

Product datasheet for **MG227022**

Gata4 (NM_008092) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gata4 (NM_008092) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gata4
Synonyms:	Gata-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227022 representing NM_008092 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTACCAAAGCCTGGCCATGGCCGCCAACACGGCCCCCGCCGGCGCCTACGAAGCAGGTGGCCCTG
GCGCCTTCATGCACAGCGCGGGCGCCGCTCCTCGCCGCTACGTGCCACTCCGCGGGTGCCGTCTC
TGTGCTGGCCTGTCTACCTGCAGGGCGGTGGCAGTGCCGCTGCAGCTGGAACCACTCGGGTGGCAGC
TCCGGGGCGGCCGCTCGGGTGGGGCCCTGGGACCCAGCAGGGTAGCCCTGGCTGGAGCCAAGCTGGAG
CCGAGGGAGCCGCTACACCCCGCCCGGTGTCCCGCGCTTCTTTCCGGGGACTACTGGGTCCCT
GGCGGCCGCTGCCGCCGCTGCCGAGCCCGGAAGCTGCAGCCTACGGCAGTGCCGGCGGGCGGGGGC
GCTGGTCTGGCTGGCCGAGAGCAGTACGGGCGTCCGGGCTTCGCCGGCTCCTACTCCAGCCCTACCCAG
CCTACATGGCCGACGTGGGAGCATCCTGGGCCGACCCGCTGCCGCTCTGCCGGCCCTTCGACAGCCC
AGTCTGCACAGCCTGCCTGGACGGGCCAACCTGGAAGACACCCCAATCTCGATATGTTTGATGACTTC
TCAGAAGGCAGAGAGTGTGTCAATTGTGGGGCCATGTCCACCCCACTCTGGAGGCGAGATGGGACGGGAC
ACTACCTGTGCAATGCCTGTGGCCTCTATCACAAGATGAACGGCATCAACCGGCCCTCATTAAAGCCTCA
GCGCCGCTGTCCGCTTCCCGCCGGTAGGCCTCCTGTGCCAACTGCCAGACTACCACCACACGCTG
TGCCGCTGTAATGCCGAGGGTGAAGCTGTATGTAATGCCTGCGGCCTCTACATGAAGCTCCATGGGGTTC
CCAGGCCTTTGCAATGCGGAAGGAGGGATTCAAACCGAAAACGGAAGCCCAAGAACCTGAATAAATC
TAAGACGCCAGCAGGTCCTGCTGGTGAGACCCTCCCTCCCTCCAGTGGTGCCTCCAGCGGTAACCTCAGC
AATGCCACTAGCAGCAGCAGCAGCAGTGAAGAGATGCGCCCCATCAAGACAGAGCCCGGGCTGTCTCTC
ACTATGGGCACAGCAGCTCCATGTCCCAGACATTCAGTACTGTGTCCGGCCACGGGCCCTCCATCCATCC
AGTGTGTCTGCTCTGAAGCTGTCCCAAGGCTATGCATCTCCTGTCACTCAGACATCGCAGGCCAGC
TCCAAGCAGGACTCTTGAACAGCCTGGTCTGGCTGACAGTCATGGGGACATAATCACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG227022 representing NM_008092
 Red=Cloning site Green=Tags(s)

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MYQSLAMAANHGPPPGAYEAGGPGAFMHSAGAASSPVYVPTPRVPSSVLGLSYLQGGGSAAGTSSGGS
SGAGPSGAGPGTQQGSPGWSQAGAEGAAAYTPPVSPRFSFPGTTGSLAAAAAAAAAREAAAYGSGGGAAG
AGLAGREQYGRPGFAGSYSSPYPAYMADVGASWAAAAAASAGPFDSPVLHSLPGRANPGRHPNLDMFDDF
SEGRECYNCGAMSTPLWRRDGTGHYLCNACGLYHKMNGINRPLIKPQRRLSASRRVGLSCANCQTITTTTL
WRRNAEGEPVCNACGLYMKLHGVRPLAMRKEGIQTRKRKPKNLNKSPTAPAGETLPPSSGASSGNSS
NATSSSSSSEEMRPIKTEPGLSSHYGHSSSMSQTFSTVSGHGPSIHPVLSALKLSPQGYASPVTQTSQAS
SKQDSWNSLVLADSHGDIITA
  
```

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_008092

ORF Size: 1323 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_008092.3](#), [NP_032118.2](#)

RefSeq Size: 3393 bp

RefSeq ORF: 1326 bp

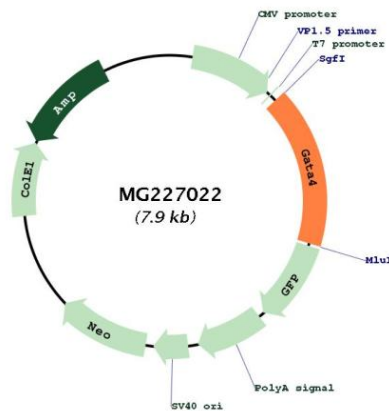
Locus ID: 14463

UniProt ID: [Q08369](#)

Cytogenetics: 14 33.24 cM

Gene Summary: Transcriptional activator that binds to the consensus sequence 5'-AGATAG-3' and plays a key role in cardiac development (By similarity). In cooperation with TBX5, it binds to cardiac super-enhancers and promotes cardiomyocyte gene expression, while it downregulates endocardial and endothelial gene expression (By similarity). Involved in bone morphogenetic protein (BMP)-mediated induction of cardiac-specific gene expression (By similarity). Binds to BMP response element (BMPRE) DNA sequences within cardiac activating regions (By similarity). Acts as a transcriptional activator of ANF in cooperation with NKX2-5 (PubMed:9584153). Promotes cardiac myocyte enlargement (By similarity). Required during testicular development (By similarity). May play a role in sphingolipid signaling by regulating the expression of sphingosine-1-phosphate degrading enzyme, sphingosine-1-phosphate lyase (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227022