

Product datasheet for MR228420

Ak1 (NM_001198792) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ak1 (NM_001198792) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ak1
Synonyms: Ak-1; B430205N08Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR228420 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAAGAGAAGCTGAAGAAGGCCAAGATCATCTTTGTGGTGGGCGGACCTGGCTCAGGAAAGGGCACCC
 AGTGCAGAGAAGATTGTACAGAAATATGGCTACACCCACCTGTCTACTGGGACCTGCTTCGGGCAGAAGT
 CAGCTCTGGATCGGAGAGGGGCAAGAAGCTGTCGGCTATCATGGAGAAGGGAGAGCTAGTGCCACTGGAC
 ACGGTGCTGGACATGCTCCGAGATGCTATGTTAGCCAAAGTGGATTCTTCCAATGGCTTCCTGATCGACG
 GCTACCCGAGGGAGGTGAAACAGGGAGAAGAATTTGAACAGAAGATTGGACAGCCACACTGCTGCTGTA
 TGTGGACGCAGGCGCCGAGACCATGACCCAACGACTCCTGAAGCGAGGGGAGACCAGTGGCCGCGTGGAT
 GACAACGAGGAGACCATCAAGAAGCGGCTGGAGACTTATTACAATGCCACAGAACCTGTCATCTCCTTCT
 ATGACAAGCGTGGCATTGTGCGCAAGGTCAATGCCAAGGCACGGTGGACTGTCTTCTGAGGTCTG
 CACCTATCTTGACTCCCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228420 protein sequence
 Red=Cloning site Green=Tags(s)

MEEKLKKAKIIFVVGPGSGKGTQCEKIVQKYGYTHLSTGDLRAEVSSGSEKGLLSAIMEKDELVPLD
 TVLDMLRDAMLAKVDSSNGFLIDGYPREVKQGEFEQKIGOPTLLLIVDAGAEVMTQRLLRGETSGRVD
 DNEETIKKRLITYYNATEPVISFYDKRGIVRKVNAEGTVDTVFSEVCTYLDLTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001198792

ORF Size: 585 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_001198792.1](#), [NP_001185721.1](#)

RefSeq Size: 2047 bp

RefSeq ORF: 585 bp

Locus ID: 11636

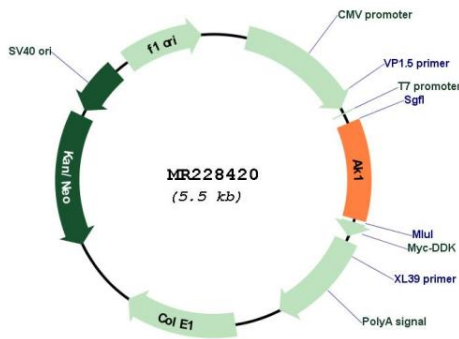
UniProt ID: [Q9R0Y5](#)

Cytogenetics: 2 22.09 cM

MW: 21.5 kDa

Gene Summary: Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. Also possesses broad nucleoside diphosphate kinase activity. Plays an important role in cellular energy homeostasis and in adenine nucleotide metabolism (By similarity). May provide a mechanism to buffer the adenylate energy charge for sperm motility. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR228420