

Product datasheet for MC210154

Rgr (NM_021340) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rgr (NM_021340) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rgr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC210154 representing NM_021340 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCAACCAGGGCCCTGCCTGCTGGTTTGGGGAACTTGAGGTGCTGGCTGTAGGAACAGTCCTGC
TGATGGAAGCGCTCTCTGGCATCAGCCTCAATGGCCTGACCATCTTCTTTCTGCAAGACTCCAGATCT
GCGGACTCCCAGCAACCTGCTGGTACTGAGCCTGGCCCTGGCAGACACTGGGATCAGCCTGAATGCCCTT
GTTGCAGCGGTATCCAGCCTCCTCCGGCGCTGGCCACATGGTTTCAGAGGGCTGCCAGGTTTCATGGTTCC
AGGGATTTGCAACAGCACTGGCCAGCATCTGTGGCAGTGCAGCCGTTGCCTGGGGACGTTATCACCACCTA
CTGCACCCGACAGACAGTTGGCATGGGACACGGCCATCCCTCTGGTCTGTTTGTGTGGATGTCATCTGCC
TTCTGGGCATCCCTGCCCTGATGGGCTGGGGCCACTATGACTATGAGCCTGTGGGGACATGCTGTACAC
TGGACTATTCGAGGGGTGACAGAACTTCATCAGTTTTCTCTTACCATGGCTTTTTTCAACTTCCTCGT
ACCCCTGTTTCATCACACACTTCATACCGTTTCATGGAGCAGAAATTCACAGGAGTGGCCATCTCCCG
GTGAATACTACTTCCAGGCAGAATGCTGCTGCTGGTGGGGCCCTATGCCCTCCTGTACCTATACG
CAGCCATCGCAGATGTGAGCTTCATCTCTCTAACTACAGATGGTGCCTGCTCTCATGCCAAAACCAT
GCCACAATCAACGCCATCAACTATGCGTTGCACAGGGAGATGGTCTGTAGAGGAACCTGGCAGTGTCTG
TCTCCACAAAAAAGCAAGAAGGACCGAACCAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms:	https://cdn.origene.com/chromatograms/ja2144_a03.zip
Restriction Sites:	Sgfl-MluI
ACCN:	NM_021340
Insert Size:	876 bp



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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 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](#)

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: [BC119055](#), [AAI19056](#)

RefSeq Size: 4307 bp

RefSeq ORF: 876 bp

Locus ID: 57811

UniProt ID: [Q9Z2B3](#)

Cytogenetics: 14 B

Gene Summary: 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]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1). Sequence Note: removed 2 bases from the 5' end that did not align to the reference genome assembly.