

## Product datasheet for **MG201681**

### Grem1 (NM\_011824) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Grem1 (NM\_011824) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Grem1  
**Synonyms:** Cktsf1b1; Drm; Grem; Id  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG201681 representing NM\_011824  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAATCGCACCGCATACTGTGGGAGCGTTGCTTCTCCTCCTGGGACCCTACTGCCAACAGCTGAGG  
GGAAAAAGAAAGGTTCCCAAGGAGCCATTCGCCTCCTGACAAGGCTCAGCACAATGACTCTGAGCAGAC  
CCAGTCCCACCACAACCTGGCTCCAGGACCCGGGGCGGGGCCAGGGCGGGGCACCGCATGCCTGGA  
GAGGAGGTGCTTGAGTCCAGCCAAGAGGCCCTGCACGTGACAGAGCGCAAGTATCTGAAGCGAGATTGGT  
GCAAACTCAGCCCTGAAGCAGACCATCCACGAGGAGGCTGCAACAGCCGCACTATCATCAACCGCTT  
CTGTTATGGCCAGTGCAACTCCTTCTACATCCCCAGGCACATCCGAAAGGAGGAAGGGTCTTTTCAGTCT  
TGCTCCTTCTGCAAGCCCAAGAAGTTCACCACCATGATGGTCACACTCAACTGTCCTGAGCTACAGCCAC  
CCACCAAGAAGAAAGGGTACACCGCGTGAAGCAGTGCCTTGCATATCCATCGACTTGGAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201681 representing NM\_011824  
Red=Cloning site Green=Tags(s)

MNRTAYTVGALLLLGLLPTAEGKKKGSQGAIPPPDKAQHNDSEQTQSPPQPGSRTRGRGQGRGTAMPG  
EEVLESSQEALHVTERKYLKRDWCKTQPLKQTIHEEGNSRTIINRFYGCNSFYIPRHIRKEEGSFQS  
CSFCKPKKFTTMMVTLNCPQLPPTKKRVTRVKQCRCSIDL

SGP**TRRRLE** - GFP Tag - V

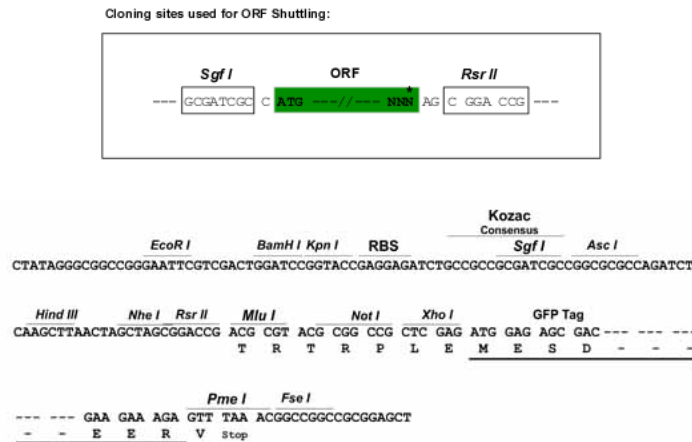
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3119\\_b06.zip](https://cdn.origene.com/chromatograms/ja3119_b06.zip)



[View online »](#)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_011824

ORF Size: 552 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_011824.4](#)

**RefSeq Size:** 1639 bp

**RefSeq ORF:** 555 bp

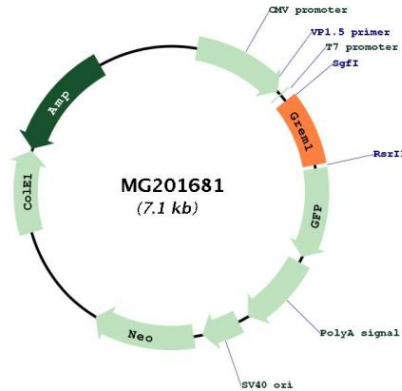
**Locus ID:** 23892

**UniProt ID:** [O70326](#)

**Cytogenetics:** 2 57.43 cM

**Gene Summary:** Cytokine that may play an important role during carcinogenesis and metanephric kidney organogenesis, as BMP a antagonist required for early limb outgrowth and patterning in maintaining the FGF4-SHH feedback loop (PubMed:12808456, PubMed:15201225). Down-regulates the BMP4 signaling in a dose-dependent manner (PubMed:15133038). Antagonist of BMP2; inhibits BMP2-mediated differentiation of osteoblasts (in vitro) (By similarity). Acts as inhibitor of monocyte chemotaxis (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG201681