

## Product datasheet for **MR228342**

### Rgr (NM\_001301692) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rgr (NM\_001301692) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Rgr  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR228342 representing NM\_001301692  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCCCTGTGTGCAGCGGTATCCAGCCTCCTCCGGCAGACAGTTGGCATGGGACACGGCCATCCCTCTGG  
TGCTGTTTGTGTGGATGTCATCTGCCTTCTGGGCATCCCTGCCCTGATGGGCTGGGGCCACTATGACTA  
TGAGCCTGTGGGACATGCTGTACACTGGACTATTCGAGGGGTGACAGAACTTCATCAGTTTTCTCTTC  
ACCATGGCTTTTTCAACTTCTCGTACCCTGTTTCATCACACACTTCATACCGTTCATGGAGCAGA  
AATTCTCCAGGAGTGGCCATCTCCCGGTGAATACTACTCTCCAGGCAGAATGCTGCTGCTGGCTGGGG  
CCCCTATGCCCTCTGTACCTATACGCAGCCATCGCAGATGTGAGCTTCATCTCTCTAAACTACAGATG  
GTGCCTGCTCTCATCGCCAAAACCATGCCACAATCAACGCCATCAACTATGCGTTGCACAGGGAGATGG  
TCTGTAGAGGAACCTGGCAGTGTCTGTCTCCACAAAAAGCAAGAAGGACCGAACCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR228342 representing NM\_001301692  
Red=Cloning site Green=Tags(s)

MPLLQRYPASSGRQLAWDTAIPVLVFWMSSAFWASLPLMGWGHYDYEYVGTCCILDYSRGRDNFISFLF  
TMAFFNFLVPLFITHTSYRFMEQKFSRSGHLPVNTTLPGRMLLLGWGPYALLYLAAIADVSFISPKLQM  
VPALIAKTMPPTINAINYALHREMVCRTWQCLSPQKSKKDRTQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

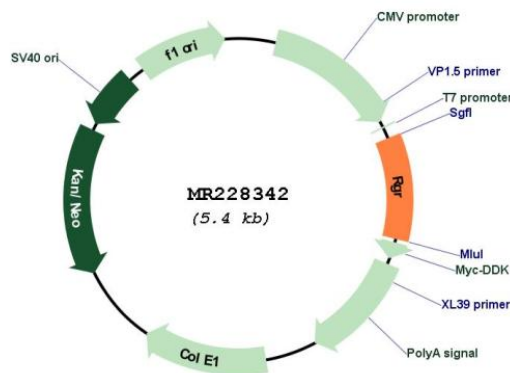


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_001301692

ORF Size: 549 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.

<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>	<u>NM_001301692.1, NP_001288621.1</u>
<b>RefSeq Size:</b>	4185 bp
<b>RefSeq ORF:</b>	552 bp
<b>Locus ID:</b>	57811
<b>Cytogenetics:</b>	14 B
<b>MW:</b>	21.4 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]