

## Product datasheet for **RC211904**

### **GATA3 (NM\_001002295) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GATA3 (NM_001002295) 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:**

>RC211904 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGGTGACGGCGGACCAGCCGCGCTGGGTGAGCCACCACCACCCCGCGTCTCAACGGGCAGCACC  
 CGGACACGCACCACCCGGGCTCAGCCACTCTACATGGACGCGGCGCAGTACCCGCTGCCGGAGGAGGT  
 GGATGTGCTTTTTAACATCGACGGTCAAGGCAACCACGTCGCCCTACTACGAAAACCGTCAAGGCC  
 ACGGTGCAGAGGTACCCTCCGACCACCACGGGAGCCAGGTGTGCCGCCGCTCTGCTTCATGGATCCC  
 TACCCTGGCTGGACGGCGCAAAGCCCTGGGCAGCCACCACCCGCTCCCCCTGGAATCTCAGCCCCTT  
 CTCAAGACGTCCATCCACCACGGCTCCCGGGGCCCTCTCCGCTACCCCCGGCCTCGTCTCTCTCC  
 TTGTGGGGGGCCACGCCAGCCGCACCTTTACCTTCCGCCACCCCGCGAAGGACGTCTCCCCGG  
 ACCCATCGCTGTCCACCCAGGCTCGGCCGGCTCGGCCCGGACGAGAAAGAGTGCCTCAAGTACCA  
 GGTGCCCTGCCGACAGCATGAAGCTGGAGTCGTCCTCCACTCCCGTGGCAGCATGACCGCCTGGGTGGA  
 GCCTCCTCGTCGACCACCACCCATCACCACTACCCGCTACGTGCCGAGTACAGCTCCGGACTCT  
 TCCCCCAGCAGCCTGCTGGGGCGCTCCCCACCGGCTTCGGATGCAAGTCCAGGCCAAGGCCCGGTC  
 CAGCACAGAAGGCAGGGAGTGTGGAAGTGTGGGGCAACCTCGACCCACTGTGGCGGCGAGATGGCAG  
 GGACTACTGTGCAACGCCTGCGGGCTCTATCACAAGTGAACGGACAGAACCAGCCCTCATTAAGC  
 CCAAGCGAAGGCTGTCTGAGCCAGGAGCAGGGACGTCCTGTGCGAAGTGTGAGACCACCACAACCAC  
 ACTCTGGAGGAGGAATGCCAATGGGGACCCTGTCTGCAATGCCTGTGGGCTCTACTACAAGTTCACAAT  
 ATTAACAGACCCCTGACTATGAAGAAGGAAGGCATCCAGACCAGAAACCGAAAAATGTCTAGCAAATCCA  
 AAAAGTGCAAAAAAGTGATGACTCACTGGAGGACTTCCCAAGAAGCAGCTCGTTAACCCGGCCGCCCT  
 CTCAGACACATGCTCCTCCCTGAGCCACATCTCGCCCTTCAGCCACTCCAGCCACATGCTGACCACGCC  
 ACGCCGATGCACCCGCCATCCAGCCTGTCTTTGGACCACACCACCCTCCAGCATGTCACCGCCATGG  
 GT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC211904 protein sequence  
 Red=Cloning site Green=Tags(s)

MEVTADQPRWVSHHPAVLNGQHPDTHHPGLSHSYMDAAQYPLPEEVDVLFNIDGQGNHVPYYPYGNVRA  
 TVQRYPPTHHGSQVCRPPLLHGSLPWL DGGKALGSHHTASPNLSPFSKTSIHGSPGPLSVYPPASSSS  
 LSGGHASPHLFTFPPTPPKDVSPDPSLSTPGSAGSARQDEKECLKYQVPLPDSMKLESSHSRGSMTALGG  
 ASSSTHHPITTYPPYVPEYSSGLFPPSSLLGGSPTGFGCKSRPKARSSTEGRECVNCGATSTPLWRRDGT  
 GHYLCNACGLYHKMNGQNRPLIKPKRRLSAARRAGTSCANCQTTTTTLWRRNANGDPVCNACGLYKLNH  
 INRPLTMKKEGIQTRNRKMSKSKKCKKVHDSLEDFPKNSSFNPAALSRHMSSLSHISPFSSSHMLTTP  
 TPMHPPSSLSFGPHHPSSMVTAMG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6301\\_e11.zip](https://cdn.origene.com/chromatograms/mk6301_e11.zip)

**Restriction Sites:**

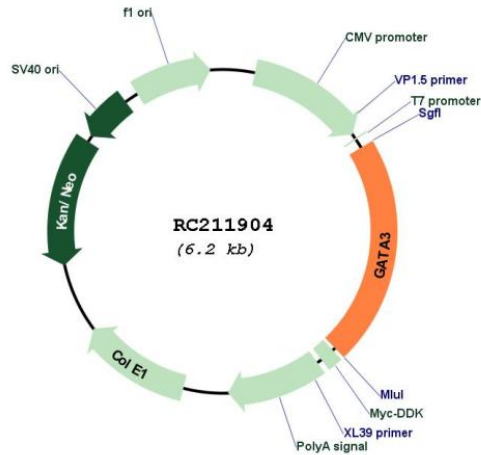
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


<b>ACCN:</b>	NM_001002295
<b>ORF Size:</b>	1332 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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\\_001002295.2](#)

**RefSeq Size:** 3070 bp

**RefSeq ORF:** 1335 bp

**Locus ID:** 2625

**UniProt ID:** [P23771](#)

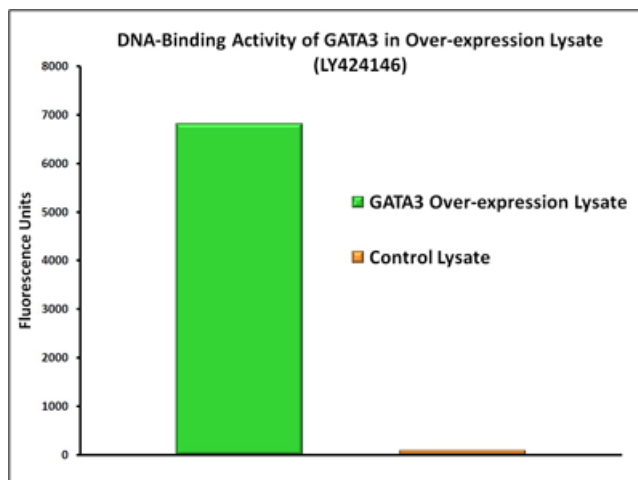
**Cytogenetics:** 10p14

**Protein Families:** Adult stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors

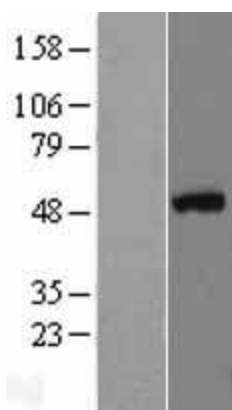
**MW:** 48 kDa

**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]

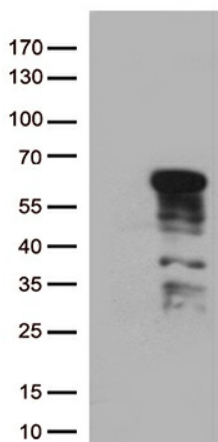
## Product images:



DNA-binding activity of EGR2 was measured in OriGene over-expression lysate [LY424742] and a control lysate. Three microliters of each lysate was tested with a transcription factor binding assay utilizing EGR2-specific DNA sequences. The high level of activity observed in the over-expression lysate compared to the control lysate demonstrates that the expressed EGR2 is biologically active in the lysate. Overexpression cell lysates are prepared from HEK293T cells transfected with RC211904 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Western blot validation of overexpression lysate (Cat# [LY424146]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211904 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GATA3 (Cat# RC211904, 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-GATA3 (Cat# [TA809095])(1:500).