

Product datasheet for **MC220880**

Pkn2 (BC052073) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pkn2 (BC052073) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pkn2
Synonyms:	6030436C20Rik; AI507382; PRK2; Prkcl2; Stk7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >BC052073
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGTCCAACCCCGACCGGGGGGAGATCCTCCTCACCGAGCTGCAGGGAGATCCCGACTCTTCCAT
 TTTCTGAGAAATGTGAGTCTGTTTCAGAAATTGGACGACATCAAGGATCGAATAAAGAGAGAAATAAGGAA
 AGAACTGAAAATCAAAGAAGGAGCTGAAAACCTGAGGAAAGTTACAACAGATAAGAAAAATTTGGCTTAT
 GTAGACAACATTTTGA AAAAATCAAATAAAAAATTAGAAGAATTACATCACAAGCTACAAGAATTAATG
 CACACATCGTTGTATCGGATCCAGAGGACTCCACAGATTGTCCGAGGACTCCAGATACTCCAAAATAGTGA
 CTCTCGTAGTTCTACTAGCAACAATAGACTGATGGCCTTACAGAAAACACTGGATATAGA ACTTAAAGTA
 AAGCAGGGTGCAGAGAACATGATACAGATGTACTCAAATGGCTCTTCAAAGGATCGGAACTCCATGGTA
 CAGCGCAGCAACTGCTACAGGATAGCAAGACAAAAATAGAAGTCATCCGGATGCAGATTCTTCAGGCCGT
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 CCACAGTAAATCATTCTGGCACATTAGCCCTCAGACTCCTGTGCCTGCAACAGTGCCAGTCTGTGACGC
 ACGCATTCTGATCTAGCACCTCCGCCAGTGACTCTACAGTAACCAAATGGACTTTGATCTTGAACCT
 GAACCTCCTCCAGCCCCACTCGTGCTTCTCCCTTGGAGAGACAGATGAATCTTCTGAATTGAGAGTTT
 TGGATATACCTGGACAGGGTTCAGAAAAGTGTTCATATTGAGAATGACAGAAAATACCTCGCTCCAAA
 ATCCAAATCTGAATATGAGCTGAGCATTCTGACTCAGGTCGAAGCTGCTGGGGTGTGGAGAGCTTGAT
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 GACACTTTGAAAAGGTGCTGTTGGCGGAATATAAACACACAAAATGAAATGTTTGAATAAAAAGCCTTAAA
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 TGTATTTTATGCAGCATGTGAGTTCTTGGGTTGCAATACTTACATGAACACAAAATTTTATAGAGAT
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 AAGGAATGGGATGAGATAGGACAAGCACATTTTGTGGTACTCCTGAGTTTCTTGCCCAAGAAGTCTC
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 ATCCAAGTTCTTATCTACAGAAGCCATTTCCATAATGAGAAGGCTGCTAAGGAGAAATCCTGAGCGGC
 CCTGGGAGCTGGTGAAGAAGGATGCAGAGGATGTCAAGAAGCACCCGTTTTTCCGGCTAACCGACTGGAGT
 GCTCTAATGGACAAAAAAGTAAAGCCACCATTTGTACCTACCATTAGAGGACGGGAAGATGTTAGTAACT
 TTGATGATGAATTTACCTCAGAAGCACCTATTCTGACTCCACCTCGAGAACCAAGGATACTCTTGAAGA
 GGAGCAGGAGATGTTCCACGATTTTACTACGTTGCTGATTGGTGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	BC052073
Insert Size:	2919 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:	BC052073 , AAH52073
RefSeq Size:	3773 bp
RefSeq ORF:	2918 bp
Locus ID:	109333
Cytogenetics:	3 66.69 cM
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 (By similarity).[UniProtKB/Swiss-Prot Function]