

Product datasheet for **RC208554**

GATA2 (NM_032638) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GATA2 (NM_032638) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC208554 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGTGGCGCCGAGCAGCCGCGCTGGATGGCGCACCCGGCCGTGCTGAATGCGCAGCACCCCGACT
 CACACCACCCGGCCTGGCGCACAACTACATGGAACCCGCGCAGCTGCTGCCTCCAGACGAGGTGGACGT
 CTTCTTCAATCACCTCGACTCGCAGGGCAACCCCTACTATGCCAACCCCGCTCACGCGGGGCGCGCTC
 TCCTACAGCCCCGCGCACGCCCGCTGACCGGAGGCCAGATGTGCCGCCACACTTGTTCACAGCCCGG
 GTTTGCCCTGGCTGGACGGGGGAAAGCAGCCCTCTCTGCCGCTGCGGCCACCACCACAACCCCTGGAC
 CGTGAGCCCTTCTCAAGACGCCACTGCACCCCTCAGCTGTGGAGGCCCTGGAGGCCACTCTCTGTG
 TACCCAGGGGTGGGGTGGGAGCGGGGAGGCAGCGGGAGCTCAGTGGCCTCCCTACCCCTACAGCAG
 CCCACTCTGGCTCCACCTTTTCGGCTTCCACCCAGCCACCCAAAGAAGTGTCTCTGACCCTAGCAC
 CACGGGGCTGCGTCTCCAGCCTCATCTCCGCGGGGGTGTGAGCCCGAGGAGAGGACAAGGACGGC
 GTCAAGTACCAGTGTCACTGACGGAGAGCATGAAGATGGAAAGTGGCAGTCCCTGCGCCAGGCCCTAG
 CTAATATGGGCACCCAGCCTGCTACACACCACCCATCCCCACCTACCCCTCCTATGTGCCGGCGGCTG
 CCACGACTACAGCAGCGGACTCTTCCACCCCGGAGGCTTCTGGGGGGACCGGCCCTCAGCTTACCCCT
 AAGCAGCGCAGCAAGGCTCGTTCCTGTTTCAAGAGCCGGGAGTGTGTCAACTGTGGGGCCACAGCCACC
 CTCTCTGGCGGGGACGGCACCAGCCACTACCTGTGCAATGCCTGTGGCCTCTACCACAAGATGAATGG
 GCAGAACCAGCACTCATCAAGCCCAAGCAAGACTGTGCGCCGCGAGAAGAGCCGGCACCTGTTGTGCA
 AATTGTGACAGCACAACCACCTTATGGCGCGAAACGCCAACGGGGACCTGTCTGCAACGCCTGTG
 CGCTACTACAAGCTGCACAATGTTAACAGGCCACTGACCATGAAGAAGGAAGGATCCAGACTCGGAA
 CCGGAAGATGTCCAACAAGTCCAAGAAGCAAGAAAGGGGCGGAGTGTTCGAGGAGCTGCAAAAGTGC
 ATGCAGGAGAAGTCATCCCTTCAAGTGCAGCTGCCCTGGCTGGACACATGGCACCTGTGGGCCACCTCC
 CGCCCTTCAAGCACTCCGGACACATCTGCCACTCCGACGCCATCCACCCCTCTCCAGCCTCTCCTT
 CGGCCACCCACCCGTCCAGCATGGTGACCGCCATGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208554 protein sequence
 Red=Cloning site Green=Tags(s)

MEVAPEQPRWMAHPAVLNAQHPDSSHPLAHNYMEPAQLLPPDEVDFVFNHLD SQGNPYANPAHARARV
 SYSPAHARLTGGQMCRPHLLHSPGLPWL DGGKAAL SAAAAHHHPWTVSPFSKTPLHPSAAGGPGGPLSV
 YPGAGGGSGGGSGSSVASLTPTAAHSGSHLFGFPPTPPKEVSPDPSTTGAASPASSAGGSAARGEDKDG
 VKYQVSLTESMKMESGSLRPGLATMGTPATHHPIPTYPSYVPAAAHDYSSGLFHPGGFLGGPASSFTP
 KQRSKARSCSEGRECVNCGATATPLWRRDGTGHYLCNACGLYHKMNGQNRPLIKPKRRLSAARRAGTCCA
 NCQTTTTTLWRRNANGDPVCNACGLYYKLHNVRPLTMKKEGIQTRNRKMSNKS KSKGAECFEELSK
 MQEKSSPFSAAALAGHMAPVGHLPFSSHGHILPTPTIHPSSSLSGHPHPSSMVTAMG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

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

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_032638

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_032638.3](#), [NP_116027.2](#)

RefSeq Size: 3383 bp

RefSeq ORF: 1443 bp

Locus ID: 2624

UniProt ID: [P23769](#)

Cytogenetics: 3q21.3

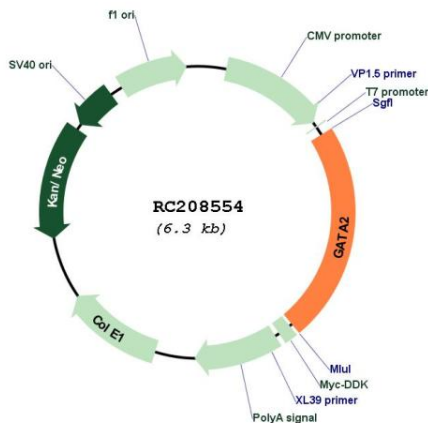
Domains: GATA

Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

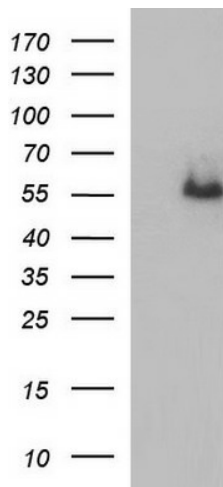
MW: 50.5 kDa

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]

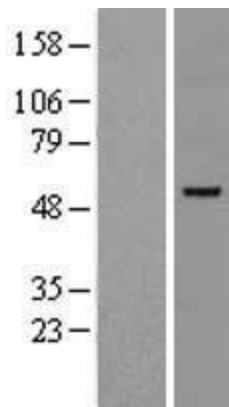
Product images:



Circular map for RC208554



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GATA2 (Cat# RC208554, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GATA2 (Cat# [TA590289]). Positive lysates [LY403182] (100ug) and [LC403182] (20ug) can be purchased separately from OriGene.



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]).



Coomassie blue staining of purified GATA2 protein (Cat# [TP308554]). The protein was produced from HEK293T cells transfected with GATA2 cDNA clone (Cat# RC208554) using MegaTran 2.0 (Cat# [TT210002]).