

## Product datasheet for **MR220572**

### Rgr (NM\_021340) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rgr (NM_021340) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rgr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR220572 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGCAACCAGGGCCCTGCCTGCTGGTTTGGGGAACTTGAGGTGCTGGCTGTAGGAACAGTCCTGC  
TGATGGAAGCGCTCTCTGGCATCAGCCTCAATGGCCTGACCATCTTCTTTCTGCAAGACTCCAGATCT  
GCGGACTCCCAGCAACCTGCTGGTACTGAGCCTGGCCCTGGCAGACACTGGGATCAGCCTGAATGCCCTT  
GTTGCAGCGGTATCCAGCCTCCTCCGGCGCTGGCCACATGGTTCAGAGGGCTGCCAGTTTCATGGTTTCC  
AGGGATTTGCAACAGCACTGGCCAGCATCTGTGGCAGTGCAGCCGTTGCCTGGGGACGTTATCACCCTA  
CTGCACCCGAGACAGTTGGCATGGGACACGGCCATCCCTCTGGTCTGTTTGTGTGGATGTCATCTGCC  
TTCTGGGCATCCCTGCCCTGATGGGCTGGGGCCACTATGACTATGAGCCTGTGGGGACATGCTGTACAC  
TGGACTATTCGAGGGGTGACAGAACTTCATCAGTTTTCTCTTACCATGGCTTTTTTCAACTTCCTCGT  
ACCCCTGTTTCATCACACACTTCATACCGTTTCATGGAGCAGAAATTCACAGGAGTGGCCATCTCCCG  
GTGAATACTACTTCCAGGCAGAATGCTGCTGCTGGCTGGGGCCCTATGCCCTCCTGTACCTATACG  
CAGCCATCGCAGATGTGAGCTTCATCTCTCTAACTACAGATGGTGCCTGCTCTCATCGCCAAAACCAT  
GCCACAATCAACGCCATCAACTATGCGTTGCACAGGGAGATGGTCTGTAGAGGAACCTGGCAGTGTCTG  
TCTCCACAAAAAAGCAAGAAGGACCGAACCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR220572 protein sequence  
 Red=Cloning site Green=Tags(s)

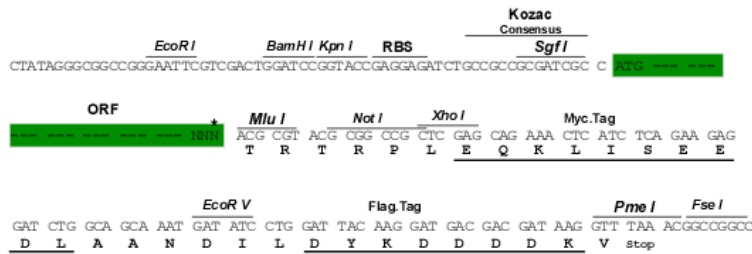
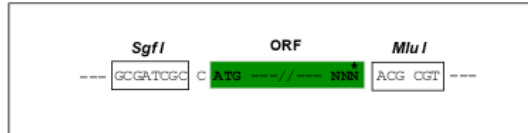
MAATRALPAGLGELEVLAVGTVLLMEALSGISLNLITIFSCKTPDLRTPSNLLVLSLALADTGISLNAL  
 VAAVSSLLRRWPHGSEGCQVHGFQGFATALASICGSAAVAWGRYHHYCTRRLAWDTA IPLVLFVWMSSA  
 FWASLPLMGWGHYDYEPVGTCCCLDYSRGDRNFISFLFTMAFFNFLVPLFITHTSYRFMEQKFSRSGHLP  
 VNTTLPGRMLLLWGPYALLYLYAAIADVSFISPKLQMPALIAKTMPTINAINYALHREMVCRGTWQCL  
 SPQKSKKDRTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_021340

**ORF Size:** 876 bp

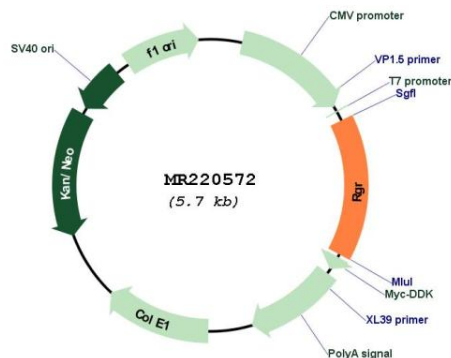
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_021340.4</a>
<b>RefSeq Size:</b>	4307 bp
<b>RefSeq ORF:</b>	876 bp
<b>Locus ID:</b>	57811
<b>UniProt ID:</b>	<a href="#">Q9Z2B3</a>
<b>Cytogenetics:</b>	14 B
<b>MW:</b>	32.1 kDa
<b>Gene Summary:</b>	The gene is a member of the opsin family of G-protein coupled receptors. The encoded protein is expressed in the retina, and acts as a photoisomerase to catalyze the conversion of all-trans-retinal to 11-cis-retinal. Disruption of a similar gene in human is associated with autosomal recessive (arRP) and autosomal dominant retinitis pigmentosa (adRP). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2014]

### Product images:



Circular map for MR220572