

Datasheet for ABIN3094699

PKN2 Protein (AA 1-984) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PKN2
Protein Characteristics:	AA 1-984
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PKN2 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MASNPERGEI LLETQGDSR SLPFSENVSA VQKLDFSDTM VQQLDDIKD RIKREIRKEL</p> <p>KIKEGAENLR KVTDDKSLA YVDNILKKS NKKLEELHHKL QELNAHIVVS DPEDITDCPR</p> <p>TPDTPNNDPR CSTSNRLKA LQKQLDIELK VKQGAENMIQ MYSNGSSKDR KLHGTAQQLL</p> <p>QDSKTKIEVI RMQILQAVQT NELAFDNAKP VISPLELRME ELRHHFRIEF AVAEGAKNVM</p> <p>KLLGSGKVTD RKALSEAQAR FNESSQKLDL LKYSLEQRLN EVPKNHPKSR IIIEELSLVA</p> <p>ASPTLSPRQS MISTQNQYST LSKPAALTGT LEVRLMGCQD ILENVPGRSK ATSVALPGWS</p> <p>PSETRSSFMS RTSKSKSGSS RNLLKTDDL NDVCAVLKLD NTVVGQTSWK PISNQSWDQK</p> <p>FTLELDRSRE LEISVYWRDW RSLCAVKFLR LEDFLDNQRH GMCLYLEPQG TLFAEVTFN</p> <p>PVIERRPKLQ RQKKIFSKQQ GKTFLRAPQM NINIATWGRL VRRAIPTVNH SGTFSPPQAPV</p> <p>PTTVPVVDVR IPQLAPPASD STVTKLDFDL EPEPPPAPPR ASSLGEIDES SELRVLDIPG</p> <p>QDSETVFDIQ NDRNSILPKS QSEYKPDTPQ SGLEYSIGQE LEDRRSQRF QFNLQDFRCC</p>

AVLGRGHFGK VLLAEYKNTN EMFAIKALKK GDIVARDEVD SLMCEKRIFE TVNSVRHPFL
VNLFACFQTK EHVCVMEYA AGGDLMMHIH TDVFSEPRAV FYAACVVLGL QYLHEHKIVY
RDLKLDNLLL DTEGFVKIAD FGLCKEGMGY GDRTSTFCGT PEFLAPEVLT ETSYTRAVDW
WGLGVLIYEM LVGESPFPGD DEEEVFDSIV NDEVRYPRFL STEAISIMRR LLRRNPERRL
GASEKDAEDV KKHPFFRLID WSALMDKKVK PPFIPTIRGR EDVSNFDEF TSEAPILTPP
REPRILSEEE QEMFRDFDYI ADWC

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.

Product Details

- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: PKN2

Alternative Name: PKN2 ([PKN2 Products](#))

Background: Serine/threonine-protein kinase N2 (EC 2.7.11.13) (PKN gamma) (Protein kinase C-like 2) (Protein-kinase C-related kinase 2), FUNCTION: PKC-related serine/threonine-protein kinase and Rho/Rac effector protein that participates in specific signal transduction responses in the cell. Plays a role in the regulation of cell cycle progression, actin cytoskeleton assembly, cell migration, cell adhesion, tumor cell invasion and transcription activation signaling processes. Phosphorylates CTTN in hyaluronan-induced astrocytes and hence decreases CTTN ability to associate with filamentous actin. Phosphorylates HDAC5, therefore lead to impair HDAC5 import. Direct RhoA target required for the regulation of the maturation of primordial junctions into apical junction formation in bronchial epithelial cells. Required for G2/M phases of the cell cycle progression and abscission during cytokinesis in a ECT2-dependent manner. Stimulates FYN kinase activity that is required for establishment of skin cell-cell adhesion during keratinocytes differentiation. Regulates epithelial bladder cells speed and direction of movement during cell migration and tumor cell invasion. Inhibits Akt pro-survival-induced kinase activity. Mediates Rho protein-induced transcriptional activation via the c-fos serum response factor (SRF). Involved in the negative regulation of ciliogenesis (PubMed:27104747). {ECO:0000269|PubMed:10226025, ECO:0000269|PubMed:10926925, ECO:0000269|PubMed:11777936, ECO:0000269|PubMed:11781095, ECO:0000269|PubMed:15123640, ECO:0000269|PubMed:15364941, ECO:0000269|PubMed:17332740, ECO:0000269|PubMed:20188095, ECO:0000269|PubMed:20974804, ECO:0000269|PubMed:21754995, ECO:0000269|PubMed:27104747, ECO:0000269|PubMed:9121475}., FUNCTION: (Microbial infection) Phosphorylates HCV NS5B leading to stimulation of HCV RNA replication. {ECO:0000269|PubMed:15364941}.

Target Details

Molecular Weight:	112.0 kDa
UniProt:	Q16513
Pathways:	Cell-Cell Junction Organization

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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months