

## Product datasheet for **RC212448**

### **RFX5 (NM\_001025603) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RFX5 (NM_001025603) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RFX5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC212448 representing NM\_001025603  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAGAAGATGAGCCTGATGCTAAGAGCCCCAAGACTGGGGGAAGGGCCCCCAGTGGTGCTGAGG  
 CTGGGGAACCTACCACCTTCTTCAGAGGCTCCGAGGTACCATTTCCAAGCCGTGCAGAACAAAGTAGA  
 GGGGATCCTGCAAGATGTACAGAAATTTCTGACAATGACAAGCTGTATCTCTACCTTCAGCTCCCTCA  
 GGACCCACTGGAGACAAAAGCTCAGAGCCAAGTACACTGAGCAATGAGGAGTACATGTATGCCTATA  
 GGTGGATCCGCAACCACCTGGAAGAGCACACTGACACCTGTCTGCCAAAGCAAAGTGTATGATGCCTA  
 TCGGAAGTACTGTGAGAGTCTTGCTGTGCGGCCACTCAGCACAGCCAACCTTGGCAAGATCATCAGA  
 GAGATCTCCCTGACATCAAAGCTCGAAGGCTTGGTGGCCGGGCCAGTCCAAATATTGCTACAGTGGCA  
 TAAGGAGGAAGACCTTGGTGTCTATGCCACCCCTGCCTGGACTTGACCTAAAGGGTCTGAGAGTCCAGA  
 AATGGGCCAGAAGTAACCCAGCACCTCGAGATGAAGTGGTGGAGGCAGCGTGTGCCCTGACCTGTGAC  
 TGGGCAGAGCGGATCCTGAAACGGTCTTCAGTCCATCGTTGAGGTCCGCCCTCCTGCTACAGCAGC  
 ATCTCATCTGCCCCGATCTGCACATGCCCATGTGCTTAAGGCCATGGGGCTTGCTGAAGAGGACGAACA  
 TGCACCTCGGGAACGGTCATCTAAACCAAAGAATGGTTTAGAGAACCCAGAGGGTGGAGCCACAAGAAG  
 CCAGAGAGACTGGCCAGCCTCCTAAGGATCTGGAAGCCGAAGTGGGGCCGGTCTCTCGCACGTGGAG  
 AGCGGAAGAAGAGTGTAGTTGAGAGCTCGGCCAGGAGCCAATAACCTGCAGGTTAATGCCCTAGTGGC  
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 GCCTGGGCGAGCTCCACCTGGGGACTCACTCAGCCCCGGGGCACAGAGAACAGAGAGGTAGGCATAGGT  
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 AGGCTCCACCAGCTAAAGCAGCAAAGCAGGATATAGAGGATACAGCAAGTATGCCAAAAGGAAACGGGG  
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 GGGCAGAGAGGCCAGGGCAATGGGAGAGGCTGAAAAGGGGGCAGTACTGCCAGGGTCAAGGAGATGG  
 TACTGTTTCAAAGGAGGAAGGGCCCCGGTCCAGCATAACAAAGAAGCAGAAGATAAAATCCCTTG  
 GTCCTCAAAGTGAAGTGTATCAAGGGCAGCAGAAGCCAAAAGGAGGCTTTTCTTTGGCAAAGGGAG  
 AGGTAGACACTGCACCACAGGTAATAAAGACTTAAAGGAGCATGTGCTCAAAGTCTTATCCCAGGA  
 GCATAAAGACCCAAAAGCAACCCCCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212448 representing NM\_001025603  
 Red=Cloning site Green=Tags(s)

MAEPEPAKSPKTGGRAPPGAEAGEPTLLQRLRGTISKAVQNKVEGILQDVQKFSNDKLYLYLQLPS  
 GPTTGDKSSEPSTLSNEEYMYAYRWIRNHLEHTDCLPKQSVYDAYRKYCESLACCRPLSTANFGKIIR  
 EIFPDIKARRLGGRGQSKYCYSGIRKTLVSMPLPLGLDLKGSESPMGPEVTPAPRDELVEAACALTC  
 WAERILKRSFSSIVEVARFLLQHLISARSAHAVLKMGLAEEDHAPRERSKPKNGLENPEGGAHKK  
 PERLAQPPKDLEARTGAGPLARGERKKSVESSAPGANNLQVNLVARLPLLLPRAPRSLIPPIVSPPI  
 LAPRLSSGALKVATLPLSSRAGAPPAAVPIINMILPTVPALPGPGPGRAPPGLTQPRGTENREVGIG  
 GDQGPDKGVKRTAEVPVSEASGQAPPAAKQDIEDTASDAKRKRGRPRKSSGSGERNSTPLKSAAM  
 ESAQSSRLPWETWGSSEGNASAGGAERPGMGEAEKGAVLAQQQGDGTVSKGGRPGSQHTKEAEDIPL  
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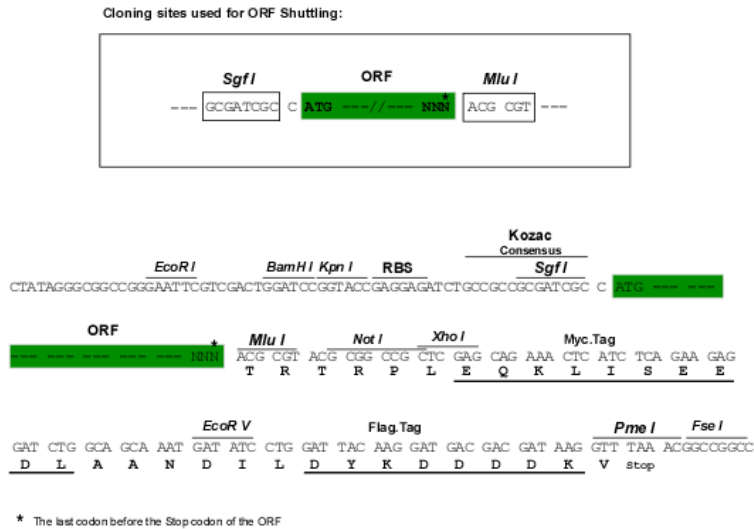
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2917\\_e05.zip](https://cdn.origene.com/chromatograms/mg2917_e05.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001025603

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\\_001025603.1](#), [NP\\_001020774.1](#)

RefSeq Size: 3611 bp

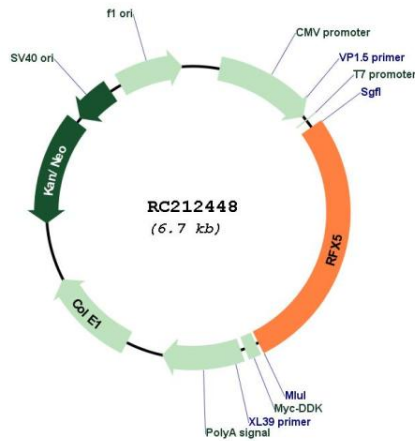
RefSeq ORF: 1851 bp

Locus ID: 5993

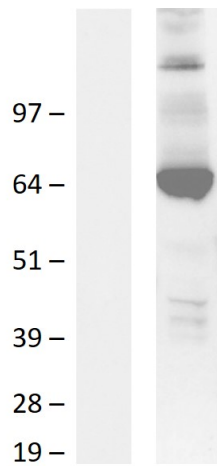
UniProt ID: [P48382](#)

<b>Cytogenetics:</b>	1q21.3
<b>Protein Families:</b>	Transcription Factors
<b>Protein Pathways:</b>	Antigen processing and presentation, Primary immunodeficiency
<b>MW:</b>	65.1 kDa
<b>Gene Summary:</b>	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]

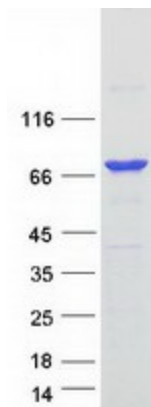
**Product images:**



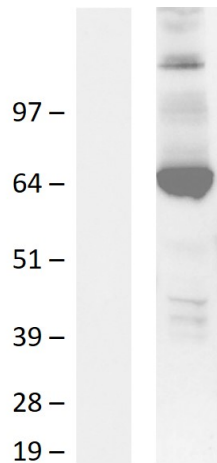
Circular map for RC212448



Western blot validation of overexpression lysate (Cat# [LY422455]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212448 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RFX5 protein (Cat# [TP312448]). The protein was produced from HEK293T cells transfected with RFX5 cDNA clone (Cat# RC212448) using MegaTran 2.0 (Cat# [TT210002]).



Western blot validation of overexpression lysate (Cat# [LY422455]) using an anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212448 using transfection reagent PEI