Molecular Weight:
77.7 kDa Including tag.

## Application Details

| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies <br> as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee <br> though. |
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| Comment: | In cases in which it is highly likely that the recombinant protein with the default tag will be <br> insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to <br> increase solubility. We will discuss all possible options with you in detail to assure that you <br> receive your protein of interest. |
| Restrictions: | For Research Use only |
| Handling | Fiquid |
| Format: | Buffer: Avoid repeated freeze-thaw cycles. |
| Handling Advice: | Store at $-80^{\circ} \mathrm{C}$. |

