

## Product datasheet for **RC220744**

### RFXANK (NM\_003721) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RFXANK (NM_003721) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RFXANK
Synonyms:	ANKRA1; BLS; F14150_1; RFX-B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220744 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCTTACCCAGCCTGCAGAAGACCTCATCCAGACCCAGCAGACCCCTGCCTCAGAACTTGGGGACC  
CTGAAGACCCCGGAGAGGAGGCTGCAGATGGCTCAGACTGTGGTCTCAGTCTCTTCCCTGCACCCC  
TGAGCCTGTGAATCCTGAACCGGATGCCAGTGTTCCTCTCCACAGGCAGGCAGCTCCCTGAAGCACTCC  
ACCACTCTACCAACCGCAGCGAGGGAACGAGGTGTGAGCTCTGCCGGCCACCTAGACTCCCTGTCCA  
TCCACCAGCTCGCAGCACAGGGGAGCTGGACCAGCTGAAGGAGCATTTCGGAAAGGTGACAACCTCGT  
CAACAAGCCAGACGAGCGCGGCTTACCCCCCTCATCTGGGCCTCCGCCTTGGAGAGATTGAGACCGTT  
CGCTTCTGCTGGAGTGGGGTGGCGACCCACATCCTGGCAAAAGAGCGAGAGAGCGCCCTGTCGCTGG  
CCAGCACAGGCGGCTACACAGACATTGTGGGGCTGCTGCTGGAGCGTGACGTGGACATCAACATCTATGA  
TTGGAATGGAGGGACGCCACTGCTGTACGCTGTGCGCGGGAACCAGTGAATGCGTTGAGGCCTTGCTG  
GCCCGAGGCGTGACCTCACCACCGAAGCCGACTCTGGCTACACCCCGATGGACCTTGCCGTGGCCCTGG  
GATACCGAAAGTGCAACAGGTGATCGAGAACCACATCCTCAAGCTCTTCCAGAGCAACCTGGTGCCCGC  
TGACCCCTGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC220744 protein sequence  
Red=Cloning site Green=Tags(s)

MELTQPAEDLIQTQQTASELGDPEDPGEEAADGSDTVVLSLFPCTPEPVNPEPDASVSSPQAGSSLKHS  
 TTLTNRQRGNEVSALPATLDSL SIHQLAAQGELDQLKEHLRKGDNLVKNPDERGFTPLIWASAFGEIETV  
 RFLLEWGADPHILAKERESALSLASTGGYTDIVGLLLERDVIDINIYDWNGGTPLL YAVRGNHVKCV EALL  
 ARGADLTTEADSGYTPMDLAVALGYRKVQV IENHILKLFQSNLVPADPE

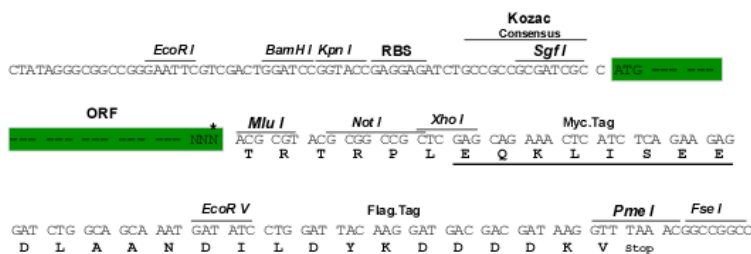
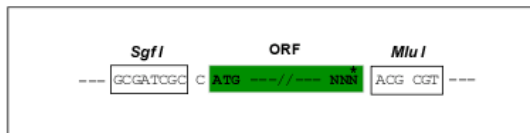
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6444\\_e12.zip](https://cdn.origene.com/chromatograms/mk6444_e12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_003721

**ORF Size:** 780 bp

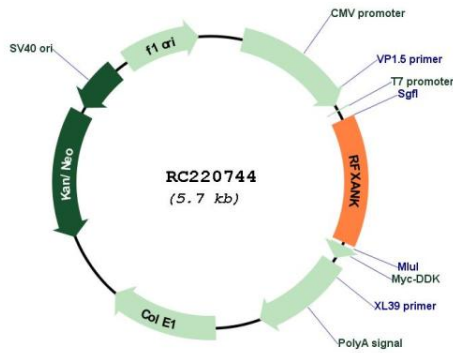
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

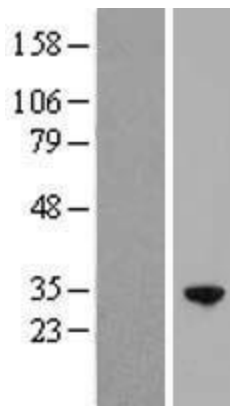
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_003721.4</a>
<b>RefSeq Size:</b>	1455 bp
<b>RefSeq ORF:</b>	783 bp
<b>Locus ID:</b>	8625
<b>UniProt ID:</b>	<a href="#">O14593</a>
<b>Cytogenetics:</b>	19p13.11
<b>Domains:</b>	ANK
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Antigen processing and presentation, Primary immunodeficiency
<b>MW:</b>	28.1 kDa
<b>Gene Summary:</b>	Major histocompatibility (MHC) class II molecules are transmembrane proteins that have a central role in development and control of the immune system. The protein encoded by this gene, along with regulatory factor X-associated protein and regulatory factor-5, forms a complex that binds to the X box motif of certain MHC class II gene promoters and activates their transcription. Once bound to the promoter, this complex associates with the non-DNA-binding factor MHC class II transactivator, which controls the cell type specificity and inducibility of MHC class II gene expression. This protein contains ankyrin repeats involved in protein-protein interactions. Mutations in this gene have been linked to bare lymphocyte syndrome type II, complementation group B. Multiple alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2013]

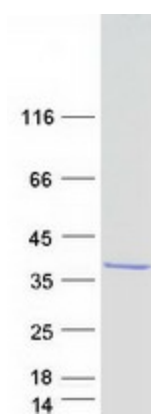
Product images:



Circular map for RC220744



Western blot validation of overexpression lysate (Cat# [LY418474]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220744 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RFXANK protein (Cat# [TP320744]). The protein was produced from HEK293T cells transfected with RFXANK cDNA clone (Cat# RC220744) using MegaTran 2.0 (Cat# [TT210002]).