

Product datasheet for **RC220989**

PKN2 (NM_006256) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKN2 (NM_006256) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PKN2
Synonyms:	Pak-2; PAK2; PRK2; PRKCL2; PRO2042; STK7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220989 representing NM_006256 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGC**C

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Protein Sequence:

>RC220989 representing NM_006256
 Red=Cloning site Green=Tags(s)

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 ADWC

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Chromatograms:

https://cdn.origene.com/chromatograms/mk6292_h01.zip

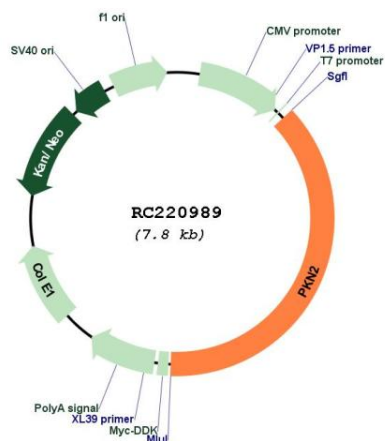
Restriction Sites:

Sgfl-Mlul

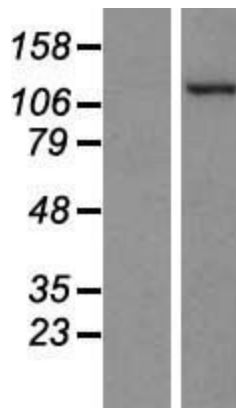
Locus ID: 5586
UniProt ID: [Q16513](#)
Cytogenetics: 1p22.2
Domains: C2, pkinase, HR1, S_TK_X, TyrKc, S_TKc
Protein Families: Druggable Genome, Protein Kinase
MW: 111.9 kDa

Gene Summary: 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).[UniProtKB/Swiss-Prot Function]

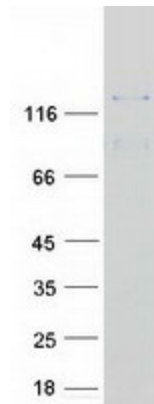
Product images:



Circular map for RC220989



Western blot validation of overexpression lysate (Cat# [LY416764]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220989 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PKN2 protein (Cat# [TP320989]). The protein was produced from HEK293T cells transfected with PKN2 cDNA clone (Cat# RC220989) using MegaTran 2.0 (Cat# [TT210002]).