

Product datasheet for **MC224603**

Gemin5 (NM_001166669) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Gemin5 (NM_001166669) Mouse Untagged Clone
Tag: Tag Free
Symbol: Gemin5
Synonyms: AA407055; AA407208; AI451603; BB194447; C330013N08
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224603 representing NM_001166669
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAAGCCGGAGCCGCGGACGCTGCCGCCGTCCCCAACTGGTACTGCTCAGCTGCAGCGACGCGGGCC
CCGGAGGCATCTTTGGCTTCGCTGCGCGGACCTCCGTCTTCTCGTCCGCGTGGTCCGGTCCGGGGCC
GAGCCCAGGGGCGCCCCGTTTCGAGTGGTAGGAGAGTTGGTGGGACACACTGAAAGAGTATCTGGTTTC
ACTTTTTCTCATACCCTGGACAATACAACCTCTGTGCCACCAGCTCAGACGATGGAAGTGAAGGTTT
GGGATGTAGAGACCAAGACTGTAGTGACAGAACACACTCCATCAGCATACAATATCAGCACTGCATTG
GTCTCCGACAGTTAAGGACTTAATAGTCTCTGGGGATGAAAAAGGAGTCGTTTTCTGTTACTGGCTTAAC
AGAAATGACAGCCAGCACCTCTTACAGAGCCAGGACCATATTCTGTCTGACGTGTTACCTCATCACG
AAAATCTAGTAGCCATTGGCTACAAAGATGGCATAGTGTTATCATTGACATCAGTAAAAAGGGAGAAGT
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TGCTTATCCATCAGCCAAGAGGAAAACCGAAGAACCTGACATTCCCAATGGGAAGCTTATAGCAGAAA
CCCCATCAGAAAAGGCTGCTACTTAGCCACAGGAAGCAAGATCAGACCATTGGAATCTGGAGCTGTTCC
CCGCGGCCGGGTGTAATGGTTTTGAAATTGCCCTTCTGAAGAGAAGAAGTGGGGGTGGACCCAACA
GTTAAAGAACGGCTTTGGTTGACACTTCATTGGCCTAAGAACCAACCAACACAGCTGGTATCCAGTTGTT
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AGCTCAGTGGAGAGGCCCTTCGACATCAACAACTCGTGAGGGACACCAACTCCATTAGATACAACTGCC
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 GAAATATTCAAAGTCCCCAATTGAGGCTGCTGTGCACCATCCAGCAGCACCACAAGCTTGTGAACGCCA
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 GCCTCTTATCTGCTATCCATCCACAAAGTGTACGAAGCTGTGGAACCTTCTCAAGTCAAACCATCTCTACA
 GAGAAGCTATTGCAGTTGCCAAGGCTCGGCTGCGCCCTGAGGACCCTGTTCTGAAGGAATATACCTCAG
 CTGGGGGTCCATCCTGGAGAGAGATGGCCACTATGCTATTGACAGCAAGTGTACTTAGGAGCCACTTCC
 GCCTATGATGCACCAAAGTTCTGGCCAGAAAGGAGATGCAGCCCTCACTTAGAACAGCTGCAGAGCTGG
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 CTTCAGTGTGGACACCCCGAGCAGTGTAGGCGCCCTTACAGAAGCTGCAGGATGTCAAGTACCCATCA
 GCAACAAGTAACACTCCCTTACAGACAGCTGCTGCTTCATGTCTGCCATGACCTGACCTTGGCAATGCTGA
 GCCAGCAGGCTGCTGCCTGGGAGGAGGAGTGCCTGCTGCTGCAGGCTGTGGTTCGGAGCTATACCTC
 AGGGAAGTTCACCTCATGCAGGAAATCTACTAGCCTTTCTCCAGGTGGCTGTGACCCTACGAGAC
 AACTGGGTGACCTCTCTCCTGCCATGGCAGCTTACAAAAGCTTAGAGGCCTTTTGTATTATGGGCAAC
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 CACGGTCTCTGATAAACAGAGCAAGCCAGAGGACAGTGCAGTGTGAGGACATGGAACAGCCTCCAGGC
 CCGGGCCCGAGGCTCAGTGCAGAGAGTGAAGCTTGTGAGTGCCTGCAAGGAGCTTTTCTCAGAACGGC
 ATGCCAGCCTGCAGACCTCCAGAGGACTGTAGCCGAAGTCCAAGAGACACTGGCAGAAATGATCCGCCA
 GCACAAAAGAGTCAAGCTCTGCAAGGCCACAACAATGGTCCCAGCAGAGATGAACCCAGCAGAGATGAA
 CCCAGCCAGGAAGCAGAGCGGGCTCCTTCTCAGCCTCCGAGCCCAACCAGAGAAGAAAGAAATGCACCAG
 TGTCTCTCCCTGAACTAACCCAGAAGGCTCACAGAGGCAAATGAGAGGATAGCAGAGTTTCCAGAGAGTGT
 AAAGGCCTGGCCCTTCCAGATGTGCTGGAGTGTGTCTCGTCTTGTTCACATTGGGTCCAGTGTCTCT
 GACGCTGTGGACCCTGAGATGCAGCAACAGGCCAGGAGCTCCTTACAAGTATGGGCACACTCGAGCTT
 ACAGAAGACACTGCCAGAGTCGGCACACGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001166669
Insert Size: 4512 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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_001166669.1 , NP_001160141.1
RefSeq Size:	6229 bp
RefSeq ORF:	4512 bp
Locus ID:	216766
UniProt ID:	Q8BX17
Cytogenetics:	11 B1.3
Gene Summary:	<p>Required for the assembly of the SMN complex that 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. GEMIN5 acts as the snRNA-binding protein of the SMN complex. Binds to the 7-methylguanosine cap of RNA molecules (By similarity). Binds to the 3' UTR of SMN1 mRNA and regulates its translation; does not affect mRNA stability (PubMed:25911097). May play a role in the regulation of protein synthesis via its interaction with ribosomes (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).</p>