

## Product datasheet for **MG202283**

### Gemin8 (BC023488) Mouse Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Gemin8 (BC023488) Mouse Tagged ORF Clone                                   |
| Tag:                      | TurboGFP   |
| Symbol:                   | Gemin8   |
| Synonyms:                 | MGC32253   |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:        | Ampicillin (100 ug/mL)   |
| ORF Nucleotide Sequence:  | >MG202283 representing BC023488<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTTTGGATGCAGGGCCACCAGAATGCCTACAGAAAGTTCAGGGATTCTATTTACATCCCCGTGGC  
TCTTCCCTCATGGAGCTTCCCTGGAAGTCTCCTGCTTATGAGGCTGGGCATCCTTGGGACTCTCAAGG  
CCAGCACATGGCGCAGCAGGAGTCTCCCTACCGTGTTCATCCAAAAGCCCTGGGCAGCCTCTGCAT  
AATAGCAGTAGAACCCAGGCATCCACAAGAGGGAATGAAGCACGGTGTGAGGAGGAAGAGCTGGAGTCAG  
ATTCAGATGATGAAGTAGAGTGCACCTGAGCAATATGGAGATCACCGAGGAGCTCCGGCAGTACTTCGC  
GCAGACCGAGAGGCACAGAGAGGAGAGAAGGCGACAGCAGCTGGACGCAGAGCGCCTGAATTAAT  
GTGAATGCGGACCATGGCCTGTACTTCAACCACCGTAGGTCACTGGAACCCCATCTGAGAAGCCCTGGG  
AGCGGGCCAAGCAGAGATGAAGCGCTTATATGGCAACAGTGCTCCCAAGATCCTGGCCATGGAGACTGC  
TGTACAGCTGAGCTTTGACAAGCACTGTGACAGAAAGCAACAAAGTACTGGCCTGTCAATCCCCTGAAG  
TTC

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG202283 representing BC023488  
 Red=Cloning site Green=Tags(s)

MLWMQGHQNA YRKF RDSYFTSPWLFPHGALPWNSPAYEAGHPWDSQGQHMAQQESPYRVSHPKSPGQPLH  
 NSSRTQASTRGNEARCEEEEELESDSDDEVECDLSNMEITEELRQYFAQTERHREERRRQQQLDAERLNYY  
 VNADHGLYFNHRRSLEPPSEKPWERRQAEMKRLYGNSAPKILAMETAVQLSFDKHC DRKQPKYWPV IPLK  
 F

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** BC023488

**ORF Size:** 635 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:** [BC023488](#), [AAH23488](#)

**RefSeq Size:** 1136 bp

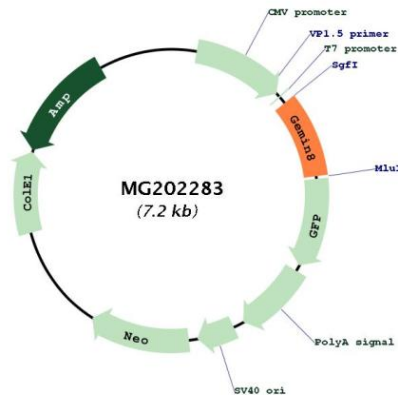
**RefSeq ORF:** 635 bp

**Locus ID:** 237221

**Cytogenetics:** X F5

**Gene Summary:** The SMN complex plays a catalyst role in the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome. Thereby, plays an important role in the splicing of cellular pre-mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP. In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. Dissociation by the SMN complex of CLNS1A from the trapped Sm proteins and their transfer to an SMN-Sm complex triggers the assembly of core snRNPs and their transport to the nucleus (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG202283