

## Product datasheet for **MG200714**

### Gemin7 (NM\_027189) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Gemin7 (NM\_027189) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Gemin7  
**Synonyms:** 2400008I04Rik; AI120175; AI461688  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG200714 representing NM\_027189  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCAGAGCCCACTGACCATTCTGTGCCGGTGCCAGTGCTGCGCCTCCCTCGGGCCCCGATGGCTTCA  
GCAGAGGCTTTGCCTCTGATGGACGTAGGACCATCCTGAGACCAGAAGTCGGAGAAGGCATATTCAAGA  
TCCCCAGAGTCACAGGAACAGCGGGCCGAGCCACTCTGCGAGAGCGCTACCTCCGAGCCTCCTAGCC  
ATGGTGGGGACCCTGTGAGTTTCACGCTGCACGAAGGTGTGCATGTGACCGCCAGTTTGGAGCCACAG  
ACCTGGATGTGGCAACTTCTACGTTTCCAACCTGCAGACTCCCATAGGTGTACAGGCCGAGGCCTTGCT  
TCGATGTAGTGACATAATTTCTATTCTTTCAAGCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG200714 representing NM\_027189  
Red=Cloning site Green=Tags(s)  
MQSPLTIPVPVPLRLPRGPDGFSRGSASDGRRTILRPEVGEHIGDPPESQEQRARATLRERYLRSLLA  
MVGHPVSVFTLHEGVHVTAFQFATDLDVANFYVSQLQTPIGVQAEALLRCSDIISYSFKL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

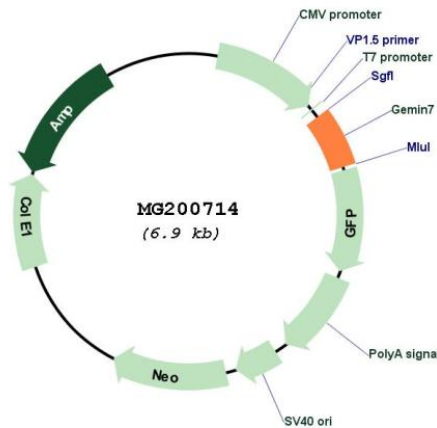


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Cloning Scheme:



Plasmid Map:



ACCN:

NM\_027189

ORF Size:

387 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_027189.2</a>
<b>RefSeq Size:</b>	765 bp
<b>RefSeq ORF:</b>	390 bp
<b>Locus ID:</b>	69731
<b>UniProt ID:</b>	<a href="#">Q9CWF4</a>
<b>Cytogenetics:</b>	7 A3
<b>Gene Summary:</b>	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]