

Product datasheet for **RR212974**

Ak1 (NM_024349) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ak1 (NM_024349) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ak1
Synonyms: Ak 1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR212974 representing NM_024349
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGAAGACAAGCTGAAGAAGGCCAAGATCATCTTCGTGGTGGGGGGCCTGGCTCAGGAAAAGGTACCC
AGTGTGAGAAGATTGTGCAGAAATATGGCTACACCCACCTCTCTACTGGGACCTGCTTCGGGCAGAAGT
CAGCTCTGGATCGTCGAGGGGCAAGATGCTGTCATCTATCATGGAGAAGGGAGAGCTGGTCCACTGGAG
ACGGTGTGGACATGCTTCGGGATGCTATGTTAGCCAAAGTGGACTCTTCCAACGGCTTCTTGATTGACG
GCTACCCGAGGGAGGTGAAACAGGGAGAAGAGTTTGAACGGAAGATCGCACAGCCACACTGCTACTGTA
TGTGGACGCAGGCCCGAGACCATGACCCAACGACTCCTAAAGCGAGGGGAGACCAGTGGCCGTGTGGAC
GATAACGAGGAGACCATCAAGAAGAGGCTGGAGACGTAATTACAAAGCCACAGAACCTGTCATCTCCTTCT
ATGACAAACGCGGCATTGTGCGCAAGGTCAATGCTGAAGGCTCAGTGGACTGTCTTCTCCAGGTCTG
CACCTATCTTGACTCCCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR212974 representing NM_024349
Red=Cloning site Green=Tags(s)

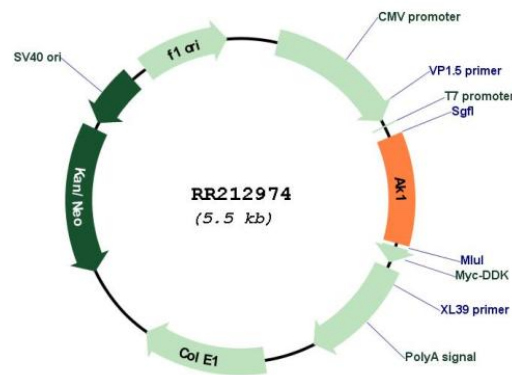
MEDKLLKAKIIFVVGPGSGKGTQCEKIVQKYGYTHLSTGDLLRAEVSSGSSRGKMLSSIMEKGELVPLE
TVLDMLRDAMLAKVDSSNGFLIDGYPREVKQGEFERKIAQPTLLLYVDAGPETMTQRLLRGETSGRVD
DNEETIKKRLITYKATEPVISFYDKRGIYRKVNAEGSVDTVFSQVCTYLDLSLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:

Plasmid Map:


ACCN: NM_024349

ORF Size: 582 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_024349.3](#), [NP_077325.2](#)

RefSeq Size: 1990 bp

RefSeq ORF: 585 bp

Locus ID: 24183

UniProt ID: [P39069](#)

Cytogenetics: 3p11

MW: 21.6 kDa

Gene Summary: catalyzes the conversion of ATP and AMP to ADP in adenine nucleotide metabolism [RGD, Feb 2006]