

## Product datasheet for **RR211616**

### **Pak1 (NM\_017198) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pak1 (NM_017198) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pak1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RR211616 representing NM\_017198  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCAAATAACGGCTTAGACGTCCAGGACAAACCCAGCCCCCTCCGATGAGAAACACCAGCACTATGA  
 TTGGAGCTGGCAGCAAAGACCCTGGAACCTAAACCACGGTTCCAACCTCTGCCTCAAACCCAGAGGA  
 GAAGAAAAAGAAGGACCGGTTCTATCGATCCATCTTAGCTGGAGATAAAAACAAATAAAAAGAAGGAGAAG  
 GAGCGGCCAGAGATTTCTCTTCCTCAGATTTTGAGCATAACAATTCATGTTGGTTTTGATGCTGTACAG  
 GGGAGTTTACGGGGATGCCAGAACAGTGGGCCCTTGCCTCAAACATCAAATATCACCAAGTCAGAGCA  
 GAAGAAAAACCCACAGGCTGTTCTGGATGTGTTGGAATTTATAACTCCAAGAAGACCTCCAATAGTCAG  
 AAGTACATGAGTTTTACAGATAAGTCAGCTGAAGATTATAATTCTCTAATACTTTGAATGTGAAGACTG  
 TGTCTGAGACCCAGCAGTGCACCAGTGTGAGAAGATGAAGATGATGATGACGATGCTACCCACCTCC  
 AGTGATTGCTCCACGCCAGAACACAAAAATCTGTATATACACGGTCTGTGATTGAACCACTTCTGT  
 ACTCCAACCTCGGGATGTGGCTACATCTCTATTTCTCTACTGAGAATAACACCCTCCGCCAGATGCTT  
 TGACCCGGAATACTGAAAAGCAGAGAAGAAGCCTAAAAATGTCTGATGAGGAGATCTTAGAGAAATTACG  
 GAGCATAGTGAGTGTGGGCGATCCTAAGAAGAAGTACACACGCTTCGAGAAGATTGGACAAGGTGCTTCA  
 GGCACAGTGTACTGCAATGGATGTAGCCACAGGGCAGGAGGTGGCCATTAACAGATGAACCTTCAGC  
 AGCAGCCGAAGAAAGAACTCATTATTAATGAGATCCTGGTCATGAGGGAAAAACAAAACCAATTGT  
 GAACTATCTGGACAGTTACCTTGTGGGAGATGAGCTATGGGTTGTCATGGAATACTTGGCCGGAGGCTCC  
 TTAACAGATGTGGTGACAGAAACCTGTATGGATGAAGCCAGATAGCAGCTGTGTGCCGAGAGTGTCTAC  
 AAGCTTTGGAGTTCTCTGCATTCAAACCAAGTCATTACAGAGACATCAAGAGTGACAATTTCTGTCTGG  
 AATGGATGGCTCTGTCAAATTAACCTGACTTTGGATTCTGTGCACAGATAACTCCAGAGCAGAGCAAAGG  
 AGCACCATGGTGGAACTCCATATTGGATGGCACCTGAAGTTGTGACACGCAAGGCCTATGGACCAAGG  
 TTGACATCTGGTCCCTGGGTATTATGGCAATTGAAATGATTGAGGGGGAGCCCCACCTCAATGAAAA  
 CCCTTTGAGAGCCTTGTACCTCATTGCTACCAATGGGACGCCAGAGCTTCAGAACCAGAGAAGTTGTCA  
 GCTATTTCCGGGACTTTTTGAACCGCTGTCTTGAGATGGATGTGGAGAAGAGAGTTTCACTAAAGAGC  
 TACTGCAGCATCAATTCCTGAAGATTGCCAAGCCTCTCTCCAGCCTGACTCCACTGATTGCTGCAGCAA  
 AGAGGCAACCAAGAACAATCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR211616 representing NM\_017198  
 Red=Cloning site Green=Tags(s)

MSNGLDVQDKPPAPMRNTSTMIAGSKDPGTLNHGSKPLPPNPEEKKKDRFYRSILAGDKTNKKKEK  
 ERPEISLPSDFEHTIHVGFDAVTGEFTGMPEQWARLLQTSNITKSEQKKNPQAVLDVLEFYNSKKTNSQ  
 KYMSFTDKSAEDYNSSNTLNKTVSETPAVPPVSEDEDDDDATPPPVIAPRPEHTKSVYTRSVIEPLPV  
 TPTRDVATSPISPTENNTTPDALTRNTEKQKKPKMSDEEILEKLRSIVSVGDPKKKYTRFEKIQQGS  
 GTVYTAMDVATGQEVAIKQMNLLQQPKKELIINEILVMRENKNPNIVNYLDSYLVGDELWVYMEYLAGGS  
 LTDVVTETCMDEGQIAAVCRECLQALEFLHSNQVIHRDIKSDNILLGMDGSVKL TDFGFCAQITPEQSKR  
 STMVGTPTYWMAPEVVTRKAYGPKVDIWSLGIMAIEMIEGEPYLNENPLRALYL IATNGTPELQNPKLS  
 AIFRDFLNRCLEMDVEKRGSAKELLQHQLKIAKPLSSL TPLIAAAKEATKNNH

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja3395\\_a05.zip](https://cdn.origene.com/chromatograms/ja3395_a05.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_017198

**ORF Size:** 1632 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\\_017198.1](#), [NP\\_058894.1](#)
**RefSeq Size:** 2539 bp

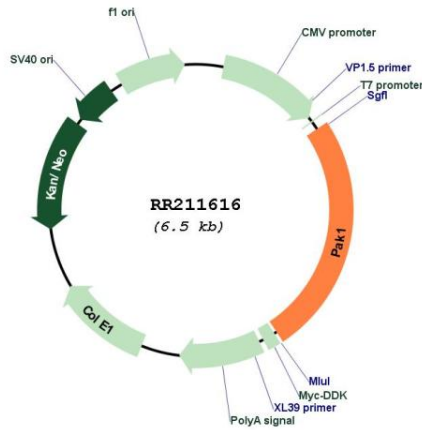
**RefSeq ORF:** 1635 bp

**Locus ID:** 29431

**UniProt ID:** [P35465](#)

**Cytogenetics:** 1q32  
**MW:** 60.6 kDa  
**Gene Summary:** serine/threonine protein kinase; binds and forms complex specifically with activated (GTP-bound) p21, leading to inhibiting p21 GTPase activity [RGD, Feb 2006]

**Product images:**



Circular map for RR211616