

Product datasheet for **RC200165**

Gemin 8 (GEMIN8) (NM_001042479) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gemin 8 (GEMIN8) (NM_001042479) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gemin 8
Synonyms:	FAM51A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200165 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGCAGCGGTAAGGCATCAACATCGAAAGCTACCAGGCCTTGGTATTCTCATCCGGTATATGCAAGAT
ACTGGCAACATTATCATCAAGCAATGGCTTGGATGCAAAGCCATCACAATGCCTACAGGAAGGCCGTGGA
ATCCTGTTTCAATCTTCCATGGTACTTACCTTCTGCGCTTCTCCCAAAGCTTTACGATAATGAGGCT
GCGTATCCTCAGTCTTCTATGACCATCATGTGGCCTGGCAGGACTACCCCTGCAGTTCTTCACATTTCA
GAAGATCTGGGCAGCATCCACGTTACAGCAGTAGGATCCAGGCATCCACAAAAGAAGACCAAGCTTTGTC
CAAAGAGGAAGAGATGGAGACTGAGTCAGATGCAGAGGTAGAATGTGACCTGAGCAATATGGAAATCACT
GAAGAGCTCCGCCAGTACTTTGCAGAGACCAGAGGCATAGAGAAGAACGACGGCGGCAGCAGCAGCTGG
ATGCAGAGCGCCTGGACAGCTATGTGAACGCTGACCACGACCTGTACTGCAACACCCGCCGGTCGGTAGA
AGCCCCAACTGAGAGGCCTGGTGAAGCGCCAGGCCGAGATGAAGCGTTTGTACGGGGACAGTGTCTGCC
AAGATCCAAGCCATGGAGGCCGCGGTGCAGCTGAGCTTTGACAAGCACTGTGACCGAAAGCAGCCCAAGT
ACTGGCCGGTCATCCCCCTGAAGTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200165 protein sequence
Red=Cloning site Green=Tags(s)

MAAVKASTSKATRPWYSHPVYARYWQHYHQAMAWMQSHHNAYRKAVE SCFNLPWYLP SALLPQSSYDNEA
 AYPQSFYDHHVAWQDYPCSSSHFRRSGQHPRYSRIQASTKEDQAL SKEEEMETESDAEVECDL SNMEIT
 EELRQYFAETERHREERRRQQQLDAERLDSYVNADHDL YCNTRRSVEAPTERPGERRQAEMKRL YGDSAA
 KIQAMEAAVQLSFDKHC DRKQPKYWPVIPLKF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6628_h10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001042479

ORF Size: 726 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: [NM_001042479.2](#)

RefSeq Size: 3171 bp

RefSeq ORF: 729 bp

Locus ID: 54960

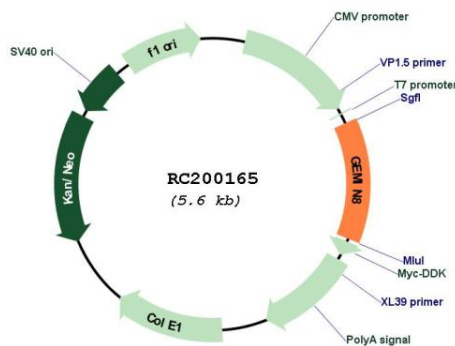
UniProt ID: [Q9NWZ8](#)

Cytogenetics: Xp22.2

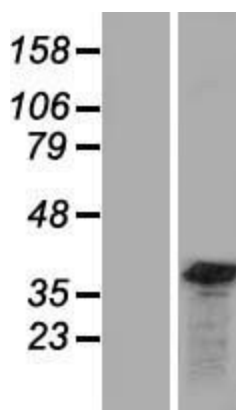
MW: 28.6 kDa

Gene Summary: The protein encoded by this gene is part of the SMN complex, which is necessary for spliceosomal snRNP assembly in the cytoplasm and pre-mRNA splicing in the nucleus. The encoded protein binds to both SMN1 and the GEMIN6/GEMIN7 heterodimer, mediating their interaction. This protein is found in nuclear Gemini of Cajal bodies (gems) and in the cytoplasm. Three transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, May 2010]

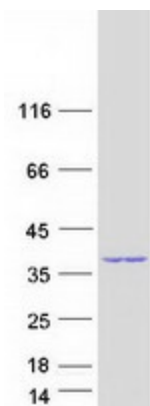
Product images:



Circular map for RC200165



Western blot validation of overexpression lysate (Cat# [LY420933]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC204795] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GEMIN8 protein (Cat# [TP300165]). The protein was produced from HEK293T cells transfected with GEMIN8 cDNA clone (Cat# RC200165) using MegaTran 2.0 (Cat# [TT210002]).