

## Product datasheet for **RG231363**

### **FAM59B (GAREM2) (NM\_001191033) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FAM59B (GAREM2) (NM_001191033) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GAREM2
Synonyms:	FAM59B; GAREML
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG231363 representing NM\_001191033  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCACAGGATGCCAGATCCAGGGAAGTTCAAGCTCCTGGAACAGGCCCGGGATGTGCGGGAGCCAGTGA  
GGTACTTCAGCAGCGTGGAGGAGGTGGCCAGTGTCTTCCCTGACCGCATCTTCGTGATGGAAGCCATCAC  
CTTCAGCGTCAAGGTGGTGTGCGGCGAGTTTCAGCGAGGACAGCGAGGTGTACAATTCACGCTGCATGCG  
GGCGACGAGCTCACTCTTATGGGCCAGGCGGAGATCCTGTGCGCCAAGACCACCAAGGAGCGCTCGCGCT  
TCACCACCCTCCTGCGAAAGCTGGGCGGGCCGGGGCGCTGGCCGGGTGGGCGGCGGGCCAGCGAG  
CGCGGGGGCCGCGGGAGGCACTGGCGGGGGGGCCAGGCCGGTCAAAGGCAAGATGCCCTGCCTCATC  
TGCATGAACCACCGCACCAACGAAAGCTGAGCCTGCCCTTTCAGTGCCAGGGCCGCTTCAGCACTCGCA  
GCCCGCTGGAGCTGCAGATGCAAGAGGGCGAGCACACGGTGCAGCCATCATCGAGCGCGTGAAGGCTGCC  
GGTGAACGTGCTGGTGCAGCCGCGCCGCGCAACCCCTACGACCTGCACCCGGTGGCGGAGGGTTCAT  
TGCTACAAGCTGGTTAGCATCATCTCCAAGACGGTGGTGTGGGGCTGGCGCTGCCCGCGAGGGCCCGG  
CGCCGCTGCATTCCTGTGTCTCACGGACACGCCGCGCTTCGCGCTGCCGAGGGCTGTGGCCGGGGA  
CCCGCGCTCGAGCGCCTGGTGCAGCAGCGCCTCCTACTGCCGCGAGCGCTTCGACCCCGACGAGTAC  
TCCACGGCCGTGCGCGAGGCGCCAGCGGAGCTCGCCGAAGACTGCCAGCCCGCGCCGCGCGCGCCTCT  
GCCTGCCCGCGCCGCGCGCCCGGGCTCGCCCGCGCCCGGCCGCTAGCGCCGGTCCCGCGGCGA  
GGGCGACAGGAGTACGTGAGCCCGACTGGGAGCCGCGCCGAGCCCGCGCGCCCGCGCGGAGATC  
CCCTACGAGGAGTTGTGGGCGCACAGGGGCCGAGGGCCTCGTCCGGCCGCCCCAGGGCTCGATCTCA  
TCTCCTTCGGGGCCGCGGACCGCGCGTGGGAGCCGGAAGCGCCGCGCTCCAGTCCCTCCAAATC  
CGAGGCGGTGAAGGAGGAGTGCCGCTGTCAATGCCCTCCAGTGCTCCCGGGGTGGCAATGGCAGC  
GGCCGGCTCTCCAGCAGCCCCCGGTTCCCCCTCGCTTCCCAAGCTGCAGCCGGTACATTCCCCAGCT  
CCAGCCTCTCCTACTACTCCTCTGGCCTCCAGGATGGGCGGGTCCCGCAGTGGCAGTGGCTCCCATC  
GCCGGACACCTACTCCCTCTATTGCTACCCATGCACCTGGGAGACTGCAAGGAACAGTCTGGAGCCC  
TTCGATCCCTTTGAGCTGGGCGAGGCGAGTCTCCAGAGCCTGAGCTGCTGCGTTCTCAGGAGCCAGAG  
CAGTGGGACACCTGGGCTGGACCCCGCCTTTCACCACTGGCCCTCCAAGGCCTTTGAGCTGAAGG  
TTTGGTGTGCACCAGGTCCCCACCCACTGTCACCAGTGTCTGCAGGGACCCGAGGCGGGAGGAGCA  
CTTTTTCTAACCAAGGGCGCTGGAAGGGCCTCTGCCAGTCCCGGGATGGAGCCACAGGCTTTGGAG  
TCCGAGATGCCTCCTCTGGCAGCCCCCTGCTGACCTGTCTGCACTCTCCCTGGAGGAGGTCTCTCGAG  
TCTGCGTTTCATCGGGCTCTCAGAGGATGTGGTGAAGTCTTTGCCCGAGAACGCATCGATGGTAGCATC  
TTTGTGACGCTCAGTGAAGACATCTGGCAGATGACTTCCACCTACCAAGCTGCAGGTCAAGAAGATCA  
TGCAGTTCATCAAAGGCTGGAGGCCAAGATC

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG231363 representing NM\_001191033  
 Red=Cloning site Green=Tags(s)

MHRMPDPGKFKLLEQARDVREPVRVYFSSVEEVASVFPDRIFVMEAITFSVKVVSGEFSEDSEVYNFTLHA  
 GDELTLMGQAEILCAKTTKERSRFTLLRKLGRAGALAGVGGGPASAGAAGGTGGGARPVKGMPCLI  
 CMNHRTNESLSLFPQCQGRFSTRSPLELQMGEHTVRAIIERVRLPVNVLVPSRPPRNPYDLHPVREGH  
 CYKLVSIISKTVVLGLALRREGPAPLHFLLLTDTPRFALPQGLLAGDPRVERLVRDSASYCRERFDPDEY  
 STAVREAPAEIAEDCASPRRRLCLPAPRAPGLARAPGPLAPAPAGEGDQEYVSPDWAAPAEPAAPP  
 PYEELWAHQGPEGLVRPPPGLDLISFGAAGPPRPEAPPVPVPPKSEAVKEECRLLNAPPVPPRGGNGS  
 GRLSSPPVPPRFKLPVHSPSSLSYSSGLQDGAGSRSGSGSPDYSLYCYPCTWGDCKEPVLEP  
 FDPFELGQSSPEPELLRSQEPRAVGTGPGPRLSPLGPSKAPEPEGLVLHQVPTPLSPAALQGPEAGGA  
 LFLTQGRLEGPPASPRDGTGFGVRDASSWQPPADLSALSLEEVSRSLRFI GLSEDVVSFFARERIDGSI  
 FVQLSEDI LADDFHLTKLQVKKIMQFIKWRPKI

TRTRPLE - GFP Tag - V

**Restriction Sites:**

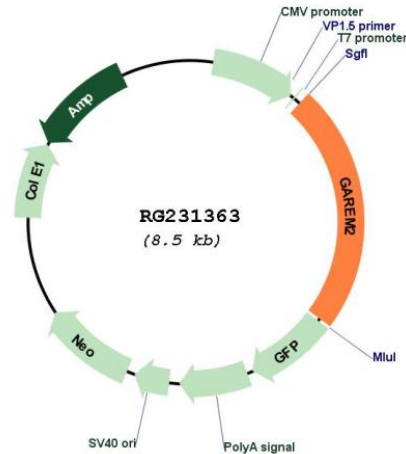
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001191033

ORF Size: 1992 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\\_001191033.1](#), [NP\\_001177962.1](#)

RefSeq Size: 5169 bp

RefSeq ORF: 1995 bp

Locus ID: 150946

UniProt ID: [Q75VX8](#)

Cytogenetics: 2p23.3

Gene Summary: Probable adapter protein that may provide a link between cell surface epidermal growth factor receptor and the MAPK/ERK signaling pathway.[UniProtKB/Swiss-Prot Function]