

# Datasheet for ABIN7564448 **PKN2 Protein (AA 1-983) (His tag)**



# Overview

Quantity:	1 mg
Target:	PKN2
Protein Characteristics:	AA 1-983
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PKN2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Purpose:	Custom-made recombinat Pkn2 Protein expressed in mammalien cells.
Sequence:	MASNPDRGEI LLTELQGDSR TLPFSENVSA VQKLDFSDTM VQQKLDDIKD RIKREIRKEL
	KIKEGAENLR KVTTDKKNLA YVDNILKKSN KKLEELHHKL QELNAHIVVS DPEDSTDCPR
	TPDTPNSDSR SSTSNNRLMA LQKQLDIELK VKQGAENMIQ MYSNGSSKDR KLHGTAQQLL
	QDSKTKIEVI RMQILQAVQT NELAFDNAKP VISPLELRME ELRHHFKIEF AVAEGAKNVM
	KLLGSGKVTD RKALSEAQAR FNESSQKLDL LKYSLEQRLN ELPRNHPKSS VVIEELSLVA
	SPTLSPRQSM LSTQNQYSTL SKPAALTGTL EVRLMGCQDI LENVPGRSKA TSVALPGWSP
	SDNRSSFMSR TSKSKSGSSR NLLKTDDLSN DVCAVLKLDN TVVGQTSWKP ISNQSWDQKF
	TLELDRSREL EISVYWRDWR SLCAVKFLRL EDFLDNQRHG MCLYLEPQGT LFAEVTFFNP
	VIERRPKLQR QKKIFSKQQG KTFLRAPQMN INIATWGRLV RRAIPTVNHS GTFSPQTPVP
	ATVPVVDARI PDLAPPASDS TVTKLDFDLE PEPPPAPPRA SSLGETDESS ELRVLDIPGQ
	GSETVFNIEN DRNNLRPKSK SEYELSIPDS GRSCWGVGEL DDKRAQQRFQ FSLQDFRCCA

VLGRGHFGKV LLAEYKHTNE MFAIKALKKG DIVARDEVDS LMCEKRIFET VNSVRHPFLV
NLFACFQTKE HVCFVMEYAA GGDLMMHIHT DVFSEPRAVF YAACVVLGLQ YLHEHKIVYR
DLKLDNLLLD TEGFVKIADF GLCKEGMGYG DRTSTFCGTP EFLAPEVLTE TSYTRAVDWW
GLGVLIYEML VGESPFPGDD EEEVFDSIVN DEVRYPRFLS TEAISIMRRL LRRNPERRLG
AGEKDAEDVK KHPFFRLTDW SALMDKKVKP PFVPTIRGRE DVSNFDDEFT SEAPILTPPR
EPRILLEEEQ EMFHDFDYVA DWC Sequence without tag. The proposed Purification-Tag is
based on experiences 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 to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

custom-made

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# **Target Details**

l arget:	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 (By similarity). {ECO:0000250|UniProtKB:Q16513, ECO:0000269|PubMed:17403031, ECO:0000269|PubMed:20974804, ECO:0000269|PubMed:8910519}.

Molecular Weight:

111.6 kDa

UniProt:

Q8BWW9

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.

Restrictions:

For Research Use only

# Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months