

## Product datasheet for **MG201800**

### Fam89b (NM\_181452) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Fam89b (NM\_181452) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Fam89b  
**Synonyms:** 1110021A21Rik; MMTV; Mtvr2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG201800 representing NM\_181452  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGAACGGGCTGCCCGCGACTGAGGCGCCGGCGCGGGCTGCGCTCTGGCCGGGCTCCCGCCGCTAC  
CGCGCGGCTCAGCGCCTTCTTAACGCTAGTGGGGCTCGTGGAGGGAGCTGGAGCGTGTCTACAGCCA  
ACGGAGCCGCATCCACGACGAAGTGTGCGCCCGCGTCCCGGATGGTCTCGCCATGCCGCTGGA  
TCTGCTAACTCAGGTTCTGCAGCGGGCCCGCCCGCGGTTAACCTCGACTCTGACTAGCCGCGCTGC  
GCAAGGAGATGGTGGGGCTGCGACAGCTGGATATGTCCCTGTTGCCAGCTGTGGGGCTGTACGAGTC  
GATCCAGGACTACAAGCATCTGTGCAAGACCTGAGCTTGTGCCAGGACCTGTCATCCTCTCTGACTCG  
GACAGCTCCTACCCACCTGATGCCGGCCTGTCTGATGACGAGGAGCCTCCTGATGCCAGCCTGCCCCAG  
ACCTCCACCCCTCACCGTACCCAGACTACAATGCCCGTGACCAGTGGTTGCAGGATGCCTTCCAAT  
CAGCCTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201800 representing NM\_181452  
Red=Cloning site Green=Tags(s)

MNGLPATEAPGGAGCALAGLPPLPRGLSGLLNASGGSWRELERYVSRSRIHDEL SRAARVPDGPRAAG  
SANSLSAAGPRRPVNLDSALAALRKEMVGLRQLDMSLLCQLWGLYESIQDYKHLQCQDL SLCQDLSSSLHS  
DSSYPDAGLSDDEPPDASLPPDPPPLTVPQTHNARDQWLQDAFQISL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

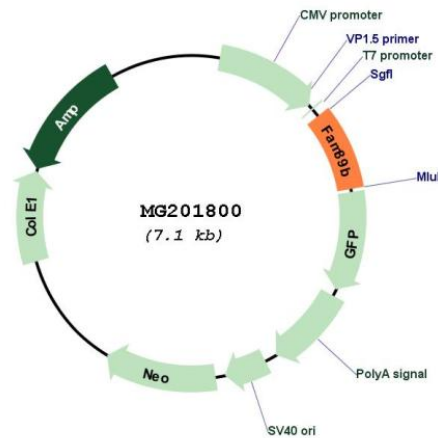


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_181452

ORF Size: 567 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\\_181452.1](#), [NP\\_852117.1](#)

**RefSeq Size:** 1194 bp

**RefSeq ORF:** 570 bp

**Locus ID:** 17826

**UniProt ID:** [Q9QUI1](#)

**Cytogenetics:** 19 4.34 cM

**Gene Summary:** Negatively regulates TGF-beta-induced signaling; in cooperation with SKI prevents the translocation of SMAD2 from the nucleus to the cytoplasm in response to TGF-beta (PubMed:12646588). Acts as an adapter that mediates the specific recognition of LIMK1 by CDC42BPA and CDC42BPB in the lamellipodia. LRAP25-mediated CDC42BPA/CDC42BPB targeting to LIMK1 and the lamellipodium results in LIMK1 activation and the subsequent phosphorylation of CFL1 which is important for lamellipodial F-actin regulation (PubMed:25107909).[UniProtKB/Swiss-Prot Function]