

# **Product datasheet for MG200353**

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OriGene Technologies, Inc.

## 3322402L07Rik (BC017602) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** 3322402L07Rik (BC017602) Mouse Tagged ORF Clone

Tag: TurboGFP

**Symbol:** 3322402L07Rik

**Synonyms:** 3322402L07Rik; rd-3; rd3

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG200353 representing BC017602

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCCCTCATCCCGTGGCTCCGGTGGAACGACACCCCTCCCCGGCTCTCGGCCCGGACCCCGGCCGAGA TGGTGCTGGAGACGCTCATGATGGAGCTGGCTGGGCAGATGAGAGAGGTGGAGCGACAACAGAGGGAGCG TCGCAGCCGCAGTCAGGAAGATCTGCACTGGTGTGGACTACAGCTGGTTGGCAAACACGCCCAGGCCCACC TATGACATCAGCCCTGGTTCAGGCAGCTGCTGGCTGAACGAGAGCCCGAGGTGCAGGAGGTGGCGCGGCT

GTTCCGCTCCGTGTTGCAGGAGGCCCTGGAGAAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG200353 representing BC017602

Red=Cloning site Green=Tags(s)

 ${\tt MSLIPWLRWNDTPPRLSARTPAEMVLETLMMELAGQMREVERQQRERRSAVRKICTGVDYSWLANTPRPT}$ 

YDISPGSGSCWLNESPRCRRWRGCSAPCCRRPWRR

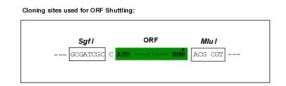
TRTRPLE - GFP Tag - V

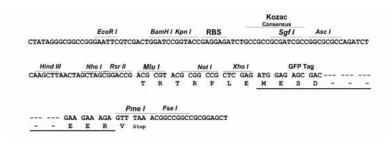
Restriction Sites: Sgfl-Mlul



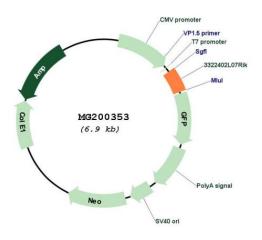


#### **Cloning Scheme:**





#### Plasmid Map:



**ACCN:** BC017602 **ORF Size:** 315 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. <u>More info</u>



Locus ID:

#### 3322402L07Rik (BC017602) Mouse Tagged ORF Clone - MG200353

**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.

74023

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:
 BC017602.1

 RefSeq Size:
 1841 bp

**RefSeq ORF:** 317 bp

Cytogenetics: 1 97.09 cM

**Gene Summary:** Plays a critical role in the regulation of enzymes involved in nucleotide cycle in

photoreceptors (PubMed:21078983, PubMed:27471269). Inhibits the basal catalytic activity and the GCAP-stimulated activity of GUCY2E and GUCY2F, two retinal guanylyl cyclases involved in the production of cGMP in photoreceptors (PubMed:27471269). Involved in the transport of GUCY2E and GUCY2F to their target sites in the photoreceptor outer segment (PubMed:21078983). Up-regulates the activity of GUK1, a kinase that plays also an essential role for recycling GMP and indirectly, cGMP (By similarity). Plays an important role for the

survival of rods and cones in the retina (PubMed:8486383, PubMed:17186464).

[UniProtKB/Swiss-Prot Function]