

Product datasheet for **RC205301**

Calmegin (CLGN) (NM_004362) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calmegin (CLGN) (NM_004362) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calmegin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205301 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCATTTCCAAGCCTTTTGGCTATGTTTGGTCTTCTGTTCATCTCAATTAATGCAGAATTTATGGATG
 ATGATGTTGAGACGGAAGACTTTGAAGAAAATTCAGAAGAAATTGATGTTAATGAAAGTGAACCTTCCTC
 AGAGATTAATATAAGACACCTCAACCTATAGGAGAAGTATTTTTGCAGAACTTTTGATAGTGAAGG
 TTGGCTGGATGGGTCTTATCAAAAGCAAAGAAAGATGACATGGATGAGGAAATTTCAATATACGATGGAA
 GATGGGAAATTGAAGAGTTGAAAGAAAACCAGGTACCTGGTGACAGAGGACTGGTATTAATCTAGAGC
 AAAGCATCATGCAATATCTGCTGTATTAGCAAAACCATTCTTTTTGCTGATAAACCTTGATAGTTCAA
 TATGAAGTAAATTTCAAGATGGTATTGATTGTGGAGTGCATACATTAACCTCCTAGCAGACACTGATG
 ATTTGATTCTGGAAAACCTTTATGATAAAACATCTATATCATTATGTTTGGACCAGATAAATGTGGAGA
 AGATTATAAACTTCATTTTATCTTCAGACATAAACATCCCAAACTGGAGTTTTGAAGAGAAAACATGCC
 AAACCTCCAGATGTAGACCTTAAAAAGTCTTTACAGACAGGAAGACTCATCTTTATACCTTGTGATGA
 ATCCAGATGACACATTTGAGGTGTAGTTGATCAAACAGTTGTAACAAAGGAAGCCTCCTAGAGGATGT
 GGTTCCTCCTATCAAACCTCCCAAGAAATTAAGATCCCAATGATAAAAACTGAGGAATGGGATGAA
 AGAGCAAAAATTCCTGATCCTTCTGCCGTCAAACCAGAAGACTGGGATGAAAGTGAACCTGCCAAATAG
 AAGATTCAGTGTGTTAAACCTGCTGGCTGGCTTGTGATGAACCAAAATTTATCCCTGATCCTAATGC
 TGAAAAACCTGATGACTGGAATGAAGACACGGATGGAGAATGGGAGGCACCTCAGATTCTAATCCAGCA
 TGTCGGATTGGGTGTGGTGAAGTGGAAACCTCCCATGATAGATAACCAAAAATACAAGGAGATGGAGAC
 CTCCACTGGTCGATAATCCTAACTATCAGGGAATCTGGAGTCTCGAAAAATTCCTAATCCAGATTATTT
 CGAAGATGATCATCCATTTCTTCTGACTCTTTCAAGTCTTGGTTTAGAGCTTTGGTCTATGACCTCT
 GATATCTACTTTGATAATTTTATTATCTGTTCCGAAAAGGAAGTAGCAGATCACTGGGCTGCAGATGGTT
 GGAGATGGAAAATAATGATAGCAATGCTAATAAGCCTGGTGTATTAACAGTTAATGGCAGCTGCTGA
 AGGGCACCCATGGCTTTGGTTGATTTATCTTGTGACAGCAGGAGTGCCAATAGCATTAACTTCTATT
 TGTTGGCCAAGAAAAGTAAAGAAAAACATAAAGATACAGAGTATAAAAAACCGACATATGTATACCAC
 AAACAAAAGGAGTACTAGAGCAAGAAGAAAAGGAAGAGAAAGCAGCCCTGGAAAAACCAATGGACCTGGA
 AGAGGAAAAAAGCAAAATGATGGTGAATGCTTGAAAAAGAAGAGGAAAGTGAACCTGAGGAAAAGAGT
 GAAGAAGAAATTGAAATCATAGAAGGGCAAGAAGAAAGTAAATCAATAAAGTCTGGGTGAGGAGATG
 AGATGAAAGAAGCAGATGAGAGCACAGGATCTGGAGATGGCCGATAAAGTCAGTACGCAAAAGAAGAGT
 ACGAAAAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205301 protein sequence
 Red=Cloning site Green=Tags(s)

MHFQAFWLCGLLFI SINA EFMDDVETEDFEENSEEIDVNESEL SSEIKYKTPQPIGEVYFAETFD SGR
 LAGWVLSKAKKDDMDEEIS IYDGRWEIEELKENQVPGDRGLVLKSRAKHHAISAVLAKPFI FADKPLIVQ
 YEYVNFQDIDCGGAYIKLLADTDDL ILENFYDKTSYIIMFGPDKCGEDYKLFHIFRHKHPKTGVFEEKHA
 KPPDVLDLKKFFTRDKTHLYTL VMNPDDT FEVLVDQTVVNKGSLLLEDVVPPIKPPKEIEDPNDKPEEWE
 RAKIPDPSAVKPEDWDESEPAQIEDSSVVKPAGWLDDEPKFIPDPNAEKPDWNETDGEWEAPQILNPA
 CRIGCGEWKPPMIDNPKYKGVWRPPLVDNPNYQGIWSPRKIPNPDYFEDDHPFLLTSFSALGLELWSMST
 DIYFDNFII CSEKEVADHWAADGWRWKIMIANANKPGVLKQLMAAAEGHPWLWLIYLVTAGVPIALITSF
 CWPRKVKKKHKDTEYKKTDCIPQTKGVLEQEEKEEKALEKPMDL EEEKKQNDGEMLEKEESEPEEKS
 EEEIEIIEGQESNQSNKSGSEDEMKEADESTGSGDGP IKSVRKRRVRKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

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

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004362

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 0.22um filter is required.

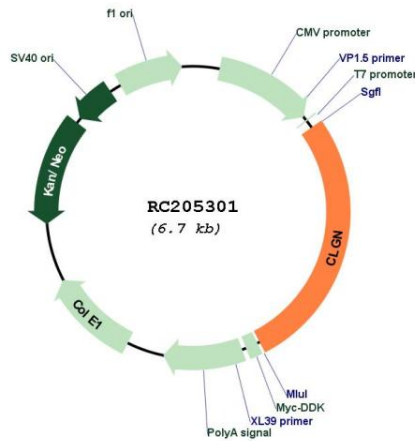
RefSeq: [NM_004362.3](#)

RefSeq Size: 2744 bp

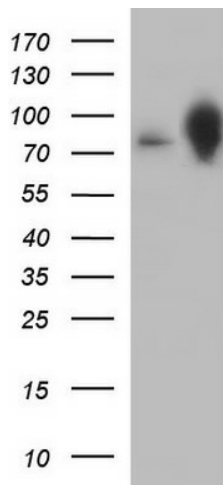
RefSeq ORF: 1833 bp

Locus ID: 1047
UniProt ID: [O14967](#)
Cytogenetics: 4q31.1
Domains: calreticulin
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]

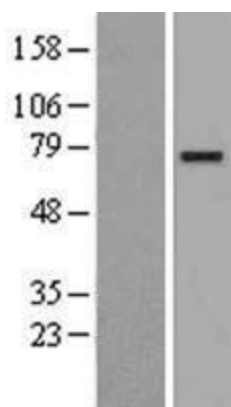
Product images:



Circular map for RC205301



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CLGN (Cat# RC205301, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CLGN (Cat# [TA590180]). Positive lysates [LY401391] (100ug) and [LC401391] (20ug) can be purchased separately from OriGene.



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