

## Product datasheet for **MG210866**

### **Grik1 (BC031822) Mouse Tagged ORF Clone**

#### **Product data:**

|                           |                                         |
|---------------------------|-----------------------------------------|
| Product Type:             | Expression Plasmids                     |
| Product Name:             | Grik1 (BC031822) Mouse Tagged ORF Clone |
| Tag:                      | TurboGFP                                |
| Symbol:                   | Grik1                                   |
| Synonyms:                 | MGC25101                                |
| Mammalian Cell Selection: | Neomycin                                |
| Vector:                   | pCMV6-AC-GFP (PS100010)                 |
| E. coli Selection:        | Ampicillin (100 ug/mL)                  |



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**ORF Nucleotide Sequence:**

>MG210866 representing BC031822  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCAATACCACATTAACTATGACATCCAGAGAATTAATCTTTTGTAGTTTTGAAGCCTCCCGAA  
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**ACCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG210866 representing BC031822  
Red=Cloning site Green=Tags(s)

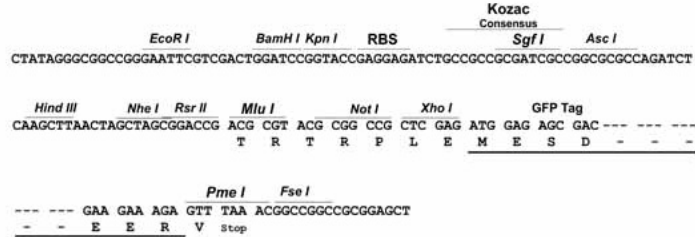
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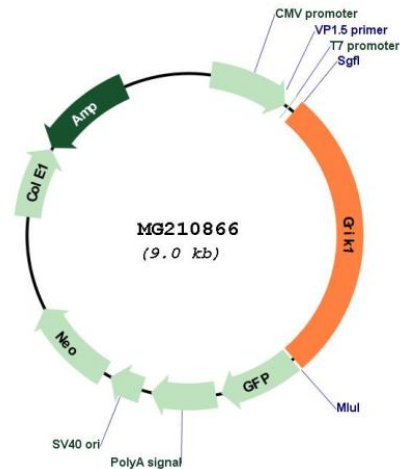
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** BC031822

**ORF Size:** 2498 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:** [BC031822](#), [AAH31822](#)

**RefSeq Size:** 3020 bp

**RefSeq ORF:** 2498 bp

**Locus ID:** 14805

**Cytogenetics:** 16 50.23 cM

**Gene Summary:**

Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. The subunit encoded by this gene is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to alter the properties of ion flow. Alternative splicing, resulting in transcript variants encoding different isoforms, has been noted for this gene. [provided by RefSeq, Jul 2008]