

## Product datasheet for TP511277

### Pkn1 (NM\_177262) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse protein kinase N1 (Pkn1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211277 representing NM_177262 Red=Cloning site Green=Tags(s)

MAGDAVQSEPRSWSLLEQLGLAGADLAAPGVQQQLELERERLKRERKELKLKEGAENLRRATDDLGRSL  
APVELLLRGSARRDLLHQQLQELHAHVLPDPAAGSDATQSLAEGSPICSSNLSRVAGLEKQLAIELK  
VKQGAENMIQTYNSGSSKDRKLLTAQQLQDSKTKIDIIRMLRRLALQALQAGELESQAAPDEAQGDPE  
LGAVELRIEELRHHFRVEHAVAEGAKNVLRLLSGAKAPDRKAVSEAQEKLTESNQKLGLLRESLERRLGE  
LPADHPKGRLLREELTAASSSAFSAIIPGPFPAHYSTLSKPAPLTGTLEVRVVGCKNLPETIPWSPPPS  
VGASGTPESRTPFLSRPARGLYSRGSLSGRSSLRGEAENATEVSTVLKLDNTVVGQTAWKPCGPNAWDQ  
SFTLELERARELELAVFWRDQRGLCALFKLEDFLDNERHEVQLDMEPQGCLVAEVTFRNPIIERIPRL  
QRQKIFSKQQGKAFQRRARQMNIDVATWVRLRLRIPSAVATGTFSPNASPGAIEIRHTGDISMEKLNLGA  
DSDSSQKSPGLPSTSCSLSSPTHESTTPELSETQETPGPLCSPLRKSPLTLEDFKFLAVLGRGHF  
GKVLLSEFRSSGELFAIKALKKGDIVARDEVESLMCEKRILAAVTRAGHPFLVNLFGCFQTPHVCFVME  
YSAGGDLMLHIHSDVFSEPRAVFYSACVVLGLQLFHEHKIVYRDLKLDNLLLDTEGYVKIADFLGCKEGM  
GYGDRSTFCGTPEFLAPEVLTDTSYTRAVDWWGLGVLLYEMLVGESPFPGDDEEEVFDSIVNDEVRYPR  
FLSAEAGIMRRLRRNPERRLGSTERDAEDVKKQPFRRSLGWDVLLARRLPPPFVPTLSGRTDVSNFDE  
EFTGEAPTLSPPRDARPLTAAEQAAFRDFDFVAGGY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	104.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_796236</a>
<b>Locus ID:</b>	320795
<b>UniProt ID:</b>	<a href="#">P70268</a>
<b>RefSeq Size:</b>	3436
<b>Cytogenetics:</b>	8 40.22 cM
<b>RefSeq ORF:</b>	2838
<b>Synonyms:</b>	DBK; F730027O18Rik; PAK1; Pkn; PRK1; Prkcl1; Stk3
<b>Summary:</b>	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]