

## Product datasheet for **MG214927**

### Garem2 (NM\_001167879) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Garem2 (NM_001167879) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Garem2
Synonyms:	Fam59b; Gareml; Gm444
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG214927 representing NM\_001167879  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGAAGCTGGCGGCCGGCTGGCCGGCTGCCTGGAGCATGGGCGCTTCCCGCTGGACCTCATCG  
 TCAGCCGCTGCCGCTGCCACGCTCGCTGCCTCGGACCAGGAGATGCTGAGGGAGTCAGTGAACG  
 AGACATCTGCTGATCCACTCCTGCCGCCAGTGGACTACAGTACTGCCACACCCTGGAGGAGGCCAC  
 TATGTCATTGGGCCAAGATTGACATCCCCCTGCAGTACCCAGGCAAATCAAGCTCTGGAGCAGGCTC  
 GGGACGTGCGGGAGCCTGTAAGATACTTACGACGCTGGAGGAGTGGCCAGTGTCTTCCCTGACCGAAT  
 CTTCTGTATGGAAGCCATCACCTTCAGTGTCAAGGTGGTGTGAGGCGAGTTCAGCGAGGACAGCGAGGTG  
 TACAACTTCACACTGCACGAGGCGACGAGCTCACTCTCATGGCCAGGCGGAGATTCTGTGCGCAAGA  
 CGACCAAGGAGCGCTCGCGCTTACCACGCTCCTGCGCAAGCTGGCCGTGCAGGGCCCTGGCCCGAAT  
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 CCCTGTCTCATCTGCATGAACCACCGCACCAACGAGAGCCTGAGCCTGCCCTTCCAGTGCCAGGGCCGAT  
 TCAGCACGCGCAGCCACTGGAGCTGCAGATGCAGGAGGGCGAGCACACGGTGCAGCGCCATCATCGAGCG  
 CGTGCGGCTGCCGGTGAACGTGCTGGTGCCAGCCGGCCGCGCAACCCCTACGACCTCCACCCGGTG  
 CCGGAGGGGACACTGCTACAAGCTGGTACGATCATCTCCAAGACGGTGGTGTGGGGTGGCGCTGCGCC  
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 GCTGGCCGGGACCCGCGCTCGAGCGCTGGTGCAGCAGCGCCTCCTACTGCCGCGAGCGCTTCGAT  
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 GGATGGGGCAGGATCCCGCAGTGGCAGTGGCTCCCGTACCAGGATGCATACTCTCTATTGCTACCTT  
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 CGCATCGAGGAAGCATCTTTGTGAGCTCAGTGAAGACATCTTGGTGCAGACTCCATCTACCAAGC  
 TTCAGTCAAGAAATCATGCAATTCATCAAAGGTTGGAGACCAAGATC

**ACGGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:** >MG214927 representing NM\_001167879  
 Red=Cloning site Green=Tags(s)

MEKLAAGLAGLRWSMGAFPLDLIVSRCRLPTLACLGPGEYAEGVSERDILLIHSCRQWTTVTAHTLEEGH  
 YVIGPKIDIPLOYPGKFKLLEQARDVREPVRVYFSSVEEVASVFPDRIFVMEAITFSVKVVSGEFSEDESEV  
 YNFTLHAGDELTLMGQAEILCAKTTKERSRFTLLRKLGRAGALAGIGGPGSMGATGGGGGAARPVKSKM  
 PCLICMNHRTNESLSLFPQCQGRFSTRSPLELQMQEGEHTVRAIIERVRLPVNVLVPSRPPRNPYDLHPV  
 REGHCYKLVSIISKTVVLGLALRREGPAPLHFLLLTDTPRFTLPQGLLAGDPRVERLVRDSASYCRERFD  
 PDEYSTAVREAPAELEDDCASPRHARLCLPAPRAPGAVRAPGPPGRLGPALPAPGSDSDQDYVSPDWAGVS  
 EPAGGCAEIPYEELWVHQAPESRADARARPLAGPDLISFGIVGPPRHEPEAPPPVPPKSEAVKEECRLL  
 HAPPVPPRGGGCSKLTGSPVLPHPFKLQPVHSPSSLSYYSSGLQDGAGSRSGSGSPDAYSLYCYP  
 CTWGDCKASESSRPPGPLPSTTTQPSQASRGLSEPLSGRTPSLLGADTPVVKNYHSCPLFKSSRPQK  
 SFAPFGALNPFSGPAHPSGAPAASSSGSISTSGVLATSSPTHSPGPGPGQGQGYSAAPSSLSSEWQE  
 PALEPLDPFELGQASPELELVRCQEPRAAGAPGSGPCLSPGQPKAFEPEGLVLRQVPASLSPAALQGP  
 EAGGTLFLFTQGCLEGGPGSPREGATGAGVRDASSWQPPADLSALSLEEVSRSLRFIIGLSEVVVFFARE  
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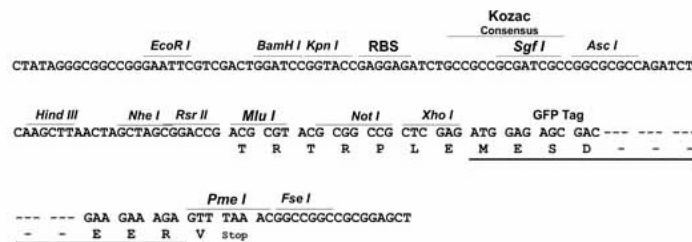
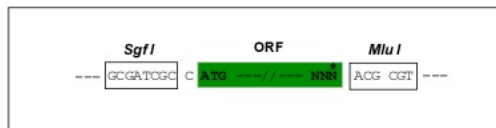
TRTRPLE - GFP Tag - V

**Restriction Sites:**

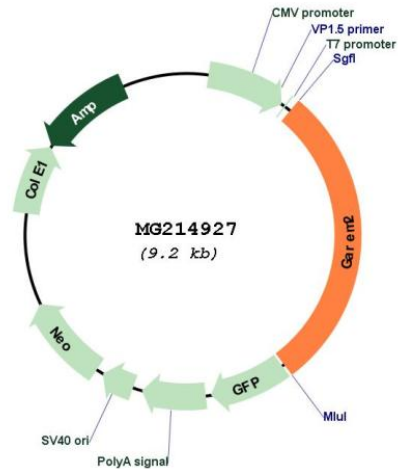
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001167879

ORF Size: 2640 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\\_001167879.1](#), [NP\\_001161351.1](#)

RefSeq Size: 3832 bp

RefSeq ORF: 2643 bp

Locus ID: 242915

UniProt ID: [Q6PAJ3](#)

**Cytogenetics:** 5 B1

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