

Product datasheet for **MG202255**

Ak1 (NM_021515) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ak1 (NM_021515) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Ak1
Synonyms: Ak-1; B430205N08Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG202255 representing NM_021515
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCTGCTGTGTGTCTAGTGAACCCCAAGAAGAGGGAGGCAGAAAGACTGGAGAGAAGCTGAAGAAGG
CCAAGATCATCTTTGTGGTGGCGGACCTGGCTCAGGAAAGGGCACCCAGTGCAGAGAAGATTGTACAGAA
ATATGGCTACACCCACCTGTCTACTGGGACCTGCTTCGGGCAGAAGTCAGCTCTGGATCGGAGAGGGGC
AAGAAGCTGTGGCTATCATGGAGAAGGGAGAGCTAGTCCACTGGACACGGTGTGGACATGCTCCGAG
ATGCTATGTTAGCCAAAGTGGATTCTTCCAATGGCTTCCTGATCGACGGCTACCCGAGGGAGGTGAAACA
GGGAGAAGAATTTGAACAGAAGATTGGACAGCCACACTGCTGTGTATGTGGACGAGGCCCGCAGACC
ATGACCCAACGACTCCTGAAGCGAGGGGAGACCAGTGGCCGCGTGGATGACAACGAGGAGACCATCAAGA
AGCGGCTGGAGACTTATTACAATGCCACAGAACCTGTCTCTCTATGACAAGCGTGGCATTGTGCG
CAAGGTCAATGCCGAAGGCACGGTGGACTGTCTTCTCTGAGGTCTGCACCTATCTTGACTCCCTGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG202255 representing NM_021515
Red=Cloning site Green=Tags(s)

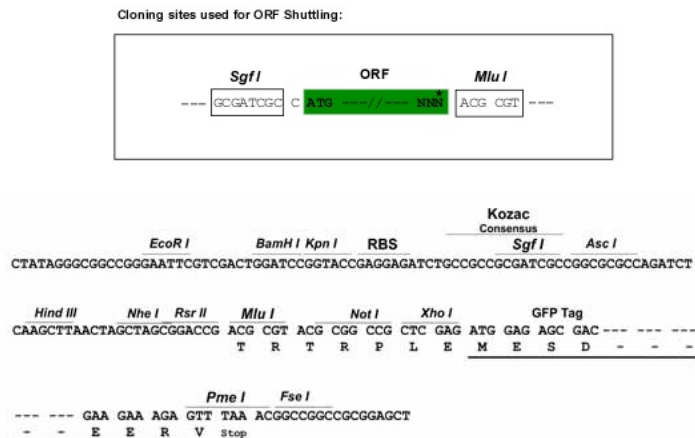
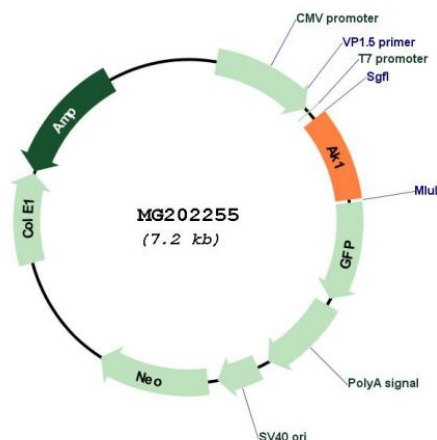
MGCCVSSEPQEEGGRKTGEKLLKAKIIFVVGPGSGKGTQCEKIVQKYGYTHLSTGDLLRAEVSSGSRG
KKLSAIMEKGELVPLDTVLDMLRDAMLAKVDSSNGFLIDGYPREVKQGEFEQKIGQPTLLLIVYDAGAET
MTQRLLLKRGETSGRVDDNEETIKRLETYYNATEPVISFYDKRGIVRKVNAEGTVDTVFSEVCTYLDLKL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_021515

ORF Size: 630 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_021515.3](#)

RefSeq Size: 2034 bp

RefSeq ORF: 633 bp

Locus ID: 11636

UniProt ID: [Q9R0Y5](#)

Cytogenetics: 2 22.09 cM

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]