

Product datasheet for **RC201618**

GATA3 (NM_002051) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GATA3 (NM_002051) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GATA3
Synonyms:	HDR; HDRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC201618 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGGTGACGGCGGACCAGCCGCGCTGGGTGAGCCACCACCACCCCGCGTGTCTAACGGGCAGCACC
 CGGACACGCACCACCCGGGCTCAGCCACTCTACATGGACGCGGCGAGTACCCGCTGCCGGAGGAGT
 GGATGTGCTTTTTAACATCGACGGTCAAGGCAACCACGTCCCGCCCTACTACGAAAACCGTCAAGGCC
 ACGGTGCAGAGGTACCCTCCGACCCACCACGGGAGCCAGGTGTGCCGCCCGCCTCTGCTTCATGGATCCC
 TACCCTGGCTGGACGGCGCAAAGCCCTGGGCAGCCACCACCCGCTCCCCCTGGAATCTCAGCCCTT
 CTCAAGACGTCCATCCACCACGGCTCCCGGGGCCCTCTCCGCTACCCCCGGCCTCGTCTCTCTCC
 TTGTGGGGGGCCACGCCAGCCGCACCTTTCACCTCCCGCCACCCCGCGAAGGACGTCTCCCGG
 ACCCATCGCTGTCCACCCAGGCTCGGCCGGCTCGGCCCGGACGAGAAAGAGTGCCTCAAGTACCA
 GGTGCCCTGCCGACAGCATGAAGCTGGAGTCGTCCTCCACTCCCGTGGCAGCATGACCGCCTGGGTGGA
 GCCTCCTCGTCGACCCACCACCCATCACACCTACCCGCTACGTGCCGAGTACAGTCCGGACTCT
 TCCCCCAGCAGCCTGCTGGGGCGCTCCCCACCGGCTTCGGATGCAAGTCCAGGCCAAGGCCCGGTC
 CAGCACAGAAGGCAGGGAGTGTGGAAGTGTGGGGCAACCTCGACCCACTGTGGCGGCGAGATGGCAG
 GGACTACTGTGCAACGCCTGCGGGCTCTATCACAAGTGAACGGACAGAACCAGCCCTCATTAAGC
 CCAAGCGAAGGCTGTCTGACCCAGGAGCAGGGACGTCTGTGCGAAGTGTGAGACCACCACAACCAC
 ACTCTGGAGGAGGAATGCCAATGGGGACCCTGTCTGCAATGCCTGTGGGCTCTACTACAAGTTCACAAT
 ATTAACAGACCCCTGACTATGAAGAAGGAAGGCATCCAGACCAGAAACCGAAAAATGTCTAGCAAATCCA
 AAAAGTGCAAAAAAGTGATGACTCACTGGAGGACTTCCCAAGAAGCAGCTCGTTAACCCGGCCGCCCT
 CTCAGACACATGCTCCTCCCTGAGCCACATCTCGCCCTTCAGCCACTCCAGCCACATGCTGACCCAGCCC
 ACGCCGATGCACCCGCCATCCAGCCTGTCTTTGGACCACACCACCCCTCCAGCATGCTACCGCCATGG
 GT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201618 protein sequence
 Red=Cloning site Green=Tags(s)

MEVTADQPRWVSHHPAVLNGQHPDTHHPGLSHSYMDAAQYPLPEEVDVLFNIDGQGNHVPYYPYGNVRA
 TVQRYPPTHHGSQVCRPPLLHGSLPWL DGGKALGSHHTASPNLSPFSKTSIHGSPGPLSVYPPASSSS
 LSGGHASPHLFTFPPTPPKDVSPDPSLSTPGSAGSARQDEKECLKYQVPLPDSMKLESSHSRGSMTALGG
 ASSSTHHPITTYPPYVPEYSSGLFPPSSLLGGSPTGFGCKSRPKARSSTEGRECVNCGATSTPLWRRDGT
 GHYLCNACGLYHKMNGQNRPLIKPKRRLSAARRAGTSCANCQTTTTTLWRRNANGDPVCNACGLYKLNH
 INRPLTMKKEGIQTRNRKMSSKSKKCKKVHDSLEDFPKNSSFNPAALSRHMSSLSHISPFSSHMLTTP
 TPMHPPSSLSFGPHHPSSMVTAMG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6014_c07.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN: NM_002051

ORF Size: 1332 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.

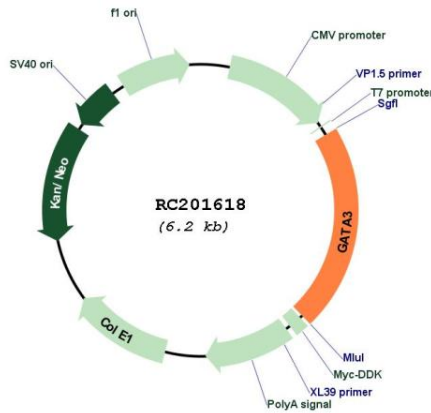
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

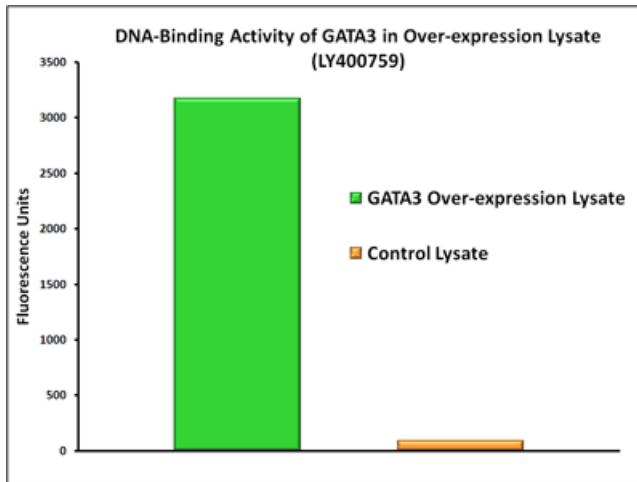
RefSeq: [NM_002051.3](#)
RefSeq Size: 3067 bp
RefSeq ORF: 1332 bp
Locus ID: 2625
UniProt ID: [P23771](#)
Cytogenetics: 10p14
Domains: GATA
Protein Families: Adult stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors
MW: 48 kDa

Gene Summary: This gene encodes a protein which belongs to the GATA family of transcription factors. The protein contains two GATA-type zinc fingers and is an important regulator of T-cell development and plays an important role in endothelial cell biology. Defects in this gene are the cause of hypoparathyroidism with sensorineural deafness and renal dysplasia. [provided by RefSeq, Nov 2009]

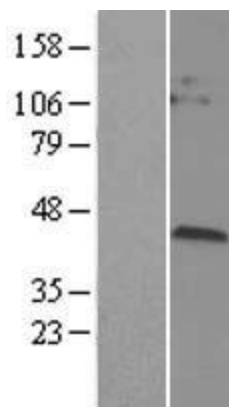
Product images:



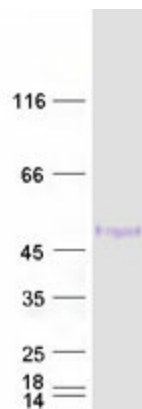
Circular map for RC201618



DNA-binding activity of GATA3 was measured in OriGene over-expression lysate [LY400759] and a control lysate. Three microliters of each lysate was tested with a transcription factor binding assay utilizing GATA3-specific DNA sequences. The high level of activity observed in the over-expression lysate compared to the control lysate demonstrates that the expressed GATA3 is biologically active in the lysate. Overexpression cell lysates are prepared from HEK293T cells transfected with RC201618 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Western blot validation of overexpression lysate (Cat# [LY400759]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201618 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GATA3 protein (Cat# [TP301618]). The protein was produced from HEK293T cells transfected with GATA3 cDNA clone (Cat# RC201618) using MegaTran 2.0 (Cat# [TT210002]).