

Product datasheet for **RC226016**

Calmegin (CLGN) (NM_001130675) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Calmegin
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC226016 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCATTTCCAAGCCTTTTGGCTATGTTTGGGTCTTCTGTTTCATCTCAATTAATGCAGAATTTATGGATG
ATGATGTTGAGACGGAAGACTTTGAAGAAAATTCAGAAGAAATGATGTTAATGAAAGTGAACCTTCCTC
AGAGATTAAATATAAGACACCTCAACCTATAGGAGAAGTATATTTTGACAGAACTTTTGATAGTGGAAAG
TTGGCTGGATGGGTCTTATCAAAGCAAAGAAAGATGACATGGATGAGGAAATTTCAATATACGATGGAA
GATGGGAAATTAAGAGTTGAAAGAAAACCAAGTACCTGGTGACAGAGGACTGGTATTAATCTAGAGC
AAAGCATCATGCAATATCTGCTGTATTAGCAAAACCATTCATTTTGGCTGATAAACCTTGATAGTTCAA
TATGAAGTAAATTTTCAAGATGGTATTGATTGTGGAGGTGCATACATTAACCTCCTAGCAGACACTGATG
ATTTGATTCTGGAAAACCTTTTATGATAAAACATCCTATATCATTATGTTTGGACCAGATAAATGTGGAGA
AGATTATAAATTCATTTTATCTTCAGACATAAACATCCAAAACCTGGAGTTTTCGAAGAGAAACATGCC
AAACCTCCAGATGTAGACCTTAAAAAGTTCTTTACAGACAGGAAGACTCATCTTTATACCCTTGTGATGA
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GGTTCCTCTATCAAACCTCCCAAAGAAATTAAGATCCCAATGATAAAAAACCTGAGGAATGGGATGAA
AGAGCAAAAATTCCTGATCCTTCTGCCGTCAAACCAAGACTGGGATGAAAGTGAACCTGCCCAATAG
AAGATTCAAGTGTTGTTAAACCTGCTGGCTGGCTTGATGATGAACCAAAATTTATCCCTGATCCTAATGC
TGAAAAACCTGATGACTGGAATGAAGACACGGATGGAGAATGGGAGGCACCTCAGATTCTTAATCCAGCA
TGTCGGATTGGGTGTTGAGTGGAACCTCCCATGATAGATAACCAAAATACAAAGGAGTATGGAGAC
CTCCACTGGTCGATAATCCTAACTATCAGGGAATCTGGAGTCTCGAAAAATTCCTAATCCAGATTATTT
CGAAGATGATCATCCATTTCTTCTGACTTCTTTCAAGTCTCTTGGTTAGAGCTTTGGTCTATGACCTCT
GATATCTACTTTGATAATTTTATTATCTGTTTCGAAAAGGAAGTAGCAGATCACTGGGCTGCAGATGGTT
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AGGGCACCCATGGCTTTGGTTGATTATCTTGTGACAGCAGAGTGCCAAATAGCATTAACTTCTCATTT
TGTTGGCCAAAGAAAGTAAAGAAAAACATAAAGATACAGAGTATAAAAAACCGACATATGTATACCAC
AAACAAAAGGAGTACTAGAGCAAGAAGAAAAGGAAGAGAAAGCAGCCCTGAAAAACCAATGGACCTGGA
AGAGGAAAAAAGCAAAATGATGGTGAAATGCTTGAAGAAGAGGAAAGTGAACCTGAGGAAAAGAGT
GAAGAAGAAATGAAATCATAGAAGGGCAAGAAGAAAGTAATCAATCAAATAAGTCTGGGTGAGAGGATG
AGATGAAAGAACGAGATGAGAGCACAGGATCTGGAGATGGGCCGATAAAGTCAGTACGCAAAAGAGAGT
ACGAAAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226016 protein sequence
Red=Cloning site Green=Tags(s)

MHFQAFWLCLGLLFISINAEFMDDVETEDFEENSEEIDVNESELSSSEIKYKTPQPIGEVYFAETFDGR
LAGWVLSKAKKDDMDEEISIDGRWEIEELKENQVPGDRGLVLKSRAKHHAISAVLAKPFIADKPLIVQ
YEVNFDGIDCGGAYIKLLADTDDLILENFYDKTSYIIMFGPKCGEDYKLHIFRHKHPKTGVFEKHA
KPPDVLKKFFTRKTHLYTLVMNPDDTFEVLVDQTVVNGSLLEDVVPPIKPPKEIEDPNDDKKPEEWE
RAKIPDPSAVKPEDWDESEPAQIEDSSVVKPAGWLDDEPKFIPDPNAEKPDWNEDTDGEWEAPQILNPA
CRIGCGEWKPPMIDNPKYKGVWRPPLVDNPNYQGIWSPRKIPNPDPYFEDDHPFLLTSFSALGLELWSMTS
DIYFDNFIICSEKEVADHWAADGWRWKIMIANANKPGVLKQLMAAAEGHPWLWLIYLVTAGVPIALITSF
CWPRKVKKKHKDTEYKKTDCIPQTKGVLEQEEKEEKALEKPMDEEEKKQNDGEMLEKEESESPEEKS
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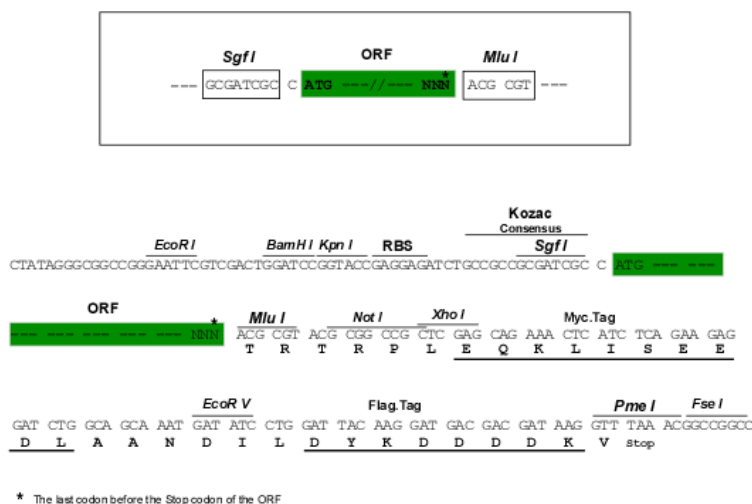
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6196_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001130675

ORF Size: 1830 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.

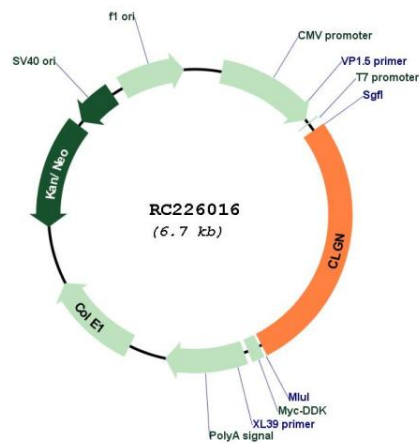
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: [NM_001130675.1](#), [NP_001124147.1](#)

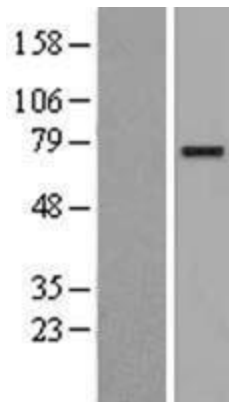
RefSeq Size: 2828 bp

RefSeq ORF:	1833 bp
Locus ID:	1047
UniProt ID:	Q14967
Cytogenetics:	4q31.1
Protein Families:	Transmembrane
MW:	70 kDa
Gene Summary:	Calmegin is a testis-specific endoplasmic reticulum chaperone protein. CLGN may play a role in spermatogenesis and infertility. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC226016



Western blot validation of overexpression lysate (Cat# [LY427232]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226016 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).