Datasheet for ABIN3134633

PKN1 Protein (AA 2-946) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	PKN1
Protein Characteristics:	AA 2-946
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PKN1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	AGDAVQSEPR SWSLLEQLGL AGADLAAPGV QQQLELERER LKREIRKELK LKEGAENLRR ATTDLGRSLA PVELLLRGSA RRLDLLHQQL QELHAHVVLP DPAAGSDATQ SLAEGSPICS STNLSRVAGL EKQLAIELKV KQGAENMIQT YSNGSSKDRK LLLTAQQMLQ DSKTKIDIIR MQLRRALQAL QAGELESQAA PDEAQGDPEL GAVELRIEEL RHHFRVEHAV AEGAKNVLRL LSGAKAPDRK AVSEAQEKLT ESNQKLGLLR ESLERRLGEL PADHPKGRLL REELTAASSS AFSAILPGPF PATHYSTLSK PAPLTGTLEV RVVGCKNLPE TIPWSPPPSV GASGTPESRT PFLSRPARGL YSRSGSLSGR SSLRGEAENA TEVSTVLKLD NTVVGQTAWK PCGPNAWDQS FTLELERARE LELAVFWRDQ RGLCALKFLK LEDFLDNERH EVQLDMEPQG CLVAEVTFRN PIIERIPRLQ RQKKIFSKQQ GKAFQRARQM NIDVATWVRL LRRLIPSAVA TGTFSPNASP GAEIRHTGDI SMEKLNLGAD SDSSSQKSPP GLPSTSCSLS SPTHESTTSP ELPSETQETP GPGLCSPLRK SPLTLEDFKF LAVLGRGHFG KVLLSEFRSS GELFAIKALK KGDIVARDEV ESLMCEKRIL AAVTRAGHPF LVNLFGCFQT PEHVCFVMEY SAGGDLMLHI HSDVFSEPRA

	VFYSACVVLG LQFLHEHKIV YRDLKLDNLL LDTEGYVKIA DFGLCKEGMG YGDRTSTFCG TPEFLAPEVL TDTSYTRAVD WWGLGVLLYE MLVGESPFPG DDEEEVFDSI VNDEVRYPRF LSAEAIGIMR RLLRRNPERR LGSTERDAED VKKQPFFRSL GWDVLLARRL PPPFVPTLSG RTDVSNFDEE FTGEAPTLSP PRDARPLTAA EQAAFRDFDF VAGGY **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 Pkn1 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.

Product Details

Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	PKN1
Alternative Name:	Pkn1 (PKN1 Products)
Background:	PKC-related serine/threonine-protein kinase involved in various processes such as regulation of the intermediate filaments of the actin cytoskeleton, cell migration, tumor cell invasion and transcription regulation. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14. Regulates the cytoskeletal network by phosphorylating proteins such as VIM and neurofilament proteins NEFH, NEFL and NEFM, leading to inhibit their polymerization. Phosphorylates 'Ser-575', 'Ser-637' and 'Ser-669' of MAPT/Tau, lowering its ability to bind to microtubules, resulting in disruption of tubulin assembly. Acts as a key coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and specifically mediating phosphorylation of 'Thr-11' of histone H3 (H3T11ph), a specific tag for epigenetic transcriptional activation that promotes demethylation of histone H3 'Lys-9' (H3K9me) by KDM4C/JMJD2C. Phosphorylates HDAC5, HDAC7 and HDAC9, leading to impair their import in the nucleus. Phosphorylates 'Thr-38' of PPP1R14A, 'Ser-159', 'Ser-163' and 'Ser-170' of MARCKS, and GFAP. Able to phosphorylate RPS6 in vitro. {ECO:0000250|UniProtKB:Q16512}.
Molecular Weight:	105.2 kDa Including tag.
UniProt:	P70268

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:	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.

Application Details

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

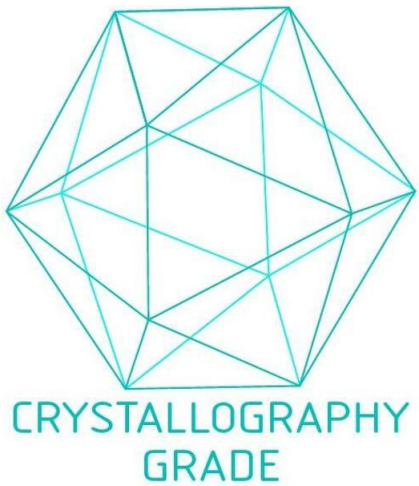

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process