

## Product datasheet for MR205408

### Prkx (NM\_016979) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prkx (NM_016979) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prkx
Synonyms:	Pkare; PKX1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205408 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCCGCCGCTGGTGCCGCGGCGACCGTAAAAGATCCAGACCATGACCCCGTGAAGACCAAGGTCT  
CGGCGCCCGCGGACCCCAAACCCAGGACATCGTCACAGAAGCGGGGCACTCGTTACAAGATTGGGA  
CACCATAGCCACCGTGGGACTGGGACCTTTGGCCGTGTAACCTGGTGAAGGAGAAGACAGGCAGGCAA  
TACTGTGCCTTGAAGATTATGAGTATCCCAGATGTCATCCGCCTGAAACAGGAACAGCATGTGCAGAAATG  
AGAAAGCAGTCCGAAGGAAATAAACCATCCCTTCCTCATTAAACTGCTTTGGACAGGCCATGACAACCG  
CTTCTATACATGTTGATGGAGTTCGTGCCTGGTGGTGAAGTCTTACCTACCTGCGTAATCGTGGCCGA  
TTCTCCTCAGTTGCTTCACTTCTACGCCACAGAGATTGTGTGTGCCATAGAATATCTACACTCAAAGG  
AAATCGTATACAGGGACCTGAAGCCTGAAAACATCCTTCTAGACAGGGAAGGACATATAAACTGACAGA  
CTTCGGCTTCGCCAAGAACTGGTGGATAGGACATGGACTCTCTGTGGGACACCAGAATATCTCGCCCCA  
GAAGTCATTAGAGCAAAGGTGATGGAAGGGCTGTGGACTGGTGGGCACTGGGCATTCTTATATTCGAGA  
TGCTGTCTGGGTTTCCCCATTTTCGATGACAACCCGTTGGGATTTACCAGAAAATCCTTGCATGCAA  
AATAGATTTCCCCAGACAATTGGATTTACCTCAAGGACCTCATCAAGAAGCTGCTGGTGGTGGACAGG  
ACCCGACGCTAGGCAACATGAAGAATGGGGCAGAAGACATCAAGCGGCCCGGTTCCGAGGTGTGG  
AGTGGGAATCTGTGCCACAAAGAAAAGTGAAGCCACCCATTGTGCCCAAGTTATCGGGTATGGTGCAT  
CTCCAACCTTGGACTTATCCAGAGAGTGAATTGGACAAGACACCTTCTGTATCTGACAAAAGACCTGGAA  
ACATTCAAAAATTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR205408 protein sequence  
 Red=Cloning site Green=Tags(s)

MEPPAGAAATVKDPDHPVKTkVSAPAADPKPRTSSQKAGHSLQDWDTIATVGTGTGFRVNLVKEKTGRQ  
 YCALKIMSIPDVIRLKQEQHVQNEKAVLKEINHFPFLIKLLWTGHDNRFLYMLMEFVPGGELFTYLNRGR  
 FSSVASVFYATEIVCAIEYLHSKEIVYRDLKPENILLDREGHIKLTDFGFAKKLVDRTWLTCGTPEYLAP  
 EVIQSKGHGRAVDWWALGILIFEMLSGFPPFFDDNPFGIYQKILACKIDFPRQLDFTSKDLIKLLVDR  
 TRRLGNMKNGAEDIKRHRWFRGVEWESVPQRKLKPPIVPKLSGDGDISNFETYPESELDKTPSVSDKDLE  
 TFKNF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_016979

**ORF Size:** 1068 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:**

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\\_016979.2](#)

**RefSeq Size:** 3217 bp

**RefSeq ORF:** 1068 bp

**Locus ID:** 19108

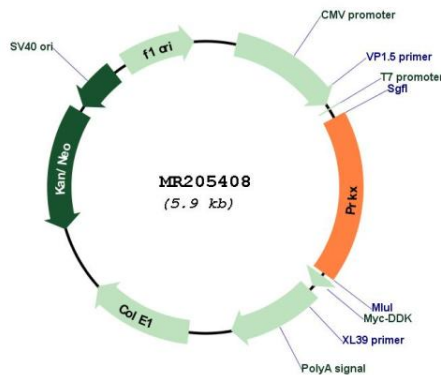
**UniProt ID:** [Q922R0](#)

**Cytogenetics:** X B

**MW:** 40.5 kDa

**Gene Summary:** Serine/threonine protein kinase regulated by and mediating cAMP signaling in cells. Acts through phosphorylation of downstream targets that may include CREB, SMAD6 and PKD1 and has multiple functions in cellular differentiation and epithelial morphogenesis. Regulates myeloid cell differentiation through SMAD6 phosphorylation. Involved in nephrogenesis by stimulating renal epithelial cell migration and tubulogenesis. Also involved in angiogenesis through stimulation of endothelial cell proliferation, migration and vascular-like structure formation.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR205408