

## Product datasheet for **RR200084**

### Gmcl1 (NM\_001033931) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gmcl1 (NM_001033931) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gmcl1
Synonyms:	Gcl
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR200084 representing NM\_001033931  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGGCGCTCTGAGCAGCCGGTCTGCGGCCCGGGGCGCACAGAGCAGCCCAACCCACGCCCGGTG  
 CTGGGGGCTCGGCCCGCAGATCGGACGCGGGCGAAGATGCGGCCACGGCTTCTGTTACTGTCCCGCGG  
 CCGCAAGCGCAAGCGCAGCAGCGCACTTTCTGCTACTGTCAACCCGAGTCAGAGACAGACGAAGACGAG  
 GACGAGGGCGACGAGCAGCAGAGGCTGCTGAACACGCGCGCAGGAAAAATTAAGAGCACATCGAAAT  
 ACATCTACCAAACGCTGTTTTTGAATGGTGAACACAGTGACATTAAGATCTGTGCTCTAGGTGAAGAGTG  
 GAGCTTACACAAAATCTACTTATGTCAATCTGGCTACTTTCTAGTATGTTCAAGTGGTCTTGAAAAGAA  
 TCCAGCATGAATATTATTGAAGTGGAGATTCTGACCAGAACATTGATATAGAAGCACTGCAGGTTGCAT  
 TTGGATCACTGTATCGAGATGACGTCTTAATAAGCCCAGCAGGGTTGTCGCCATTTTGGCAGCAGCTTG  
 CATGCTGCAGTTGGATGGTTTGATACAGCAGTGTGGTGAACCATGAAGGAGACCATCTCTGTAAGAACT  
 GTGTGTGGCTATTACACATCGGCAGGGACCTATGGACTAGACTCTGTAAGAAAAAGTGCCTCGAGTGGC  
 TGCTGAACAACCTCATGACTCACCAGAGTGTGGAGCTTTTCAAAGAACTCAGTATAAACGTCATGAGGCA  
 GCTCATTGGTTCACTAACTTATTTGTGATGCAAGTGGAAATGGATGTATATACAGCTCTGAAAAAGTGG  
 ATGTTCCCTCAGTTGGTGCCTTCTGGAATGGTCTTTAAAGCAGCTTTTACAGAAAACAGATGTCTGGT  
 TTTCAAAGTGGAAAAAGACTTTGAAGGGACGACTTTCTTGAAGTGAAGGAGAAAACCATTTGCGCC  
 CGTGTTCAGACATTTAAGGCTACAGTACATTATCAGTGATCTGGCTTCTGCAAGGATCATTGAGCAGGAC  
 TCTCTGGTACCTTCAGAATGGCTGGCTTCAAGTATAAAGCAGCAGTGGTGGCTATGCTTCGGGCTGAAC  
 AAGCAGTGAAGTGGGGCTCAAGAAATCAATAAAGAAGAACTGAGGGAATAGCATGAGGTGTGGTAG  
 AAAGCTTGCCAAAGATGGTGAATACTGCTGGCGTGGACAGGTTTTAATTTGGCTTTGACCTCCTTG  
 ACTTACACCAATCGATACATCATTTTCAAACGCAATACGCTAAACAGCCATGTAGTGGATCTGTACAGT  
 TGCAGCCTCGAAGAAGCATAGCATTTAGATTGCGCTTGGCTTCTTTGACAGTAGTGAAAACTCATATG  
 CAGTAGAGCGACTGGCTACCAAATCCTGACGCTTGAGAAAGACCAGGAGCAAGTGGTGTGAAGTGGAC  
 AGCAGACTGCTGATCTTCCCTCTATACATCTGCTGTAACCTTCTGTATATATCACCAGAAAAAGAACTG  
 AGAGTAATCGTCACCCAGAAAACCCAGGACAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR200084 representing NM\_001033931  
 Red=Cloning site Green=Tags(s)

MGALSSRVLRPAGRTEQPEPTPGAGGSARRSDAGEDAAHGFCYCPGGRKRKRSSGTFYCHPESETDEDE  
 DEGDEQRLNTPRRKLLKSTSKYIYQTLFLNGENSDIKICALGEEWSLHKIYLCQSGYFSSMFGSWKE  
 SSMNIIIELEIPDQNIIDIEALQVAFGSLYRDDVLIKPSRVVAILAACMLQLDGLIQQCGETMKETISVRT  
 VCGYYTSAGTYGLDSVKKKCLEWLLNMLMTHQSVLFEKELINVMRQLIGSSNLFVMQVEMDVYALKKW  
 MFLQLVPSWNGSLKQLLTETDVWFVSKWKKDFEGTTFLETEQGKPFAPVFRHLRLQYIISDLASARIEQD  
 SLVPSWNLASVYKQWLAMLRAEQDSEVGPQEINKEELEGNMRCGRKLAKDGEYCWRWTFNFGFDLLV  
 TYTNRYIIFKRNTLNQPCSGSVSLQPRRSIAFRLRLASFDSGKLI CSRATGYQILTLEKDQEQVVMNLD  
 SRLLIFPLYICCNFLYISPEKRTESNRHPENPGH

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

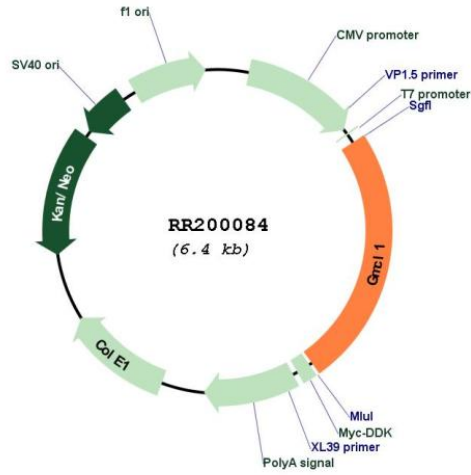
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001033931
<b>ORF Size:</b>	1572 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_001033931.2</a> , <a href="#">NP_001029103.1</a>
<b>RefSeq Size:</b>	2947 bp
<b>RefSeq ORF:</b>	1575 bp
<b>Locus ID:</b>	312516
<b>Cytogenetics:</b>	4q34
<b>MW:</b>	59.7 kDa
<b>Gene Summary:</b>	This gene encodes a nuclear envelope protein that contains a broad-complex, tramtrack and bric a brac/ Pox virus and Zinc finger (BTB/POZ) protein-protein interaction domain. In mouse, this gene is expressed at high levels in the testis, and null mutant mice exhibit morphologically abnormal sperm that have chromatin condensation defects. These defects result in significantly impaired fertility, demonstrating a role for this gene in male germ cell development in mouse. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015]