

## Product datasheet for **MR222844**

### Rpgr (NM\_001177950) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rpgr (NM\_001177950) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Rpgr  
**Synonyms:** Rd9; Rp3h  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR222844 representing NM\_001177950  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGCCAAGAGGGTCGCGATGGGGTCCCAGGGGTAGGGCAGCACCTTAGGCTCAATCGAGTCGCCCTG  
 CTATCTTCCGAAGCAGGCACAGATTCCGTTTCGAGGCTTCGGCATGGCGGAATCTGAGTCACTGGTGCC  
 CGATACAGGTGCTGTGTTACGTTTGGAAAACTAAATTTGCCGAAAATATTCCTAGCAAATCTGGTTT  
 AAAATGACATACCCATATGTCTTTCATGTGGAGATGAACATACTGCTATTGTTACAGGAAATAATAAT  
 TGTACATGTTTCGGCAGTAACAACCTGGGGTCAGTTAGGATTAGGATCAAAAGCTGCTATCATCAAGCCAAC  
 ATGTATCAAAGCTCTTAAGCCTGAGAAGGTGAAACTTGCTGCCTGTGGAAGGAACCACACCTTAGTTTCA  
 ACAGATACTGGTGGCGTATATGCAGCTGGTGGAAATAATGAAGGTCAACTGGGGCTTGGTACACTGACG  
 ATAGAGACACCTTTCATCAAATGTCTTTCACACCTGCTGATACCATTAACAGCTCTCTGCTGGCGC  
 CAATACATCCGCTGCTCTTACTGAGGATGGAAAATTTTTATGTGGGGTGACAAATTCGAAGGGCAGATT  
 GGTCTAGAAGATAAAAAGTAATGTATGTATCCCTCATGAAGTGACTGTTGGAAAGCCAATTCCTGGATCT  
 CTTGTGGATATTACCATTACGCTTTTGTAACAATGGATGGGGAGCTCTACACATTTGGAGAACCAGAA  
 TGGGAAGTTGGCCTTCCAATGAGCTGCTGATGAATCACAGATCACCCAGCGTGTGCTGGCATTCTCT  
 GAGAGGGTCATTCAAGTGGCCTGTGGTGGAGGGCACACTGTGGTTCTCACAGAGAAAGTTGTGTATGCCT  
 TTGGGCTGGGGCAGTTTGGACAACCTGGGCCTTGGCACTTTTCTCTTTGAAACATCAGAACCACAAAATTAT  
 TGAGCGTATTAAGGATCAGAAAATATGTATATTTCTGTGGAGAAAACCATACAGCTTTGATGACAGAA  
 CTAGGCCCTCCTGTATACTTTTGGAGACGGCCGACATGGAAAGTTAGGACTTGGGATGGAGAAATTCACCA  
 ATCAGTTCTTCTACCTTGTGCTCAACTTTTTGAGATTTGCAGTTCAATTGATTGCCTGTGGTGGATG  
 TCATATGCTAGTTTTTGGCACTCCACGACTTGGTACAATAGATGAACCTAAATTTGAAGACGTATATGAG  
 CCTTATAAAGTACAGGTTCTTTTTCCATCAATGACCTCTCCCCAAGAAGTTCACTGAATAGATCTTTAT  
 CAGCACGTCTGCGCGAAGAGAGCGGGAGAGACCCCATGCTCAGCTTCAATGGTGGGAACACTGCCTCC  
 ATTAGAGGGGACTTCTGCCTCCACTTCAGCTTATTTTTACCCAGTTCACCCCTTCCATTGTCTGTG



[View online »](#)

AATAACTACCCAGAGAAAAGCCCCTCTGAATCAATGGAGCCACTGGACTCAGATTATTTTGAAGATAAAA  
 TGAACAAAGACACAGAGACAGAAAATTCTTCAGCAGTGGATTGAGAAAACCTTTGGTAAAATAATGATAT  
 CTTAAATATGACACATATGATGACTACGAGTCCAATGAGAAGTTATTAGATTTTTACCAATTCAAAA  
 CAACAGAATCAAGACACATTTGAGAAAGTATGAAAAGTACACCGTGCCTGAAAATGAGGATAGTTATG  
 AATATGAAGAAATGTCAAAAATAAAGAAGTACAGTGTACAAACAATATTTAGCAAAAGGGATCTACAT  
 GATACGACCAGCCGAGATTCTGGAAGCATTTCAGATGAGGAAGTGGTAATGCCTAGACCAGGTGGAG  
 GAGCCCGGGTCTTCACCTGATGGAAGGGCTTACAAAGCAAGCAAGTAGGAAAAGGAAAGTATGAAGAAA  
 TAGTCTCTGAGAAGAAAAGTGGGTGATGGAAGTGGCAGATGTGAAAAAGATTAGAGAAAAGTGAAGAGAA  
 CTCAAAATCAGATTCACCTTTTGTGACTTACCAGATAAAAACCATGAATTCTGAGAGTGAAGACAATAAA  
 GATATTGCTGAGGAAAGGAGAAGCAGTGAAGCAGATGACCTTTGACAGTGAACACAGAATTGGTAGAAG  
 AACACAGCAGTTACATGGAATGTGAGAGGCACAGTGAAGCAGTGCCTGAGGAGTTGGAGCAGCCCAA  
 GCTAGTAGAATATAGTAGCAAGAGAAAGATGAGAAAGATGAGAAAGATGACGATGAAGTGGAGACTGAG  
 AACTTATGGTACGACAGGAAGTACTGAGCAAGAACTGAGAATGTATTAGAGCAACCCAGATTTTTCC  
 CAAAGTTCGATCTTAAGCATGATCATTGTGAGGATACCAGAGGAGCAGGAAGGACCAGAGGATTCAGA  
 AGGAAATGTAGTAGTGGACCAAGTGTACAGGCACAAAAGGAAAATTTGGAAATTTGAAAGGAGACAGAAA  
 GAGGCAAAAGCAGAAGCCCCATCAGATGTCATTACAGAAAAGAGGCTCCTCAACTTTCAGAAAAGTGTGA  
 AACCAAGAAAGGGGAAATGGATGAGGAAATAGTATCCTGAATGTAGAAGACACTGTAGAAGAAGAAA  
 GAAGGAAGGAGAGAAGGAGATTGTAGAAGAAGGAGTACCTGAAAACAGAAAGGCTCAGAAAATTTGAT  
 ATTACTGATGAGAAGCTAGATGAAGTCCTAAAGAGGAAGACAGTGCAGCCTTCTGCAACGGGCCCTTC  
 GTGAGTACAATGAAAATCCAAAAGGACACATGTATGATCGTGTAAAGAGCAGCTCTTCAGAAAATCTGGG  
 AGGTAATGATCCAACAAGTAAAGACATAAAAAAGCTAAAAAATTTCTTCTTTAATCGGATGTCATTG  
 ACAGGTCAGAACTGATGCAGAACTAATGATCCACTCCAGAGATAAAGCCAATAGGAGATCAGATAG  
 CCTTACAAAGTGATAAGAAAGATGCCAACCAAGCACATGGGTCAAATCTTCAGGATTCGACAACACC  
 AAATATGGAGGAAAGTCAAATCCTGTACAATTCTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR222844 representing NM\_001177950

Red=Cloning site Green=Tags(s)

MPRGRSWGQVGVQHLRLNRVAPAIFFPKQAQIPFAGFGMAESELVDPDTGAVFTFGKTKFAENIPSKFWF  
 KNDIPIICLSCGDEHTAIVTGNNKLYMFGSNWQQLGLGSKAAIIKPTCIKALKPEVKLAACGRNHTLVS  
 TDTGGVYAAGGNNEGQLGLGDTDDRDTFHQIVFFTPADTIKQLSAGANTSAALEDGKLFMWGDNSEGQI  
 GLEDKSNVICPHEVTVGKPISWISCGYYHSAFVTMDGELYTFGEPENGLGLPNELLMNHRSPQVRLGIP  
 ERVIQVACGGHTVVLTEKVVYAFGLGQFQGLGLGTFLFETSEPKIIERIKDQKICHISCGENHTALMTE  
 LGLLYTFGDGRHGKLGGMENFTNQFFPTLCSNFLRFVQLIACGGCHMLVFATPRLGTIDEPKFEDVYE  
 PYISTGSFSINDLSPRSSLNRSLSARLRRRERERPPCSASMGVTLPPLEGTSASTSAYFYPSPPFHL SV  
 NNYPEKSPSEMEPLDSDYFEDKMNKDTE TENS SAVDSENFGETNDILNMTHMMTSSNEKLLDFSPIQK  
 QQNQDTEFKVMESTPCTENEDSYEYEEMSKIKEVTYKQYLAKGIYMRPAEILEAFSDEEVGNGLDQVE  
 EPRVFTDGKGLQSKQVKGESDEEIVSEKKTEVMEVADVKKIRESEENSKSDSLFDDLDPDKTMNSESEDNK  
 DIAEERRSSEQNMTFDSETELVVEPDSYMECERHSEQDSAELEQPKLVEYSSEEKDEKDEKDDDEVETE  
 NLWYDRNCTEQETENVFRATRFPPKFDLKHDLSGIPEEQEGPEDSEGNVVVEQVVAQKENLEFEGDRK  
 EAKAEAPSDVITEKEAPQLSETVKPEEGEMDEEISILNVEDTVEEERKEGEKEIVEEGSIPETEGSETID  
 ITDEKLDEVLKEEDSASLLQRALREYNENPKGHMYDRVKSSESILGGNDPTSKDIKKAKKISFFNRMSL  
 TGQKLMQNTNDPLPEIKPIGDQIALQSDKKDANQNHMGQNLQDSTTPNMEGKSKSCTIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9094\\_h03.zip](https://cdn.origene.com/chromatograms/mm9094_h03.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001177950

ORF Size: 3117 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\\_001177950.1](#), [NP\\_001171421.1](#)

RefSeq Size: 3680 bp

RefSeq ORF: 3120 bp

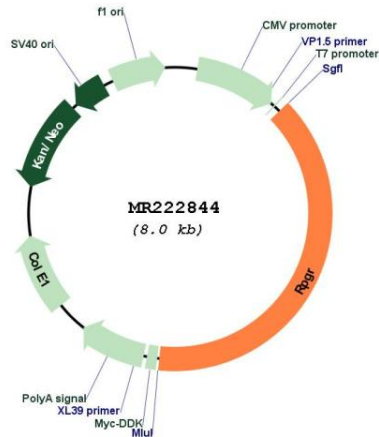
Locus ID: 19893

Cytogenetics: XA1.1

MW: 115.9 kDa

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 MR222844