

## Product datasheet for **MR224918**

### **Ak5 (NM\_001081277) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ak5 (NM_001081277) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ak5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR224918 representing NM\_001081277  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAACACCAACGACGCCAAGGAGTACCTGGCCCGAGGGACATTCTCAGCTTTTCGAGAGCCTGCTCA  
 ATGGCTTGATGTGTTCCAAGCCAGAAGACCCCATAGAGTACTTGGAACTTGTTTACAGAAAGTCAAGGA  
 GCTAGGAGGCTGTGACAAGGTGAAGTGGGACACATTTGTCAGCCAGGAAAAGAAGACGTTACCGCCCTA  
 AATGGAGGACAATCACGGAGATCCTTCCCGAAATGTCATGCCTGAAAATTCAACTTTCCATATCGGC  
 GGTATGACCGGCTCCCTCCAATCCACCAGTTTTCCATAGAGAGTGACACGGACCTGTGGAGACGGCGGA  
 GCTGATAGAAGAATATGAGGTTTTGACCCGACTAGACCTCGGCCAAAAATCATTCTTGCATAGGTGGT  
 CCAGGAAGTGGAAAGGTTACTCAGAGTTTGAATTTGCAGAGCGGTATGGATTCCAGTACATCTCAGTGG  
 GAGAATTATTGAGGAAGAAAATCCACAGTGCCAGCAGCAACAGAAAATGGAGTCTGATCGCCAAGATAAT  
 CACCAATGGGGAGCTGGCCACAGGAGACAACAATTACGGAGATAAAACAAAAATTTGATGCAAATACCC  
 GATGAAGAAGGCATTGTGATTGATGGATTTCCAAAGGGATTTGCCAGGCCTGTCTTTTGGAGACCAGA  
 TCTGCACCCCTGACCTGGTGGTGTCTGGCTTGTGCCAACCCAGAGGCTCAAGGAGAGGTTACAGAAAGCG  
 TGGGAGCAGCAGGGGCGGCCAGATGACAACTGAAAGCAACCCAAAGGAGACTAGTGAACCTTCAAGCAG  
 AATGCCGCCCCACTAGTGAAGTACTTCCAAGAGAAGGGACTCATCGTGACTTTTGTGACCGCAGATG  
 AAGACGCAGTGTCCATGACATCAGCGTGGCCGTCGACAGCAAGCTGTTTCCAACAAAGAGGCTCCGAT  
 GGATTCAGTGACCTTGACCCTTCCATGATGTTTGTGCTGGAGAGATTATTGACACAGGATCAGATTAC  
 GATAACCGAGCAGATGATCAGCTAAATGTATTTGGAGAAGACACAGAGGGAGGCTTCATGGAGGATTTGA  
 GGAAGTGTAAAAATTTTTCTTGGTGGCTGCTGCTGGCAAAGGCACCCAGTGTGAGAAGCTGGC  
 AGAAAAATATGGCTTACCCATCTCTACTGGTGGAGCTCTGCCAGGAAGTACCTCAGAGTCAGAA  
 AGAAGCAAAGTATCCGTGACATCATGGAGCGTGGAGATCTGGTCCCTCGGGTGTGCTTCTGGAGCTGC  
 TGAAGGAGGCCATGGTGGCCAGCCTGGGCAACACCAAGGGCTTCTGATTGACGGCTACCCCGGGAAGT  
 GAAGCAAGGGGAAGGATTTGGACGAAGGATCGGAGACCCACACTTGGTGTCTGCATGGACTGCTCAGCA  
 GACACCATGACTAACCGCCTTCTCAGAGAAGCCAGAGCAGCCAGCGGGGGAGGACGGTCCAAGAGCA  
 TTGCCAAGCGCTGGAGGCTACCACCGAGCGTCCATCCCGTCGTCACCTACTACGAGAGGAAAACACA  
 GCTACGGAAGGTAATGCAGAGGGAACACCAGAGCAAGTTTTTCTCAGCTCTGCACAGCTATTGACTCT  
 GTTTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224918 representing NM\_001081277  
 Red=Cloning site Green=Tags(s)

MNTNDAKEYLARRDIPQLFESLLNGLMCSKPEDPIEYLETCLQKVKELGGCDKVKWDTFVSQEKKTLPLP  
 NGGQSRRSFLRNVPENSFPYRRYDRLPPIHQFSIESDLDLSETAELIEEYEVFDPTRPRPKIILVIGG  
 PGSGKGTQSLKIAERYGFQYISVSELLRKKIHSASSNRKWSLIAKIIITNGELAPQETTITEIKQKLMQIP  
 DEEGIVIDGFPDRVAQALSFEDQICTPDLVVFACANQRLKERLQKRAEQGRPDNDLQATRRLLVNFQK  
 NAAPLVKYFQEKGLIVTFDADRDEDAVFHDISVAVDKSLFPNKEAPMDSSDLDPSSMFDAGEIIDTGS  
 DNQDDQLNVFGEDETEGGFMEDLRKCKIIFLMGGPGSGKGTQCEKLAEKYGFTHLSTGELLRQELTSESE  
 RSKLIRDIMERGDLVPSGVVLELLKEAMVASLGNKGFIDGYPREVKQGEFGRRIIDPHLVICMDCSA  
 DTMTNRLQRSQSSQRGEDGAKSIKRLEAYHRASIPVVTTYERKTQLRKVNAEAGTPEQVFLQLCTAIDS  
 VF

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9044\\_b02.zip](https://cdn.origene.com/chromatograms/mm9044_b02.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001081277

**ORF Size:** 1686 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\\_001081277.2](#)

**RefSeq Size:** 3103 bp

**RefSeq ORF:** 1689 bp

**Locus ID:** 229949

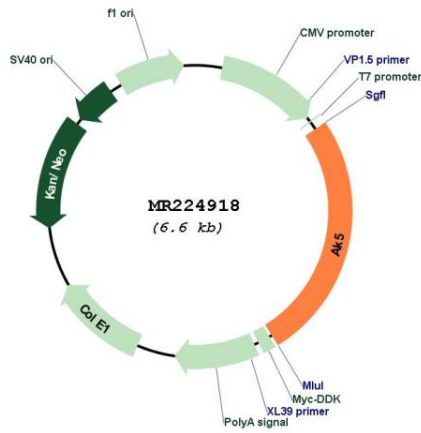
**UniProt ID:** [Q920P5](#)

**Cytogenetics:** 3 H3

**MW:** 63.8 kDa

**Gene Summary:** Nucleoside monophosphate (NMP) kinase that catalyzes the reversible transfer of the terminal phosphate group between nucleoside triphosphates and monophosphates. Active on AMP and dAMP with ATP as a donor. When GTP is used as phosphate donor, the enzyme phosphorylates AMP, CMP, and to a small extent dCMP. Also displays broad nucleoside diphosphate kinase activity.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR224918