

Product datasheet for **RN200527**

Ak2 (NM_001033967) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ak2 (NM_001033967) Rat Untagged Clone
Tag: Tag Free
Symbol: Ak2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN200527 representing NM_001033967
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGCTCCCAACGCGTTGGCTCCTGAACCGGAGCATCCGAAGGGCATCCGGGCCGTGTTGCTGGGGCCTC
 CCGGGGCTGGCAAGGGGACCCAGGCACCCAAATTGGCTGAGAATTTCTGTCTGTCACTTGGCCACTGG
 GGACATGCTGAGAGCGATGGTAGCTTCAGGCTCGGAGCTGGGGAAAAAGCTGAAGGCGACAATGGATGCC
 GGAAAACTGGTGAAGTGAATGGTCGTGGAGCTCATTGAGAAGAATTTGGAGACTCCTTCCTGCAAAA
 ATGGCTTTCTTAGATGGCTTCCCTCGGACTGTGAAGCAGGCTGAAATGCTTGTGACCTCATGGATAA
 GAGGAAAGAGAAGCTCGATTCAGTCATCGAGTTCAGCATCCAGGACTCCCTGCTGATCCGGAGAATCACG
 GGAAGGCTGATTCACCCCAAGAGTGGCCGGTCTACCATGAGGAGTTCACCCTCCAAAGGAGGCCATGA
 AAGATGATATCACTGGGAGCCCTGATCCGCAGGTCAGATGACAACGAGAAAGCCTTGAAGACCCGCCT
 GGAGGCCTACCACACTCAGACCACTCCGCTTGTGGAATACTACAGGAAACGGGGCATTCACTGCGCCATT
 GATGCGTCCCAGACCCCTGACGTGGTGTGCAAGCATCTGGCAGCCTTCTCCAAGCCACATCCT**AG**

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII
ACCN: NM_001033967
Insert Size: 699 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).



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| 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: | <u>NM_001033967.2</u> , <u>NP_001029139.1</u> |
| RefSeq Size: | 1711 bp |
| RefSeq ORF: | 699 bp |
| Locus ID: | 24184 |
| UniProt ID: | <u>P29410</u> |
| Cytogenetics: | 5q36 |
| Gene Summary: | <p>Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism. Adenylate kinase activity is critical for regulation of the phosphate utilization and the AMP de novo biosynthesis pathways. Plays a key role in hematopoiesis.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 3' coding region and 3' UTR compared to variant 1. The resulting protein (isoform b) is shorter and has a distinct C-terminus compared to isoform a.</p> |