

## Product datasheet for **MR221748**

### **Mfrp (NM\_001190314) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mfrp (NM_001190314) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mfrp
Synonyms:	rd6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR221748 representing NM\_001190314  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAAGGACTATGACGACGTCATCCTCCGTCCAGAGGCGAGTGAGTTGAGCAAGACAGAGTTCTGTAATC  
 CTGCTTTTCGACCCGGAAGCAGGGCCATCCTGCCCTCCACCAGCGTTACAGAGGGATGTCGGCAGCCGGCT  
 CCAAGCCCCCTGGCATGCCAGCGTCTCCGGGGCTACAGCCGACTGCCACTTCTCCTGGTTCTGTATT  
 CTGCTTCTCAGTGGCCTGCTGCTCCTGCTGCTGGGGCTACTGGTGGCTGTCATCCTGGCTCAGTGCAGG  
 CTACATCCCTCCCAGGACTACCAAGAACCCTGCTCACCCGAGGCTCACCCCATGGGTGTCATTCC  
 CAGCACCACCCCTAACACCACCACCACCACCACCCTACCACCCAGCAAGGACAGGGCAGCAGGAGGCA  
 GCCATGAGCCCTACACACCAGACCCTGTGGAGGCTCCTTCTGGTCCCAGTGGTTTCTTCAGCAGCC  
 CTAACACCCAGACCTTACCACCCCTCAGCCACTGTGTCTGGCATATCCAGGTAGCCGCGGGCCAGAC  
 AATACAGCTCAAGATTCAAGCCCTCAGCATAGAGAGTATGCTCACCTGTCTTTTGTATCGCTTGGAAATT  
 ATCTCAGAGCCTACAGGCCCTCCTCAGGGTGTGTGGTAAAACACCTCCTGCCACATTAACACCAATA  
 CCAGCCACCTCCGTGTGTCTTCTGCTCTGATAACGATGTGGAAGGGTCTGGTTTCCAGGCTGGTACCA  
 AGCAGTGGCCCTGGACATTGGAGCTGTGCCATAATGAGTTCCTGTGACCTTCTCCTCTGCCTGAAG  
 CGTGACTCTGTATGTGACGGTATTACCGAGTGTCCGATGGCAGTGACGAGGCCAACTGCAGTGCCAAGA  
 CGTTGGGGTGTGGAGGAACTGACTGGGCTCTATGGCGTATTCTTACCCAACTATCCACAGCACTA  
 CCCTCACCAACAGCTTTGCACCTGGTACATCGAAGTGCCTGTGGGATACGGGATAAGACTGGAGTCCAC  
 AACTTCAGTCTGGAAGCACAGGCTGAGTGAAGTTTACTACGTGGAAGTGTACGAGGCCAGCAACCTGG  
 GAACCTTCAGCTTCTGGCAGGTTCTGTGGAGCAGAGCCACCCTCAACGTTGTCTCCTCGATGCACCA  
 GCTGGCTGTAATCTTCAAGACGGATCTTGGTATCAGCAGCGGGGCTTTCTAGCCACCTACCAGGCCATC  
 AATACTACAGAGAAGTTCTGCCAGAGCGGAGGATATAGGGATCTGCAATGGATGTGTGACTTATGAAAG  
 ACTGTGAAAATGACAGCAACGACAACTGCAGCAGCCACTTGTCCCACAACCAGACCTGACCTGTGAACC  
 TGTCCAGGTGGAGATGTGCCTTGGACTAAGCTACAATACCACGGCCTTCTTAACTCTGGTGGCCCTG  
 GCCACGCAGACAGAGGTGACAGACATCCTCCGAGGCTACAAGAGTCTGACAAGTCTACCCTGCTACCAGA  
 CTTTCCAGAGGTTCTCTGTGGACTGCTGTGCCTCGATGCACCTCACTGGGCACTATCCTACCCCTTG  
 TCGTTCGTCTGCCAGGCGCGGAGCAGCAGTCCAGTCTAGCCTGGCATTATTGGGCACCCCTGGCCT  
 TCAACTGCAACAGGCTGCCCGTGGCAGCTAGCCTGGAAGCTTGCTCCAGGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR221748 representing NM\_001190314  
 Red=Cloning site Green=Tags(s)

MKDYDDVILRPEASELSKTEFCNPAFDPEAGPSCPPPALQRDVGSRQLQAPWHAQRLRGLQPDCHFSWFCI  
 LLLSGLLLLLLGLLVAVILAQLQATSLPRTTKNPLLTRGLTPMGVIPSTTPNTTTTTTTTTTPARTGQQA  
 AMSPTHQTTCCGLLPGPSGFFSSPNYPDLYPPLSHCVWHIQAAGQTIQLKIQALSIESMLTCLFDRLEI  
 ISEPTGPLLRVCGKTPPATLNTNTSHLRVSVSDNDVEGSGFQAWYQAVAPGHWSAHNEFHCDLLCLK  
 RDSVCDGITCADGSDEANCSAKTLGCGNLTGLYGVFSTPNYPQHYPHQLCTWYIEVPVGYGIRLEFH  
 NFSLEAQAECKFDYVEVYEASNLGTF SFLGRFCGAEPPLNVVSSMHQLAVIFKTDLGISSGGFLATYQAI  
 NTTEKFCQSGGYRDLQWMDLWKDCANDSNDNCSSHLSPQPDLTCEPVQVEMCLGLSYNTTAFPNIWVGL  
 ATQTEVTDILRGYKSLTSLPCYQTFQRFLCGLL VPRCTSLGTILPPCRSVCQAAEQQCSSLALLGTPWP  
 FNCNRLPVAASLEACSQP

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9078\\_h04.zip](https://cdn.origene.com/chromatograms/mm9078_h04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001190314

**ORF Size:** 1737 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\\_001190314.1](#), [NP\\_001177243.1](#)

**RefSeq Size:** 4274 bp

**RefSeq ORF:** 1737 bp

**Locus ID:** 259172

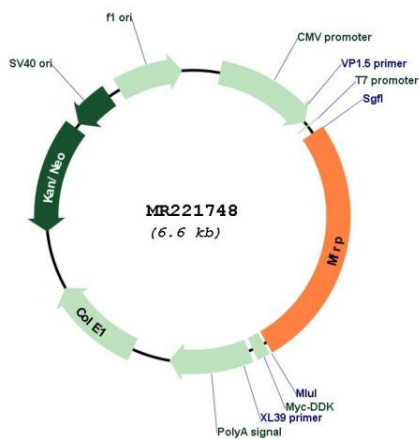
**UniProt ID:** [Q8K480](#)

**Cytogenetics:** 9 24.6 cM

**MW:** 63.1 kDa

**Gene Summary:** The protein encoded by this gene contains a region with similarity to the cysteine-rich domain (CRD) of frizzled, a gene originally found in *Drosophila* that controls tissue polarity. This protein functions in eye development, where it is necessary for the maintenance of photoreceptor outer segments. Mutations in this gene cause retinal degeneration 6 in mice, which gives rise to a mouse model for human retinitis punctata albescens. Bicistronic transcripts composed of the coding sequences for this gene (Mfrp) and the C1q and tumor necrosis factor related protein 5 gene (C1qtnf5) have been identified, and the resulting products can interact with each other. Co-transcription of C1qtnf5 and Mfrp has been observed in both human and mouse. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010]

**Product images:**



Circular map for MR221748