

Product datasheet for **MR227022**

Gata4 (NM_008092) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gata4 (NM_008092) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gata4
Synonyms:	Gata-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227022 representing NM_008092
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTACCAAAGCCTGGCCATGGCCGCCAACACGCCCCCGCCGGCGCCTACGAAGCAGGTGGCCCTG
 GCGCCTTCATGCACAGCGCGGGCGCCGCTCTCGCCCGTCTACGTGCCACTCCGCGGGTGCCGTCCTC
 TGTGCTGGGCTGTCTACCTGCAGGGCGGTGGCAGTGCCGCTGCAGCTGGAACCACTCGGGTGGCAGC
 TCCGGGGCGGCCGTCGGGTGCGGGCCCTGGACCCAGCAGGGTAGCCCTGGCTGGAGCCAAGCTGGAG
 CCGAGGGAGCCGCTACACCCGCGCCGCTGTCCCCGCGCTTCTTTCCCGGGGACTACTGGTCCCT
 GCGCGCCGCTGCCCGCTGCCGAGCCCGGAAGCTGCAGCCTACGGCAGTGCGGGCGGGGCGGGGCG
 GCTGGTCTGGCTGGCCGAGAGCAGTACGGGCGTCCGGGCTTCGCCGGCTCTACTCCAGCCCTACCCAG
 CCTACATGGCCGACGTGGGAGCATCTGGGCCGACCGCTGCCGCTCTGCCGGCCCTTCGACAGCCC
 AGTCTGCACAGCCTGCCTGGACGGCCAAACCCTGGAAGACACCCCAATCTCGATATGTTTGATGACTTC
 TCAAGAAGCAGAGAGTGTCAATTGTGGGGCCATGTCCACCCCACTCTGGAGGCGAGATGGGACGGGAC
 ACTACCTGTGCAATGCCTGTGGCCTCTATCACAAGATGAACGGCATCAACCGGCCCTCATTAAAGCCTCA
 GCGCCGCTGTCCGTTCCCGCCGGTAGGCCTCTCTGTGCCAACTGCCAGACTACCACCACACGCTG
 TGGCGTCGTAATGCCGAGGGTGAGCCTGTATGTAATGCCTGCGGCCTCTACATGAAGCTCCATGGGGTTC
 CCAGGCCCTTTGCAATGCGGAAGGAGGGGATTCAAACCAGAAAACGGAAGCCCAAGAACCTGAATAAATC
 TAAGACGCCAGCAGGTCTGTGGTGAAGCCCTCCCTCCCTCCAGTGGTGCCTCCAGCGGTAACCTCCAGC
 AATGCCACTAGCAGCAGCAGCAGCAGTGAAGAGATGCCCCCAATCAAGACAGAGCCCGGGCTGTCATCTC
 ACTATGGGCACAGCAGCTCCATGTCCCAGACATTCAGTACTGTGTCCGGCCACGGGCCCTCCATCCATCC
 AGTGCTGTCTGCTGAAGCTGTCCCCACAAGGCTATGCATCTCCTGTCACTCAGACATCGCAGGCCAGC
 TCCAAGCAGGACTCTTGAACAGCCTGGTCTGGCTGACAGTCATGGGGACATAATCACCCGCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227022 representing NM_008092
 Red=Cloning site Green=Tags(s)

MYQSLAMAANHGPPPGAYEAGGPGAFMHSAGAASSPVYVPTPRVPSSVLGLSYLQGGGSAAGTSSGGS
 SGAGPSGAGPGTQQGSPGWSQAGAEGAAATPPPVSPRFSFPGTTGSLAAAAAAAAAREAAAYGSGGGAAAG
 AGLAGREQYGRPGFAGSYSSPYPAYMADV GASWAAAAASAGPFDSPVLHSLPGRANPGRHPNLDMFDDF
 SEGREC VNCGAMSTPLWRRDGTGHYLCNACGLYHKMNGINRPLIKPQRRLSASRRVGLSCANCQTITTTTL
 WRRNAEGEPVCNACGLYMKLHGVPRLAMRKEGIQTRKRKPKNLNKSPTPAGPAGETLPPSSGASSGNSS
 NATSSSSSEEMRPIKTEPGLSSHGHSSMSQTFSTVSGHGPSIHPVLSALKLSPQGYASPVTQTSQAS
 SKQDSWNSLVLADSHGDIITA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_008092

ORF Size: 1326 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_008092.1](#), [NM_008092.2](#), [NM_008092.3](#), [NM_008092.4](#), [NP_032118.2](#)

RefSeq Size: 3393 bp

RefSeq ORF: 1326 bp

Locus ID: 14463

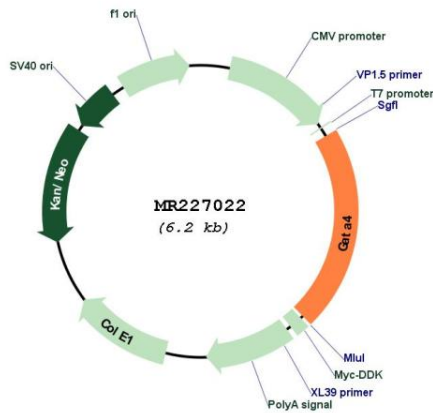
UniProt ID: [Q08369](#)

Cytogenetics: 14 33.24 cM

MW: 44.6 kDa

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 MR227022