

Product datasheet for **MC203356**

Pkn1 (NM_177262) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pkn1 (NM_177262) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pkn1
Synonyms:	DBK; F730027O18Rik; PAK1; Pkn; PRK1; Prkcl1; Stk3
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >BC052923
 GCCAGGCCGGCCGAGCGCAGCAGGCCGGAGCGCGCCGCGCCTGGGAGGGTCTGGGCGCCGCGCTCC
 CGCCGCACCCGCCGCGCTCGCAAGCCCTTCTTGGCGCTGGGACCCCTGGCGGGCGCCGGAGGACA
 TGGCCGGCGAGCCGTACAGAGTGAAGCTCGAAGCTGGTGCCTGCTGGAACAGCTGGGTCTGGCTGGGGC
 TGACCTGGCAGCCCCGGGTGCAGCAACAGCTGGAGTTAGAGCGAGAGCGACTGAAGCGGGAGATACGG
 AAGGAGCTGAAGCTGAAGGAGGGCGTGAAGCTGAGGCGAGCCACCTGACCTGGCCGTAGCCTGG
 CCCCTGTGGAGCTGCTGCTGCGGGGCTCCGCTCGACGCCTAGACTTACTGCACCAGCAGCTGCAGGAGT
 GCATGCACATGTGGTGCCTGACCCTGCAGCTGGAAGCGATGCTACCCAATCCCTTGCAGAGGGCAGC
 CCTATCTGCTCATCCACCAACCTGAGCAGAGTGGCTGGGCTGGAGAAGCAGCTGGCCATTGAGCTCAAGG
 TCAAACAGGGGGCAGAGAACATGATCCAGACCTATAGCAATGGCAGCAGCAAGGACCCGGAAGCTGTTGTT
 GACAGCCAGCAGATGCTGCAGGACAGTAAAGCAAGATTGACATCATCCGCATGCAGCTTCAAGAGCG
 CTCCAGGCACTACAGGCTGGAGAGCTGGAGAGTCAAGCAGCTCCTGATGAAGCCCAAGGAGATCCAGAAC
 TGGGAGCCGTAGAGCTACGCATTGAGGAGTACGACACCATTTTCGAGTGGAGCATGCAGTGGCAGAAGG
 TGCCAAGAATGCTCTGCGCTGCTCAGTGGGGCAAAGGCCCCAGACCCGAAGGCAGTCAAGGAGGCTCAG
 GAGAAATTGACTGAGTCCAACCAAGCTGGGCTTCTGCGGGAATCACTGGAGAGGCGCCTTGGGGAGT
 TGCTTGCAGATCACCCCAAGGGCGGCTGCTTCCGGAGGAGCTCACTGCAGCCTGCTCCTCAGCCTTCAG
 CGCCATACTGCCTGGGCCCTTCCCTGCCACTCACTACAGCACCTTGGCAAGCCTGCACCCTCACAGGG
 ACCCTGGAAGTACGAGTGGTGGGCTGCAAAAACCTTCCGAGACCATCCCTGGAGCCCTCCCCCTCAG
 TGGGGGCATCTGGGACCCCGAAAGCCGCACTCCGTTCTGAGTCGCCCCGCTCGGGGCTTTACAGCCG
 GAGTGGAAAGCCTTAGTGGACGGAGCAGCCTCAGAGGGGAGGCAGAGAATGCCACTGAGGTCAAGCCGTG
 CTCAAGCTGGACAACACAGTGGTGGGGCAAACAGCCTGGAAGCCATGCGGCCCAATGCCTGGGACCAGA
 GCTTTACCCTGGAGCTGGAGAGGGCTCGGGAGCTGGAGCTGGCTGTGTTCTGGCGAGACCAGAGGGGTCT
 GTGTGCTCAAATTTCTGAAGTTGGAGGACTTCTGGACAACGAGAGGCATGAGTGCAGCTGGAGATG
 GAAGCCAGGGCTGCCTGGTGGCTGAGGTCACTTCCGAAACCCATCATCGAGCGGATCCCTAGGCTCC
 AAAGGCAGAAAAAATCTTCTCCAAGCAGCAAGGGAAGGCATTTCAAGCGGCCAGACAGATGAACATAGA
 TGTGGCGACTTGGGTGCGGCTGCTCCGTAGACTCATCCCTAGTGTGTGGCCACTGGCACCTTCACTCCC
 AATGCATCTCCAGGTGCTGAGATCCGGCACACTGGAGACATATCCATGGAGAAATGAATCTCGGTGCTG
 ACTCAGACAGCTCGTCCAAAAGAGCCACCAGGGCTGCCCTCCACCTCATGCAGCCTGAGTTCTCCAAC
 CCATGAATCCACCACATCTCCAGAGCTGCCTTCAAGAGCCAGGAGACTCCAGGCCCTGGCCTGTGCAGC
 CCCTTGAGAAAGTCGCCCTGACACTTGGAGACTTCAAGTTCTGGCCGTGCTTGGCCGGGGTCACTTTG
 GAAAGGTGCTGCTGTCTGAATTCGCTCCAGTGGGGAGCTCTTTGCCATCAAAGCCTTGAAGAAAGGTGA
 CATTGTAGCCCGAGATGAGGTTGAGAGCCTGATGTGTGAGAAGCGGATTTGGCGCCGTGACCAGGGCA
 GGACATCCCTTCTGGTGAACCTTTTCCGCTGTTTCCAGACCCCAAGCAGTGTGCTTTGTGATGGAGT
 ACTCGGCGGGTGGAGACCTGATGCTGCACATTCATAGCGACGTGTTCTCAGAGCCTCGGGCTGTCTTCTA
 TTCGGCCTGTGTGGTGTGGGACTGCAGTTCCTCCATGAACACAAGATTGTCTACAGGGACCTGAAGTTG
 GACAATTTGCTCCTGGATACTGAGGGTACGTCAAGATCGCAGACTTTGGCCTCTGCAAGGAGGGGATGG
 GCTATGGGACCCGACCAGCAGCTTCTGCGGAACCTCCGGAGTTCTGGCGCCGGAAGTGTCAACAGACAC
 ATCCTACACGCGAGCAGTGGACTGGTGGGACTGGCGTGTGCTCTATGAGATGTTGGTTGGAGAGTCT
 CCGTTCCCTGGGATGATGAGGAGGAGGTATTTGACAGCATTGTCAACGACGAAGTTGCTATCCCCGCT
 TCCTGTCTGCAGAGGCCATCGGCATCATGAGAAGGCTACTGCGGAGGAACCCGGAGCGGAGCTGGGGT
 CACTGAGCGCGATGCAGAAGATGTGAAAAACAGCCTTTCTTCCGGTCTTGGGCTGGGATGCTCCTGCTG
 GCCCGCCGCTTGCTCCACCTTCGTGCCTACACTTTCAGGGCGCACAGATGTCAGCAACTTCGATGAGG
 AGTTCACTGGGGAGGCCCCACACTGAGTCTCCCGGGATGCACGGCCCTCACAGCTGCGGAGCAGGC
 AGCCTTCCGGGATTTGACTTTGTGGCCGAGGCTACTAGCCCCAAGCCCTGCCTTACCCAAGAGTTCT
 TGATTTTTTAAAAACAAGCCTTTGGGGTTTACTCCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AA

Restriction Sites: RsrII-NotI
ACCN: NM_177262
Insert Size: 2841 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:	BC052923 , AAH52923
RefSeq Size:	3124 bp
RefSeq ORF:	2841 bp
Locus ID:	320795
UniProt ID:	P70268
Cytogenetics:	8 40.22 cM
Gene Summary:	<p>PKC-related serine/threonine-protein kinase involved in various processes such as regulation of the intermediate filaments of the actin cytoskeleton, cell migration, tumor cell invasion and transcription regulation. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14. Regulates the cytoskeletal network by phosphorylating proteins such as VIM and neurofilament proteins NEFH, NEFL and NEFM, leading to inhibit their polymerization. Phosphorylates 'Ser-575', 'Ser-637' and 'Ser-669' of MAPT/Tau, lowering its ability to bind to microtubules, resulting in disruption of tubulin assembly. Acts as a key coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and specifically mediating phosphorylation of 'Thr-11' of histone H3 (H3T11ph), a specific tag for epigenetic transcriptional activation that promotes demethylation of histone H3 'Lys-9' (H3K9me) by KDM4C/JMJD2C. Phosphorylates HDAC5, HDAC7 and HDAC9, leading to impair their import in the nucleus. Phosphorylates 'Thr-38' of PPP1R14A, 'Ser-159', 'Ser-163' and 'Ser-170' of MARCKS, and GFAP. Able to phosphorylate RPS6 in vitro.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) contains a different segment for its 5' UTR and 5' coding region, compared to variant 1. The resulting protein (isoform 2) has a shorter and distinct N-terminus when it is compared to 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>