

Product datasheet for **SC108568**

PKN2 (NM_006256) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKN2 (NM_006256) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKN2
Synonyms:	Pak-2; PAK2; PRK2; PRKCL2; PRO2042; STK7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_006256 edited
ATGGCGTCCAACCCGAACCGGGGGAGATTCTGCTCACGGAAGTGCAGGGGGATTCCCGA
AGTCTTCCGTTTTCTGAGAATGTGAGTGTCTGTTCAAAAATTAGACTTTTCAGATACAATG
GTGCAGCAGAAATTTGGATGATATCAAGGATCGAATTAAGAGAGAAATAAGGAAAGAACTG
AAAATCAAAGAAGGAGCTGAAAACTGAGGAAAGTCACAACAGATAAAAAAGTTTGGCT
TATGTAGACAACATTTTAAAAAATCAAATAAAAAATTAGAAGAACTACATCACAAGCTG
CAGGAATTAATGCACATATTGTTGTATCAGATCCAGAAGATATTACAGATTGCCAAGG
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TTACAAAAACAATTGGATATAGAACTTAAAGTAAAAACAAGGTGCAGAGAATATGATACAG
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TTTAATGAATCAAGTCAGAAGTTGGACCTTTTAAAGTATTCATTAGAGCAAAGATTAAC
GAAGTCCCAAGAATCATCCAAAAGCAGGATTATTATTGAAGAACTTCACTTGTGTCT
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CCAAGTGAACCAGATCATCTTTCATGAGCAGAACGAGTAAAAGTAAAAGCGGAAGTAGT
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AATACTGTGGTTGGCCAAACTAGCTGGAACCCATTTCCAATCAGTCATGGGACCAGAAG
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CCTACTACAGTCCAGTGGTTGATGTACGCATCCCTCACTAGCACCTCCAGCTAGTGAT
TCTACAGTAACCAAAATTGACTTTGATCTTGAGCCTGAACCTCCTCCAGCCCCACCAGA
GCTTCTTCTCTTGAGAAATAGATGAATCTTCTGAATTAAGATTTTGGATATACCAGGA
CAGGATTCAGAGACTGTTTTGATATTCAGAATGACAGAAATAGTATACTTCCAAAATCT
CAATCTGAATACAAGCCTGATACTCCTCAGTCAGGCCTAGAATATAGTGGTATTCAAAGAA
CTTGAGGACAGAAGATCTCAGCAAAGGTTTCAGTTAATCTACAAGATTTTCAGGTGTTGT
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TCTACAGAAGCCATTTCTATAATGAGAAGGCTGTTAAGAAGAAAATCCTGAACGGCGCCTT
GGGGCTAGCGAGAAAGATGCAGAGGATGTAAGAAAGCACCATTTTTCCGGCTAATTGAT
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CGAGAACCAAGGATACTTTCCGAAGAGGAGCAGGAAATGTTTCAGAGATTTTGACTACATT
GCTGATTGGTGTTAA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006256 unedited
 GTTAGAATTTGTATACGACTCATATAGGGCGGCCGCGATTTCGGCAGGAGCCTCGTGCCG
 AATTTCGGCAGCAGGGGCCCGTCCCGCCTTCTCCCTTCGCCAGAGGCGGCCGCGTCCAGGT
 GCGGAGTCCATACCGGAGCGCAATGGCGTCCAACCCGACGGGGGAGATTCTGCTCACG
 GAACTGCAGGGGGATTCCCGAAGTCTCCGTTTTCTGAGAATGTGAGTGTGTTCAAAAA
 TTAGACTTTTCAGATACAATGGTGCAGCAGAAAATTGGATGATATCAAGGATCGAATTAAG
 AGAGAAATAAGGAAAGAAGTCAAAAATCAAGAAGGAGCTGAAAAATCTGAGGAAAGTCACA
 ACAGATAAAAAAAGTTTGGCTTATGTAGACAACATTTTGAAAAATCAAATAAAAAATTA
 GAAGAAGTACATCACAAGCTGCAGGAATTAATGCACATATTGTTGTATCAGATCCAGAA
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 AGCAACAATAGATTGAAGGCCTTACAAAAACAATTGGATATAGAAGTAAAGTAAAAACA
 GGTGCAGAGAATATGATACAGATGTATTCAAATGGATCTTCAAAGGATCGGAACTCCAT
 GGTACAGCTCAGCAACTGCTCCAGGACAGCAAGACAAAAATAGAAGTCATACGAATGCAG
 ATCTTCAGGCAGTCCAGACTAATGAATTGGCTTTTGATAATGCANAACCTGTGATAAGT
 CCTCTTGAAGTTCGGATGAAAAGAATAANGCATATTNNTAGATAGANGTTCAGTAGCA
 GAAGGTGCAAAGAAATGTATGAAATTAAGTGGCTCAGGGAANAGTACCAGACAGAAAGCA
 CTTTCAGAAAGCTCAAGCAGATTAATGAAATCAGTCAGAAAGTTGGACCTTTTAAAGTAT
 CATAAG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006256 unedited
 GCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTAAAAATAGACTATTGATCCAAAA
 GTATTCGTGATGGATTTTCATGGCCGATGTTCACTCAACTTAACTCCATGAAACTGTTT
 CCAGTGCTCATATTTACGCTGAAGTACAATGAGGAGCCACTTTTGAAGAAGTATTAGAAT
 GGTACTTTTAAACAAATCTTCACGTGTTTCAATAAAAAACAACAACAAAAAACTCAGA
 AGCTATTGGTGGCACAGAGGCAAAATGAAGGGTGTCTATTTTAAAGAGTCTTCTTGTA
 GTCAGCTTGGTTTCGCAGTGTCTAGCAACTTAACCAATCAGCAATGTAGTCAAATCT
 CTGAACATTTCTGCTCCTCTCCGAAAGTATCCTTGGTTCTCGAGGTGGAGTCAGAATA
 GGTGCTCTGAGGTAAATTCATCATCAAATTAACATCTTCTCGCTCCTCTTATGGTA
 GGTATAAATGGTGGCTTACTTTTTTGTCCATCAGAGCGCTCCAATCAATTAGCCGGAAA
 AATGGGTGCTTTTTTACATCCTCTGCATCTTCTCGCTAGCCCCAAGGCGCCGTTTCAGGA
 TTTCTTCTTAACAGCCTTTTTCATTATAGAAATGGCTNCTGTAGATAAGAACCTTGGATAC
 CTTACTTCATCATTTACAATACTGTCAAAAACTTCTCTTCTCACCACCCGGAAAGGGAG
 ACTTACCAACAACCTTTTCATCTATAACGACCCCGGGGCTCACCATCTACAGCCCTCGGAT
 AAAAACTTTTCGTTATCCTTCTGGGCATAAAATTATGGGAGGCACCAAAGGCGCCCGGC
 TTATTTCTCCACCATTTTGTTCACAAACCAACCCACCATTGTTACAATTCCTCCGCT
 TTCGCCACCATCTCAATTTACCCCCCCCCCAATTTGTGTTTGTACCCCTCCCCC
 CCTTTTCTTTCCCCCCCN

Restriction Sites:

NotI-NotI

ACCN:

NM_006256

Insert Size:

3180 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_006256.1 , NP_006247.1
RefSeq Size:	3255 bp
RefSeq ORF:	2955 bp
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>