

Product datasheet for **MG209992**

Rpgr (BC036959) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rpgr (BC036959) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rpgr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG209992 representing BC036959
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCAAGAGGGTCGCGATGGGGTCCCAGGGGTAGGGCAGCACCTTAGGCTCAATCGAGTCGCCCTG
CTATCTTTCCGAAGCAGGCACAGATTCCGTTTCGAGGCTTCGGCATGGCGGAATCTGAGTCACTGGTGCC
CGATACAGGTGCTGTGTTTACGTTTGGAAAACTAAATTTGCCGAAAATATTCTAGCAAATCTGGTTT
AAAAATGACATACCCATATGTCTTTCATGTGGAGATGAACATACTGCTATTGTTACAGGAAATAATAAAT
TGTACATGTTCCGCAGTAACAACGGGGTCAGTTAGGATTAGGATCAAAAGCTGCTATCATCAAGCCAAC
ATGTATCAAAGCTCTTAAGCCTGAGAAGGTGAACTTGTGCCTGTGGAAGGAACACACCTTAGTTTCA
ACAGATACTGGTGGCGTATATGCAGCTGGTGGAAATAATGAAGGTCAACTGGGGCTTGGTGACACTGACG
ATAGAGACACCTTTCATCAAATGTCTTTCACCTGCTGATACCATTAACAGCTCTCTGCTGGCGC
CAATACATCCGCTGCTCTTACTGAGGATGGAAAACCTTTTATGTGGGGTGACAATTCTGAAGGGCAGATT
GGTCTAGAAGATAAAAAGTAATGTATGTATCCCTCATGAAGTGACTGTTGGAAAGCCAATTCCTGGATCT
CTTGTTGGATATTACCATTGAGCTTTTGTAAACAATGGATGGGGAGCTCTACACATTTGGAGAACCAGGAA
TGGGAAGTTGGGCCTTCCAATGAGCTGCTGATGAATCACAGATCACCCAGCGTGTGCTGGGCATTCTCT
GAGAGGGTCATTCAAGTGGCCTGTGGTGGAGGGCACACTGTGGTTCTCACAGAGAAAAGTTGTGTATGCC
TTGGGCTGGGGCAGTTTGGACAACCTGGCCTTGGCACTTTTCTTTTGAACATCAGAACCCAAAATTTAT
TGAGCGTATTAAGGATCAGAAAAATGTCATATTTCTGTGGAGAAAACCATACAGCTTTGATGACAGAA
CTAGGCCTCCTGTATACTTTTGGAGACGGCCGACATGAAAAGTTAGGACTTGGGATGGAGAATTTACCA
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TCATATGCTAGTTTTTGGCACTCCAGACTTGGTACAATAGATGAACCTAAATTTGAAGACGTATATGAG
CCTTATATAAGTACAGGTTCTTTTTCCATCAATGACCTCTCCCAAGAAGTTCACTGAATAGATCTTTAT
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CTTAAATATGACACATATGATGACTACGAGTTCCAATGAGAAGTTATTAGATTTTTACCAATTCAAAA
CAACAGGCTCCTCAACTTTCAGAACTGTGAAACCAGAAGAAGGGGAAATGGATGAGGAAATAGTATCC
TGAATGTAGAAGACACTGTAGAAGAAGAAAGGAAGGAGAGAGAAGGAGATTGTAGAAGAAGGAAGTAT
ACCTGAAACAGAAGGCTCAGAACTATTGATTAATGATGAGAAAGCTAGATGAAGTCTTAAAGAGGAA
GACAGTGCACGCTTCTGCAACGGGCCCTTCGTGAGTACAATGAAAATCCAAAAGGATCTGGAGACTCAC
CACTAGAAGACGATGGAGTCTGGTATTCACACTCTCTATAAAGGTGAATTCTTTGCTTCTGTGCTGAC
AAGGACCCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG209992 representing BC036959
 Red=Cloning site Green=Tags(s)

MPRGRSRWGSQGVGQHLRLNRVAPAIIFPKQAQIPFAGFGMAESES LVPDTGAVFTFGKTKFAENIPSKFWF
 KNDIPICLSCGDEHTAIVTGNNKLYMFGSNNWQQLGLGSKAAIIKPTCIKALKPEKVKLAACGRNHTLVS
 TDTGGVYAAGGNNEGQLGLGDTDDRDTFHQIVFFTPADTIKQLSAGANTSAALETGKLFMWGDNSEGQI
 GLEDKSNVCIPHEVTVGKPISWISCGYHSAFVTMDGELYTFGEPENGLGLPNELLMNHRSPQRVLGIP
 ERVIQVACGGGHTVVLTEKVYAFGLGQFGQLGLGTFLFETSEPKIIERIKDQKICHISCGENHTALMTE
 LGLLYTFGDGRHGKLG LGMENFTNQFFPTLCSNFLRFVAVQLIACGGCHMLVFATPRLGTIDEKPFEDVYE
 PYISTGSFSINDLSRSSLNRSL SARLRRRERPPCSASMVGTLPPLEGTSASTSAYFYPPSPFFHLSV
 NNYPEKSPSEMEPLDSDYFEDKMNKDTE TENSSAVDSENFGETNDILNMTHMMTTSSNEKLLDFSPIQK
 QQAPQLSETVKPEEGEMDEEISILNVEDTVEEERKEGEKEIVEEGSIPETEGSETIDITDEKLDEVLKEE
 DSASLLQRALREYNENPKGSGDSPLEDDGVWYSHSLYKGEFFASVLRTR

TRTRPLE - GFP Tag - V

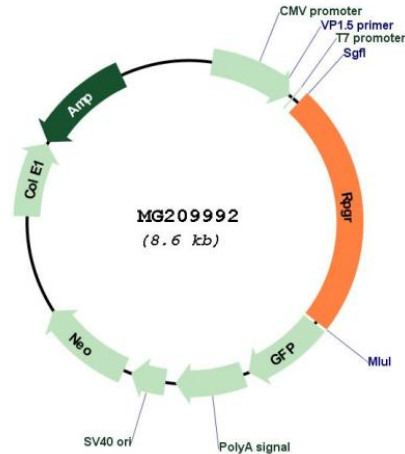
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: BC036959

ORF Size: 2042 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: [BC036959](#)

RefSeq Size: 2213 bp

RefSeq ORF: 2042 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]