

Product datasheet for **MG202803**

Ak2 (NM_016895) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ak2 (NM_016895) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ak2
Synonyms:	Ak-2; D4ErtD220e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG202803 representing NM_016895 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCCCAACGTGTTGGCTTCCGAACCGGAGATTCCGAAGGGCATCCGGGCCGTGTTGCTGGGGCCGC
CCGGGGCTGGCAAGGGGACGCAGGCACCCAAACTGGCTGAAAACTTTTGTGTCTGTCAATTTGGCCACCGG
GGACATGCTGAGAGCCATGGTAGCTTCTGGCTCGGAGCTAGGAAAAAGCTGAAGGCGACAATGGATGCA
GGGAAACTGGTGAGTGACGAAATGGTTGTGGAGCTAATTGAGAAGAATTTGGAGACTCCTTCGTGCAAAA
ATGGCTTTCTTAGATGGCTTCCCTCGGACTGTGAGGCAGGCTGAAATGCTTGATGACCTCATGGAGAA
GAGGAAAGAGAAGCTCGATTAGTCACTGAGTTTCAAGACTCGCTGCTGATCCGGAGGATCACT
GGGAGGCTGATTCACCCCAAGAGTGCCCGTCTACCATGAGGAATTCACCCCTCCAAAGGAGCCCATGA
AAGATGATATCACTGGGGAGCCCTGATCCGCAGGTCAGATGACAACGAGAAAGCCTTGAAGACCCGCT
GGAGGCCATACCACACTCAGACACTCCGCTCGTGGAGTACTACAGGAAACCGCGCATTCACTGCGCCATC
GATGCGTCCCAGACCCCTGACATCGTGTGGGAGCATCTGGCAGCCTTCTCCAAAGCCACATCC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG202803 representing NM_016895
 Red=Cloning site Green=Tags(s)

MAPNVLASEPEIPKGIRAVLLGPPGAGKGTQAPKLAENFCVCHLATGDMLRAMVASGSELGKKLKATMDA
 GKLVSDMVMVELIEKNLETPSCKNGFLLDGFPRTVRQAEMLDDLMEKRKEKLDVIEFSIQDSLIRIRIT
 GRLIHPKSGRSYHEEFNPPKEPMKDDITGEPLIRRSDNEKALKTRLEAYHTQTTPLEVEYYRKRGIHCAI
 DASQTPDIVFASILAFAFSKATS

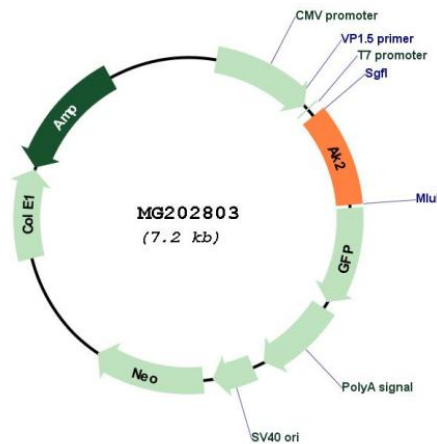
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_016895

ORF Size: 696 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:	<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:	NM_016895.2
RefSeq Size:	1691 bp
RefSeq ORF:	699 bp
Locus ID:	11637
UniProt ID:	Q9WTP6
Cytogenetics:	4 62.62 cM
Gene Summary:	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]