

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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGTGGCGCCGAGCAGCCGCGCTGGATGGCGCACCCGGCCGTGCTGAATGCGCAGCACCCCGACT
 CACACCACCCGGCCTGGCGCACAACTACATGGAACCCGCGCAGCTGCTGCCTCCAGACGAGGTGGACGT
 CTTCTTCAATCACCTCGACTCGCAGGGCAACCCCTACTATGCCAACCCCGCTCACGCGGGGCGCGCTC
 TCCTACAGCCCCGCGCACGCCCGCTGACCGGAGGCCAGATGTGCCGCCACACTTGTGACAGCCCGG
 GTTTGCCCTGGCTGGACGGGGGAAAGCAGCCCTCTGCGCGTGGCGCCACCACCACAACCCCTGGAC
 CGTGAGCCCTTCTCAAGACGCCACTGCACCCCTCAGCTGTGGAGGCCCTGGAGGCCACTCTCTGTG
 TACCCAGGGGTGGGGTGGGAGCGGGGAGGCAGCGGGAGCTCAGTGGCCTCCCTACCCCTACAGCAG
 CCCACTCTGGCTCCACCTTTTCGGCTTCCACCCAGCCACCCAAAGAAGTGTCTCTGACCCTAGCAC
 CACGGGGCTGCGTCTCCAGCCTCATCTCCGCGGGGGTGTGAGCCCGAGGAGAGGACAAGGACGGC
 GTCAAGTACCAGGTGTCCTGACGAGAGCATGAAGATGGAAAGTGGCAGTCCCTGCGCCAGGCCCTAG
 CTAATATGGGCACCCAGCCTGCTACACACCACCCATCCCCACCTACCCCTCCTATGTGCCGGCGGCTG
 CCACGACTACAGCAGCGGACTCTTCCACCCCGGAGGCTTCTGGGGGGACCGGCCTCCAGCTTACCCCT
 AAGCAGCGCAGCAAGGCTCGTTCCTGTTTCAAGAGCCGGGAGTGTGCAACTGTGGGGCCACAGCCACCC
 CTCTCTGGCGGGGACGGCACCAGGCTACTGTGCAATGCCTGTGGCCTCTACCACAAGATGAATGG
 GCAGAACCAGCACTCATCAAGCCCAAGCAAGACTGTGGCCCGCAGAAGAGCCGGCACCTGTTGTGCA
 AATTGTGACAGCACAACCACCTTATGGCGCGAAACGCCAACGGGGACCTGTCTGCAACGCCTGTG
 CGCTTACTACAAGCTGCACAATGTTAACAGGCCACTGACCATGAAGAAGGAAGGATCCAGACTCGGAA
 CCGGAAGATGTCCAACAAGTCCAAGAAGCAAGAAAGGGCGGAGTGTTCGAGGAGCTGCAAAAGTGC
 ATGCAGGAGAAGTCATCCCTTCAAGTGCAGCTGCCCTGGCTGGACACATGGCACCTGTGGGCCACCTCC
 CGCCCTTCAAGCACTCCGGACACATCTGCCACTCCGACGCCATCCACCCCTCTCCAGCCTCTCCTT
 CGGCCACCCACCCGTCAGCATGGTGACCGCCATGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

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

MEVAPEQPRWMAHPAVLNAQHPDSSHPLAHNYMEPAQLLPPDEVDFVFNHLD SQGNPYANPAHARARV
 SYSPAHARLTGGQMCRPHLLHSPGLPWL DGGKAAL SAAAAHHHPWTVSPFSKTPLHPSAAGGPGPLSV
 YPGAGGGSGGGSGSSVASLTPTAAHSGSHLFGFPPTPPKEVSPDPSTTGAASPASSAGGSAARGEDKDG
 VKYQVSLTESMKMESGSLRPGLATMGTPATHHP IPTYPSYVPAAAHDYSSGLFHPGGFLGGPASSFTP
 KQRSKARSCSEGRECVNCGATATPLWRRDGTGHYLCNACGLYHKMNGQNRPLIKPKRRLSAARRAGTCCA
 NCQTTTTTLWRRNANGDPVCNACGLYYKLHNVRPLTMKKEGIQTRNRKMSNKS KSKGAECFEELSK
 MQEKSSPFSAAALAGHMAPVGHLPFSSHGHILPTPTIHPSSSLSF GHPHPSSMVTAMG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6149_d01.zip

Restriction Sites:

Sgfl-Mlul

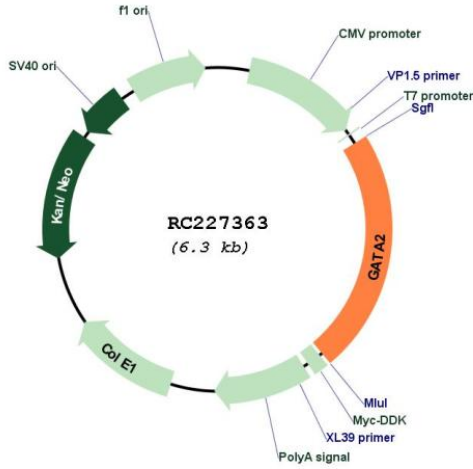
Cloning Scheme:

Cloning sites used for ORF Shutting:

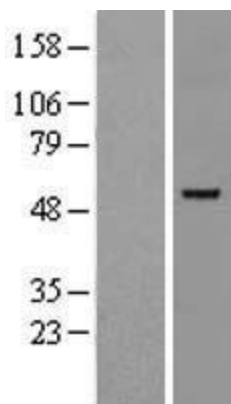


* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001145661
ORF Size:	1440 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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_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:	<p>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]</p>

Product images:

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]).