

## Product datasheet for **RC227363**

### **GATA2 (NM\_001145661) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GATA2 (NM_001145661) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GATA2
Synonyms:	DCML; IMD21; MONOMAC; NFE1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC227363 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGGTGGCGCCGAGCAGCCGCGCTGGATGGCGCACCCGGCCGTGCTGAATGCGCAGCACCCCGACT  
 CACACCACCCGGCCTGGCGCACAACTACATGGAACCCGCGCAGCTGCTGCCTCCAGACGAGGTGGACGT  
 CTTCTTCAATCACCTCGACTCGCAGGGCAACCCCTACTATGCCAACCCCGCTCACGCGGGGCGCGCTC  
 TCCTACAGCCCCGCGCACGCCCGCTGACCGGAGGCCAGATGTGCCGCCACACTTGTGACAGCCCGG  
 GTTTGCCCTGGCTGGACGGGGGAAAGCAGCCCTCTGCGCGTGGCGCCACCACCACAACCCCTGGAC  
 CGTGAGCCCTTCTCAAGACGCCACTGCACCCCTCAGCTGTGGAGGCCCTGGAGGCCACTCTCTGTG  
 TACCCAGGGGTGGGGTGGGAGCGGGGAGGCAGCGGGAGCTCAGTGGCCTCCCTACCCCTACAGCAG  
 CCCACTCTGGCTCCACCTTTTCGGCTTCCACCCAGCCACCCAAAGAAGTGTCTCTGACCCTAGCAC  
 CACGGGGCTGCGTCTCCAGCCTCATCTCCGCGGGGGTGTGAGCCCGAGGAGAGGACAAGGACGGC  
 GTCAAGTACCAGGTGTCCTGACGGAGAGCATGAAGATGGAAAGTGGCAGTCCCTGCGCCAGGCCCTAG  
 CTAATATGGGCACCCAGCCTGCTACACACCACCCATCCCCACCTACCCCTCCTATGTGCCGGCGGCTG  
 CCACGACTACAGCAGCGGACTCTTCCACCCCGGAGGCTTCTGGGGGGACCGGCCTCCAGCTTACCCCT  
 AAGCAGCGCAGCAAGGCTCGTTCCTGTTTCAAGAGCCGGGAGTGTGCAACTGTGGGGCCACAGCCACCC  
 CTCTCTGGCGGGGACGGCACCAGCCACTACCTGTGCAATGCCTGTGGCCTCTACCACAAGATGAATGG  
 GCAGAACCAGCACTCATCAAGCCCAAGCAAGACTGTGCGCCGCGAGAAGAGCCGGCACCTGTTGTGCA  
 AATTGTGACAGCACAACCACCTTATGGCGCGAAACGCCAACGGGGACCTGTCTGCAACGCCTGTG  
 GCCTCTACTACAAGCTGCACAATGTTAACAGGCCACTGACCATGAAGAAGGAAGGATCCAGACTCGGAA  
 CCGGAAGATGTCCAACAAGTCCAAGAAGCAAGAAAGGGGCGGAGTGTTCGAGGAGCTGCAAAAGTGC  
 ATGCAGGAGAAGTCATCCCTTCAAGTGCAGCTGCCCTGGCTGGACACATGGCACCTGTGGGCCACCTCC  
 CGCCCTTCAAGCACTCCGGACACATCTGCCACTCCGACGCCATCCACCCCTCTCCAGCCTCTCCTT  
 CGGCCACCCACCCGTCAGCATGGTGACCGCCATGGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC227363 protein sequence  
 Red=Cloning site Green=Tags(s)

MEVAPEQPRWMAHPAVLNAQHPDSSHPLAHNYMEPAQLLPPDEVDFVFNHLD SQGNPYANPAHARARV  
 SYSPAHARLTGGQMCRPHLLHSPGLPWL DGGKAAL SAAAAHHHPWTVSPFSKTPLHPSAAGGPGPLSV  
 YPGAGGGSGGGSSVASLTPTAAHSGSHLFGFPPTPPKEVSPDPSTTGAASPASSAGGSAARGEDKDG  
 VKYQVSLTESMKMESGSLRPGLATMGTPATHHP IPTYPSYVPAAAHDYSSGLFHPGGFLGGPASSFTP  
 KQRSKARSCSEGRECVNCGATATPLWRRDGTGHYLCNACGLYHKMNGQNRPLIKPKRRLSAARRAGTCCA  
 NCQTTTTTLWRRNANGDPVCNACGLYYKLHNVNRP LTMKKEGIQTRNRKMSNKS KSKGAECFEELSK  
 MQEKSSPFSAAALAGHMAPVGHLPFSSHGHILPTPTIHPSSSLSF GHPHPSSMVTAMG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6149\\_d01.zip](https://cdn.origene.com/chromatograms/mk6149_d01.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001145661

**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](mailto: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](#)

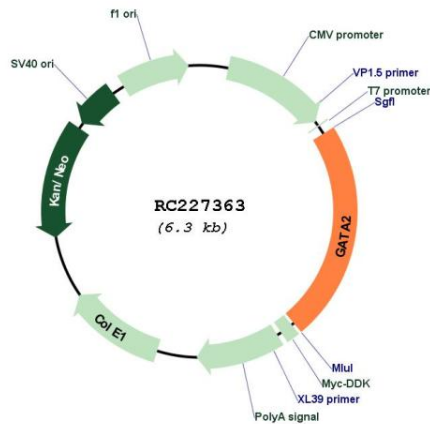
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

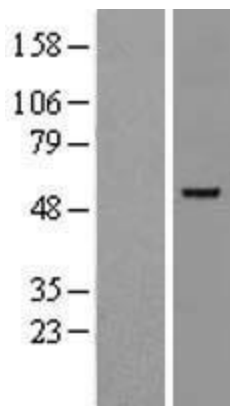
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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.

**RefSeq:** [NM\\_001145661.1](#), [NP\\_001139133.1](#)  
**RefSeq Size:** 3484 bp  
**RefSeq ORF:** 1443 bp  
**Locus ID:** 2624  
**UniProt ID:** [P23769](#)  
**Cytogenetics:** 3q21.3  
**Protein Families:** Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors  
**MW:** 50.5 kDa  
**Gene Summary:** This gene encodes a member of the GATA family of zinc-finger transcription factors that are named for the consensus nucleotide sequence they bind in the promoter regions of target genes. The encoded protein plays an essential role in regulating transcription of genes involved in the development and proliferation of hematopoietic and endocrine cell lineages. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Mar 2009]

### Product images:



Circular map for RC227363



Western blot validation of overexpression lysate (Cat# [LY428960]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227363 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).