

Product datasheet for **MG215922**

AfgII (NM_145743) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	AfgII
Synonyms:	CG8520; Lace1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >MG215922 representing NM_145743
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGCCTCCTGGTCGCCCTTGGTTACTCTGCGCTCCGCCGCGCGCAGCCGGCTGACTGGGAGAGGTG
 TTGGGTGCGGGGCGGGTCTGTCGCAATCCCTCCTCCGGCCCTGGCCCTGGGAAACCCCTGTGGAAAGC
 CTACACAGTCCAGACATCCGAGGGTGTACGCCAACAGCCGCTTCTGAGGCCCGTTTAAAGCCCTTGGCT
 GTTTGCCACGGGCTCTGGACCACTACGACTTTCTGATCAAATCTCAGGAGCTGAGGGAGGATGAACATC
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 GCTCTTTTCAAAGCTTTTTCAAGGAACAACCTCAAAGGGCCTCTATGTTTATGGAGACGTTGGTACA
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 TGTTTTGATGAATTCAGGCTACTGACATCGCCGACGCCATGATTCTGAAACAGCTTTTTGAAAACTGT
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 GAAAAATGCAAGGCAGAGAGCTGCGGCTGAATAAAGCCTGTGGAAGCGTTGCCGACTGCACATTTGAAGAG
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 GAAACATTCGCAGTTTCACTGGCAAAGGAGCAGCAAGCGAGAAGATTCATCACTCTCATTGATAACTT
 CTATGACTTCAAGGTGCGCATTATCTGCTCCGCTTCAAGCTTGTCTGATCAGCAT
 CAGGACAGTGAAGTGGACCAAAGCAGAATCCTGATGGATGATTTGGGGCTGAGCCAGGACTCAGCCGGGC
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 GACGGAGCAGTACTGGATTGAAGGGGACAGAAGCAGGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG215922 representing NM_145743
 Red=Cloning site Green=Tags(s)

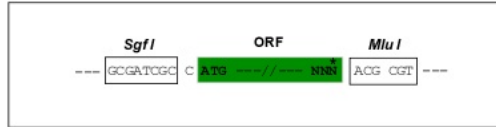
MAASWSPLVTLRSAARSRLTGRGVGCGARVVAIPPPAPGPGKPLWKAYTVQTSSEVVRPTAASEARLKALA
 VCHGPLDHYDFLIKSQLREDEHQRRVVQCLQKLQEDLKGYSIEEGGLFSKLSRNKPPKGLVYVYGDVGT
 GKTMVMDMFYAYVETKRKRKRVHFHGFMLDVHRRIHHLKQSLPKRKAGFMAKSYDPIAPIAEEISQETSLL
 CFDEFQVTDIADAMILKQLFENL FKNGVVVATSNRPPEDLYKNGLQRANFVPFI AVLKEYCDTLQLDSG
 VDYRKRELAPAGKLYYLTSEADVEAVVDKLFDELAQKQNDLTSPRILKMQGRELRNLKACGSVADCTFEE
 LCERPLGASDYELSKNFDTVIIRNIPQFSLAKRTQARRFITLIDNFYDFKVR IICSASAPISSLFLHQH
 QDSESDQSRILMDDLGLSQDSAGLSMFTGEEEIFAFQRTISRLEMQTEQYWIIEGDRSRK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



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                                     Kozac
                                     Consensus
                                     Sgf I   Asc I
EcoR I   BamH I Kpn I   RBS   CTC GAG ATG GAG AGC GAC ---
CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCCGATCGCCGGCGCCAGATCT

Hind III   Nhe I   Rsr II   Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAAGTAGCTAGCTAGCGGACCG   ACG CGT   ACG CGG   CCG CTC GAG ATG GAG AGC GAC ---
                                     T   R   T   R   P   L   E   M   E   S   D   -   -   -

Pme I   Fse I
--- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
- - - E E R V Stop
    
```

ACCN: NM_145743

ORF Size: 1440 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_145743.2](#), [NP_665686.2](#)

RefSeq Size: 2530 bp

RefSeq ORF: 1443 bp

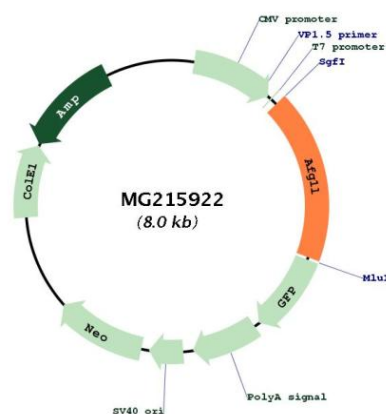
Locus ID: 215951

UniProt ID: [Q3V384](#)

Cytogenetics: 10 22.88 cM

Gene Summary: Putative mitochondrial ATPase. Plays a role in mitochondrial morphology and mitochondrial protein metabolism. Promotes degradation of excess nuclear-encoded complex IV subunits (COX4I1, COX5A and COX6A1) and normal activity of complexes III and IV of the respiratory chain. Mediates mitochondrial translocation of TP53 and its transcription-independent apoptosis in response to genotoxic stress.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215922