

## Product datasheet for **RC231307**

### **FMRP (FMR1) (NM\_001185075) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FMRP (FMR1) (NM_001185075) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FMRP
Synonyms:	FMRP; FRAXA; POF; POF1; POFX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC231307 representing NM\_001185075  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAGGAGCTGGTGGTGAAGTGCAGGCTCCAATGGCGCTTTCTACAAGGCATTTGTAAGGATGTTCT  
 ATGAAGATTCAATAACAGTTGCATTTGAAAACAACCTGGCAGCCTGATAGGCAGATTCCATTTTCATGATGT  
 CAGATTCACCTCCTGTAGGTTATAATAAAGATATAAATGAAAGTGATGAAGTTGAGGTGATTCCAGA  
 GCAAAATGAAAAGAGCCTTGCTGTTGGTGGTTAGCTAAAGTGAGGATGATAAAGGGTGAGTTTTATGTGA  
 TAGAATATGCAGCATGTGATGCAACTTACAATGAAATTGTACAATTGAACGTCTAAGATCTGTTAATCC  
 CAACAACTGCCACAAAAGATACTTTCCATAAGATCAAGCTGGATGTGCCAGAAGACTACGGCAAAATG  
 TGTGCCAAAGAGGCGGCACATAAGGATTTAAAAAGGCAGTTGGTGCCTTTCTGTAACCTATGATCCAG  
 AAAATTATCAGCTTGTCATTTTGTCCATCAATGAAGTCACTCAAAGCGAGCACATATGCTGATTGACAT  
 GCACTTTTCGGAGTCTGCGCACTAAGTTGTCTCTGATAATGAGAAATGAAGAAGCTAGTAAGCAGCTGGAG  
 AGTTCAAGGCAGCTTGCCTCGAGATTTTCATGAACAGTTTATCGTAAGAGAAGATCTGATGGGTCTAGCTA  
 TTGGTACTCATGGTGTAAATTCAGCAAGCTAGAAAAGTACCTGGGGTCACTGCTATTGATCTAGATGA  
 AGATACCTGCACATTTTCATTTTATGGAGAGGATCAGGATGCAGTGAAAAAGCTAGAAGCTTTCTCGAA  
 TTTGCTGAAGATGTAATACAAGTTCCAAGGAACCTAGTAGGCAAAGTAATAGGAAAAATGGAAAGCTGA  
 TTCAGGAGATTGTGGACAAGTCAAGGAGTTGTGAGGGTGAAGATTGAGGCTGAAAAATGAGAAAAATGTTCC  
 ACAAGAAGAGGAAATATGCCACCAAATTCCTTCTTCCAATAATTCAAGGGTTGGACCTAATGCCCCA  
 GAAGAAAAAACATTTAGATATAAAGGAAAACAGCACCCATTTTCTCAACCTAACAGTACAAAAGTCC  
 AGAGGGTGTAGTGGCTTCATCAGTTGTAGCAGGGGAATCCAGAAAACCTGAACCTCAAGGCTTGGCAGGG  
 TATGGTACCATTGTTTTTGTGGGAACAAGGACAGCATCGCTAATGCCACTGTTCTTTTGGATTATCAC  
 CTGAACTATTTAAAGCTCCAACAGAGGAAGAGAGGGAGAGCTTCTGCGCAGAGGAGACGGACGGCGGCG  
 TGGAGGGGAGGAAGAGGACAAGGAGGAAGAGGACGTGGAGGAGGCTTCAAAGGAAACGACGATCACTCC  
 CGAACAGATAATCGTCCACGTAATCCAAGAGAGGCTAAAGGAAGAACAACAGATGGATCCCTTCAGATCA  
 GAGTTGACTGCAATAATGAAAGGAGTGTCCACACTAAAACATTACAGAATACCTCCAGTGAAGGTAGTCG  
 GCTGCGCAGGGTAAAGATCGTAACCAGAAGAAAGAGAAGCCAGACAGCGTGGATGGTCAGCAACCACTC  
 G

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC231307 representing NM\_001185075  
 Red=Cloning site Green=Tags(s)

MEELVVEVRGNSGAFYKAFVKDVHEDSITVAFENWQPDQRQIPFHDVRFPPPVGYNKDINESDEVEVYSR  
 ANEKEPCCWFLAKVRMIKGEFYVIEYAACDATYNEIVTIERLRVSNPNKPKATKDTFHKIKLDVPEDLRQM  
 CAKEAAHKDFKAVGAFSVTYDPENYQLVILSINEVTSKRAHMLIDMHFRSLRKLKSLIMRNEEASKQLE  
 SSRQLASRFHEQFIVREDLMGLAIGTHGANIQQARKVPGVTAIDLDEDTCTFHIVGEDQDAVKKARSFLE  
 FAEDVIQVPRNLVGKVIKNGKLIQEIVDKSGVVRVRIEAENEKNVPQEEEIMPPNSLPSNNSRVGPNAP  
 EEKHLDIKENSTHFSQPNSTKVQRVLVASSVAGESQKPELKAQGMVFPVFGTKDSIANATVLLDYH  
 LNYLKLQQRKRGRASCAEETDGGVEGEEEDKEEEDVEEASKETTIPEQIIVHVIQERLKEEQMDPFRS  
 ELTAIMKGVSTLKHRYRIPPVKVVGRCARVKIVTRRKRSTAWMVSNSH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8066\\_b01.zip](https://cdn.origene.com/chromatograms/mk8066_b01.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001185075

**ORF Size:** 1611 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\\_001185075.1](#), [NP\\_001172004.1](#)

**RefSeq ORF:** 1614 bp

**Locus ID:** 2332

**UniProt ID:** [Q06787](#)

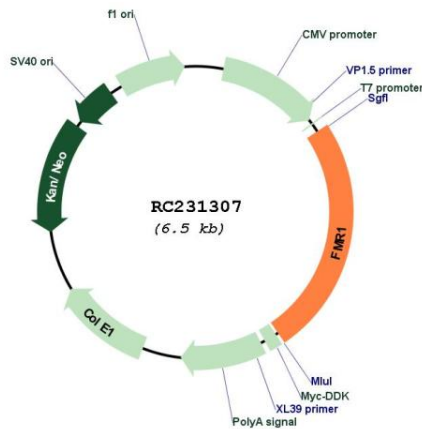
**Cytogenetics:** Xq27.3

**Protein Families:** Druggable Genome

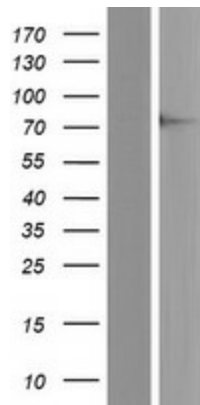
**MW:** 61.5 kDa

**Gene Summary:** The protein encoded by this gene binds RNA and is associated with polysomes. The encoded protein may be involved in mRNA trafficking from the nucleus to the cytoplasm. A trinucleotide repeat (CGG) in the 5' UTR is normally found at 6-53 copies, but an expansion to 55-230 repeats is the cause of fragile X syndrome. Expansion of the trinucleotide repeat may also cause one form of premature ovarian failure (POF1). Multiple alternatively spliced transcript variants that encode different protein isoforms and which are located in different cellular locations have been described for this gene. [provided by RefSeq, May 2010]

**Product images:**



Circular map for RC231307



Western blot validation of overexpression lysate (Cat# [LY434306]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231307 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).