

## Product datasheet for **RG202368**

### **RFX5 (NM\_000449) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RFX5 (NM_000449) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RFX5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG202368 representing NM\_000449  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCAGAAGATGAGCCTGATGCTAAGAGCCCCAAGACTGGGGGAAGGGCCCCCAGTGGTGCTGAGG  
 CTGGGAAACCTACCACCTTCTTCAGAGGCTCCGAGGTACCATTTCCAAGGCCGTGCAGAACAAAGTAGA  
 GGGGATCCTGCAAGATGTACAGAAATTTCTGACAATGACAAGCTGTATCTCTACCTTCAGCTCCCTCA  
 GGACCCACTGGAGACAAAAGCTCAGAGCCAAGTACACTGAGCAATGAGGAGTACATGTATGCCTATA  
 GGTGGATCCGCAACCACCTGGAAGAGCACACTGACACCTGTCTGCCAAAGCAAAGTGTATGATGCCTA  
 TCGGAAGTACTGTGAGAGTCTTGCTGTTGCCGCCACTCAGCACAGCCAACCTTTGGCAAGATCATCAGA  
 GAGATCTCCCTGACATCAAAGCTCGAAGGCTTGGTGGCCGGGCCAGTCCAAATATTGCTACAGTGGCA  
 TAAGGAGGAAGACCTTGGTGTCTATGCCACCCCTGCCTGGACTTGACCTAAAGGGTCTGAGAGTCCAGA  
 AATGGGCCAGAAGTAACCCAGCACCTCGAGATGAAGTGGTGGAGGCAGCGTGTGCCCTGACCTGTGAC  
 TGGGCAGAGCGGATCCTGAAACGGTCTTCAGTCCATCGTTGAGGTCCGCCGCTTCTCTGCTACAGCAGC  
 ATCTCATCTCTGCCCGATCTGCACATGCCCATGTGCTTAAGGCCATGGGGCTTGCTGAAGAGGACGAACA  
 TGCACCTCGGGAACGGTCACTAAACCAAAGAATGGTTTAGAGAACCCAGAGGGTGGAGCCACAAGAAG  
 CCAGAGAGACTGGCCAGCCTCCTAAGGATCTGGAAGCCGAAGTGGGGCCGGTCTCTCGCACGTGGAG  
 AGCGGAAGAAGAGTGTAGTTGAGAGCTCGGCCCCAGGAGCCAATAACCTGCAGGTTAATGCCCTAGTGGC  
 TCGGCTGCCTCTGCTCCTCCCCGGGCCCTCGCTCAATAATCCGCCAATCCCAGTCTCTCCACCTATT  
 CTGGCCCCAGGCTTCTTCAGGTGCCCTGAAAGTGGCTACACTGCCTCTGTCTAGTAGGGCCGGGGCAC  
 CCCCAGCAGCTGTGCCATCATTAAACATGATCTTACCAACTGTTCTGCTTTGCCCTGGACCTGGACCTGG  
 GCCTGGGCGAGCTCCACCTGGGGGACTCACTCAGCCCGGGGCACAGAGAACAGAGAGGTAGGCATAGGT  
 GGTGACCAAGGACCACATGACAAGGGTGTCAAGAGGACAGCTGAAAGTACCTGTGAGTGAGGCCAGTGGGC  
 AGGCTCCACCAGCTAAAGCAGCAAAGCAGGATATAGAGGATACAGCAAGTATGCCAAAAGGAAACGGGG  
 GCGCCCTCGAAAAAGTCAAGTGGAAAGTGGGAAAGGAATTCTACCCCTCTCAAGTCAAGTCAAGTCAAGT  
 GAATCTGCCAGTCTCAAGGTTACCATGGGAGACATGGGGCTCAGGAGGGGAAGGCAACTCAGCTGGAG  
 GGGCAGAGAGGCCAGGGCAATGGGAGAGGCTGAAAAGGGGGCAGTACTGCCAGGGTCAAGGAGATGG  
 TACTGTTTCAAAGGAGGAAGGGCCCCGGTCCAGCATAACAAAGAAGCAGAAGATAAAATCCCTTG  
 GTCCCTCAAAGTGAAGTGTATCAAGGGCAGCAGAAGCCAAAAGGAGGCTTTTCTTTGGCAAAGGGAG  
 AGGTAGACTGCAACCACAGGTAATAAAGACTTAAAGGAGCATGTGCTCAAAGTCTTATCCCAGGA  
 GCATAAAGACCCAAAAGCAACCCCCA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG202368 representing NM\_000449  
 Red=Cloning site Green=Tags(s)

MAEDEPDAKSPKTGGRAPPGAEAGEPTLLQRLRGTISKAVQNKVEGILQDVQKFSNDKLYLYLQLPS  
 GPTTGDKSSEPSTLSNEEYMYAYRWIRNHLEHTDCLPKQSVYDAYRKYCESLACCRPLSTANFGKIIR  
 EIFPDIKARRLGGRGQSKYCYSGIRRKTLVSMPLPLGLDLKGESEPMGPEVTPAPRDELVEAACALTC  
 WAERILKRSFSSIVEVARFLLQHLISARSAHAHVLKAMGLAEEDEHAPRERSKPKNGLNPEGGAHK  
 PERLAQPPKDLEARTGAGPLARGERKKSVESSAPGANNLQVNALVARLPLLPAPRSLIPPIVSPPI  
 LAPRLSSGALKVATLPLSSRAGAPPAVPIINMILPTVPALPGPGPGRAPPGLTQPRGTENREVGIG  
 GDQGPDKGVKRTAEVPVSEASGQAPPAKAAKQDIEDTASDAKRKRGRPRKSSGSGERNSTPLKSAAM  
 ESAQSSRLPWETWGSSEGNSSAGGAERPMPGAEKGAFLAQQQGDGTVSKGGRGPGSQHTKEAEDIPL  
 VPSKVSVIKGSRSQKEAFPLAKGEVDTAPQGNKDLKEHVLQSSLQEHKDPKATPP

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_000449

**ORF Size:** 1848 bp

**OTI Disclaimer:** 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\\_000449.3](#), [NP\\_000440.1](#)

**RefSeq Size:** 3618 bp

**RefSeq ORF:** 1851 bp

**Locus ID:** 5993

**UniProt ID:** [P48382](#)

**Cytogenetics:** 1q21.3

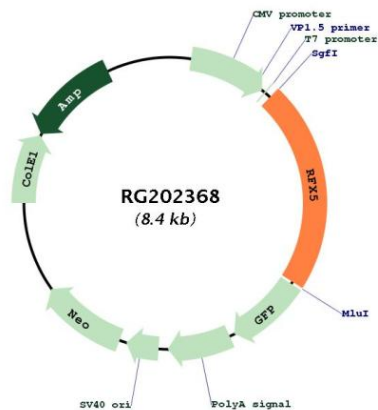
**Domains:** RFX\_DNA\_binding

**Protein Families:** Transcription Factors

**Protein Pathways:** Antigen processing and presentation, Primary immunodeficiency

**Gene Summary:** A lack of MHC-II expression results in a severe immunodeficiency syndrome called MHC-II deficiency, or the bare lymphocyte syndrome (BLS; MIM 209920). At least 4 complementation groups have been identified in B-cell lines established from patients with BLS. The molecular defects in complementation groups B, C, and D all lead to a deficiency in RFX, a nuclear protein complex that binds to the X box of MHC-II promoters. The lack of RFX binding activity in complementation group C results from mutations in the RFX5 gene encoding the 75-kD subunit of RFX (Steimle et al., 1995). RFX5 is the fifth member of the growing family of DNA-binding proteins sharing a novel and highly characteristic DNA-binding domain called the RFX motif. Multiple alternatively spliced transcript variants have been found but the full-length natures of only two have been determined. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG202368