

## Product datasheet for **MG222540**

### **Rpgr (NM\_001177952) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Rpgr (NM_001177952) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rpgr
Synonyms:	Rd9; Rp3h
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG222540 representing NM\_001177952  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGTTTCGGCAGTAACTGGGGTCACTTAGGATTAGGATCAAAAGCTGCTATCATCAAGCCAACATGTA  
 TCAAAGCTCTTAAGCCTGAGAAGGTGAACTTGCCTGTGGAAGGAACACACCTTAGTTTCAACAGA  
 TACTGGTGGCGTATATGCAGCTGGTGGAAATAATGAAGGTCAACTGGGGCTTGGTGACACTGACGATAGA  
 GACACCTTTCATCAAATTGCTCTTTACACCTGCTGATACCATTAAACAGCTCTCTGCTGGCGCAATA  
 CATCCGCTGCTCTACTGAGGATGGAAAATTTTTATGTGGGGTGACAATTCTGAAGGCGAGATTGGTCT  
 AGAAGATAAAAAGTAATGTATGTATCCCTCATGAAGTGACTGTTGGAAAGCCAATTTCTGGATCTTTGT  
 GGATATTACCATTAGCTTTTGAACAATGGATGGGGAGCTCTACACATTTGGAGAACCCGAGAATGGGA  
 AGTTGGGCTTCCCAATGAGCTGCTGATGAATCACAGATCACCCAGCGTGTGCTGGGCATTCTGAGAG  
 GGTCAATCAAGTGGCCTGTGGTGGAGGGCACACTGTGGTTCTCACAGAGAAAGTTGTGTATGCCTTTGGG  
 CTGGGGCAGTTTGACAACCTGGGCTTGGCACTTTTCTTTTGAACATCAGAACCCAAAATTATTGAGC  
 GTATTAAGGATCAGAAAATATGTCATATTTCTGTGGAGAAAACCATACAGCTTTGATGACAGAAGTAGG  
 CCTCTGTATACTTTGGAGACGGCCGACATGGAAAGTTAGGACTTGGGATGGAGAATTTACCAATCAG  
 TTCTTTCTACCTTGTGCTCTAACTTTTGGAGATTTGCAGTTCAATTGATTGCCTGTGGTGGATGTCATA  
 TGCTAGTTTTTGGCACTCCACGACTTGGTACAATAGATGAACCTAAATTTGAAGACGTATATGAGCCTTA  
 TATAAGTACAGTTCTTTTCCATCAATGACCTCTCCCAAGAAGTTCACTGAATAGATCTTTATCAGCA  
 CGTCTGCGGCGAAGAGAGCGGGAGAGACCCCATGCTCAGCTTCAATGGTGGGAACACTGCCTCCATTAG  
 AGGGGACTTCTGCCTCCACTTCAGCTTATTTTTACCCAGTTACCCCTTCCATTTGTCTGTGAATAA  
 CTACCCAGAGAAAAGCCCTCTGAATCAATGGAGCCACTGGACTCAGATTATTTTGAAGATAAAAATGAAC  
 AAAGACACAGAGACAGAAAATTCTTCAGCAGTGGATTCAGAAAATTTGGTGAACATAATGATATCTTAA  
 ATATGACACATATGATGACTACGAGTTCCAATGAGAAGTTATTAGATTTTTACCAATTCAAAAACAACA  
 GGCTCCTCAACTTTCAGAACTGTGAAACCAGAAGAAGGGGAAATGGATGAGGAAATTAGTATCCTGAAT  
 GTAGAAGACACTGTAGAAGAAGAAGGAAGGAAGGAGAGAAGGAGATTGTAGAAGAAGGAAGTATACCTG  
 AAACAGAAGGCTCAGAACTATTGATATTACTGATGAGAAGCTAGATGAAGTCTTAAAGAGGAAGACAG  
 TGCCAGCCTTCTGCAACGGGCCCTTCGTGAGTACAATGAAAATCCAAAAGGACACATGTATGATCGTGTA  
 AAGAGCAGCTCTCAGAAATTCTGGGAGTAATGATCCAACAAGTAAAGACATAAAAAAAGCTAAAAAAA  
 TTTCTTCTTTAATCGGATGTCATTGACAGGTCAGAAACTGATGCAGAATACTAATGATCCACTCCAGAG  
 GATAAAGCCAATAGGAGATCAGATAGCCTTACAAAGTGATAAGAAAGATGCCAACCAAGACACATGGGT  
 CAAAATCTTCAGGATTCGACAACACAAAATATGGAGGGAAAGTCCAAATCCTGTACAATTCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG222540 representing NM\_001177952  
 Red=Cloning site Green=Tags(s)

MFGSNWQQLGLGSKAAIIKPTCIKALKPEKVLAACGRNHTLVSTDTGGVYAAGGNNEGQLGLGDTDDR  
 DTFHQIVFFTPADTIKQLSAGANTSALTEDGKLFMWGDNSEQIGLEDKSNVCIPHEVTVGKPISWISC  
 GYYHSFAVVTMDGELYTFGEPENGLGLPNELLMNHRSPQRVLGIPERVIQVACGGGHTVVLTEKVVYAFG  
 LGQFGQLGLGTLFETSEPKIIERIKDQKICHISCGENHTALMTELLYTFGDGRHGKLGGMENFTNQ  
 FFPTLCSNFLRFVAVQLIACGGCHMLVFATPRLGTIDEPKFEDVYEPYISTGSFSINDLSPRSSLNRSLA  
 RLRRRERERPPCSASMGVTLPPLEGTSASTSAYFYSSPPFHLVNNYPEKSPSESMEPLDSDYFEDKMN  
 KDTETENSSAVDSENFGETNDILNMTHMTTSSNEKLLDFSPIQKQAPQLSETVKPEEGEMDEEISILN  
 VEDTVEEERKEGEKEIVEEGSIPETEGSETIDITDEKLDEVLKEEDSASLLQRALREYNENPKGHMYDRV  
 KSSSSEILGGNDPTSKDIKAKKISFFNRMSTGQKLMQNTNDPLPEIKPIGDQIALQSDKKDANQNHM  
 QNLQDSTTPNMEGKSKSCTIL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM\_001177952

ORF Size: 1953 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\\_001177952.1](#), [NP\\_001171423.1](#)

RefSeq Size: 2795 bp

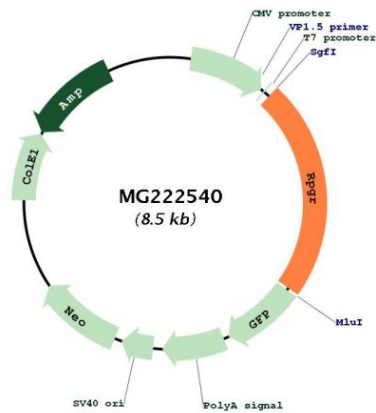
RefSeq ORF: 1956 bp

Locus ID: 19893

Cytogenetics: X A1.1

**Gene Summary:**

Could be a guanine-nucleotide releasing factor (By similarity). Plays a role in ciliogenesis (By similarity). Probably regulates cilia formation by regulating actin stress filaments and cell contractility (By similarity). May be involved in microtubule organization and regulation of transport in primary cilia (By similarity). Plays an important role in photoreceptor integrity. Isoform 5 may play a critical role in spermatogenesis and in intraflagellar transport processes. [UniProtKB/Swiss-Prot Function]

**Product images:**

Circular map for MG222540