

## Product datasheet for MR201681

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Grem1 (NM\_011824) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Grem1  
**Synonyms:** Cktsf1b1; Drm; Grem; Id  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR201681 representing NM\_011824.  
Blue=ORF Red=Cloning site Green=Tag(s)

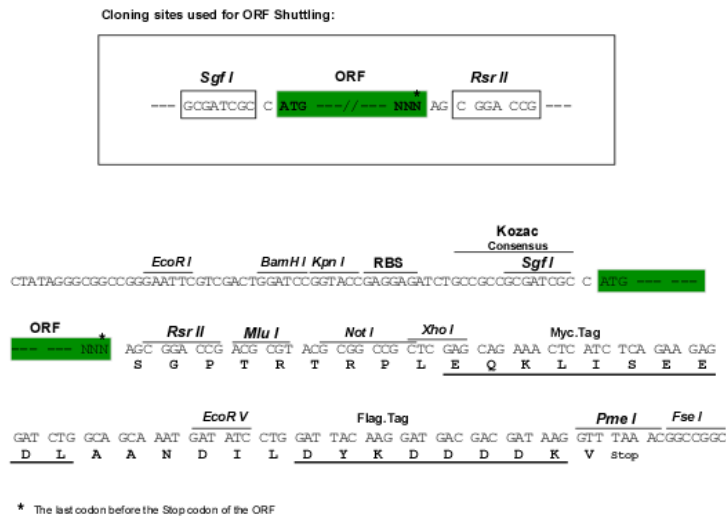
```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGAATCGCACCGCATACACTGTGGGAGCGTTGCTTCTCCTCCTGGGGACCCCTACTGCCAACAGCTGAG
GGGAAAAAGAAAGGTTCCCAAGGAGCCATTCCGCCTCTGACAAGGCTCAGCACAATGACTCTGAGCAG
ACCCAGTCCCACCACAACCTGGCTCCAGGACCCGGGGCGGGCCAGGGGCGGGCCACCCGCATGCCT
GGAGAGGAGGTGCTTGAGTCCAGCCAAGAGGCCCTGCACGTGACAGAGCGCAAGTATCTGAAGCGAGAT
TGGTGAAAACTCAGCCCCTGAAGCAGACCATCCACGAGGAGGGCTGCAACAGCCGCACTATCATCAAC
CGCTTCTGTTATGGCCAGTGCAACTCCTTCTACATCCCCAGGCACATCCGAAAGGAGGAAGGTCCTTT
CAGTCTTGCTCCTTCTGCAAGCCCAAGAAGTTCACCACCATGATGGTCACACTCAACTGTCTGAGCTA
CAGCCACCCACCAAGAAGAAAAGGGTCACACGCGTGAAGCAGTGCCGTTGCATATCCATCGACTTGGAT
AG CGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGAT
ATCCTGGATTACAAGGATGACGACGATAAGGTTTAA
```

**Protein Sequence:** >Peptide sequence encoded by MR201681  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MNRTAYTVGALLLLGLLLPTAEGKKKGSQGAIPPPDKAQHNDSEQTQSPQPGRTRGRGQGRGTAMP
GEEVLESSQEALHVTERKYLKRDWCKTQPLKQTIHEEGNSRTIINRFYCYQCNSFYIPRHIRKEEGSF
QSCSFCKPKKFTTMMVTLNCPQLPPTKKRVTRVKQCRCSIDL
SGPTRTRPLE EQKLISEEDLAANDILDYKDDDDKV
```

**Restriction Sites:** Sgfl-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

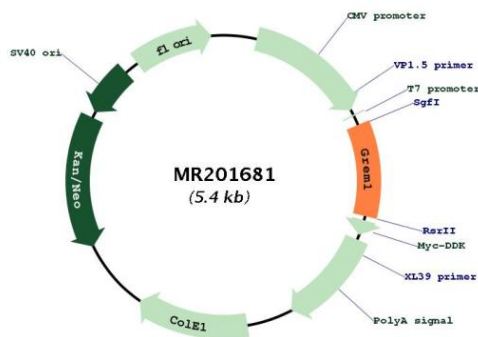
**UniProt ID:** [O70326](#)

**Cytogenetics:** 2 57.43 cM

**MW:** 20.7 kDa

**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 MR201681