

Product datasheet for **MR209394**

Clgn (NM_009904) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Clgn
Synonyms:	4930459O04Rik; A2/; A2/6; AI528775; C; calne; Cln
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR209394 representing NM_009904
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCGTTTCCAGGGTGTGGACTATGTTTGGGTCTCCTGTTCAACGGTCAATGCGGACTTTATGGATG
 ATGGTGTGAGGTGGAAGACTTCAGTGAAAATTCAGACGAGAGTAATATTAAAGATGAACCTTCCTCGGG
 GACTTTTAAGTATAAGACACCTCAACCTATAGGAGAAGTATATTTTACAGAAACATTTGATAGTGGAAT
 CTGGCTGGGTGGGTCTTATCAAAGCAAAGAAGGATGATATGGATTCAGAAATGCTATATATGATGGAA
 GATGGGAAATAGAAGAACTGAAGGAAAACAGGTGCCTGGCGACAGAGGGCTGGTCTGAAGTCTAAAGC
 CAAGCACACGCAATAGCCGCTGTCTCGAAAAACCTTTATTTTGGCCGATAAACCTTTGATAGTTCAA
 TATGAAGTAAATTTTCAAGATGGTATTGATTGTGGAGGTGCATACATAAACTGCTAGCAGACACTGGTG
 ATTTGATTCTGGAAAACCTTTATGATAAAACATCCTATACCATCATGTTTGGACCAGATAAATGTGGAGA
 GGATTATAAACTTCATTTAATCTTCGACACAAACATCCGAAAACCTGGAGTTTTTGAAGAAAAGCATGCC
 AAGCCTCCAGATGTCGATCTGAAGGAGTCTTTACAGACAGGAAGACTCACCTCTATACCCTTGTGATGA
 ATCCGGATGATACATTTGAAGTATTAATTGATCAGAAAGTTGTGAACCAAGGGACCTTGCTAGATGATGT
 GGTCCCGCTATCAACCCACCCAGAGAAATGACGACCCAGTGATAAAAAGCCAGAGGAGTGGGATGAC
 AGAGCCAAGATCCCGACCTACCGCGCTCAGGCCAGAGGACTGGGATGAAAATGAACCTGCCCAATAG
 AAGACTCAAGTGCTGTTAAACCTGATGGCTGGCTTGATGATGAACCAAGTTTATCCCAATCCTAAAGC
 TGAGAAACCTGAGGACTGGAGTGACGACATGGATGGAGAATGGGAGGCACCACATATTCCTAATCCAGCC
 TGTCAGATTGGATGTGGAGAATGGAACCTCCCATGATCGATAACCAAAATACAAAGGAATCTGGAGAC
 CACCAATGATCAATAATCCTAACTACCAGGACTCTGGAGTCTCAGAAGATCCCAACCCAGATTACTT
 TGAGGATGACCACCCCTCCTCCTGACTTCTTTCAAGTGGCTGGGCTTAGAGCTTTGGTCCATGACTCCT
 GACATCTACTTTGATAATTTTATCATCTGTTTCAAGAAAGGAGGTGGCCGATCAGTGGGCTACAGATGGCT
 GGGAATGAAGATAATGGTGGCAATGCTAATGAGCCTGGTGTACTCCGACAGCTGGTGATGCCGAGA
 GGAGCGCCCTGGCTCTGGCTCATGTACCTGGTGATGGCCGGCTTGCCCGTTGCATTAGTTGCTTCTTT
 TGTGGCCAAAGGAAGTAAAGAAAAAATATGAAGACACGGGACCTAAAAAACTGAATTATGCAAACTGC
 AAAGCAAGGCCGCTCTGGAACAAGAGGCAGAGGAGGAGAAGGCCCCAGAGAAGCCAGAAGATGTGAAGA
 AGAAAAGAAGCCAGGTGAAGCTGAGGTGTCACCGTGAAAAGGAAGTAAATGGTGAACCGGAAGAGAAG
 AGTAAGGAAGACAGAGAACTCTAGAAGGTCAAGAGGAAGTGAAGCAAGCTGAGTAAATCTGGATCAGAGG
 ATGAGATGAAGGACGCTGATGAGAGCCAGGATCTGGAGATGCCCCACTGAAGTCATTGCGGAAGAGGAG
 GGTACGGAAGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >MR209394 representing NM_009904
 Red=Cloning site Green=Tags(s)

MRFQGVGLCLGLLFITVNADFMDGVEVEDFSENSDESNIKDEPSSGTFKYKTPQPIGEVYFTETFDSGN
 LAGVWLSKAKKDDMDSEIAIYDGRWEIEELKENQVPGDRGLVLKSKAKHHAIAAVLEKPIFADKPLIVQ
 YEVNFDGIDCGGAYIKLLADTGDLILENFYDKTSYTIMFGPKCGEDYKLHLIFRHKHPKTGVFEKHA
 KPDPVDLKEFFTRDKTHLYTLVMNPDDTFEVLIDQKVVNQGLLDDVPPINPPREIDDPDKKPEEWDD
 RAKIPDPTAVRPEDWDENEPAQIEDSSAVKPDGWLDDPKFIPNPKAEKPEDWSDDMDGEWEAPHIPNPA
 CQIGCGEWKPPMIDNPKYKGIWRPPMINNPNYQGLWSPQKIPNPDYFEDDHPFLLTSFSALGLELWSMTP
 DIYFDNFIICSEKEVADQWATDGWELKIMVANANEPGVLRLVIAAEERPWLWMLYVMAGLPVALVASF
 CWPVRVKKKYEDTGPKKTELCKLQSKAALEQEAEEKAPEKPEDVQEEKKPGAEVVTVEKEVIGEPEEK
 SKEDRETLEGQEEVSKLSKSGSEDEMKDADESPGSGDAPLKLRLRRVRKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9014_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009904

ORF Size: 1833 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

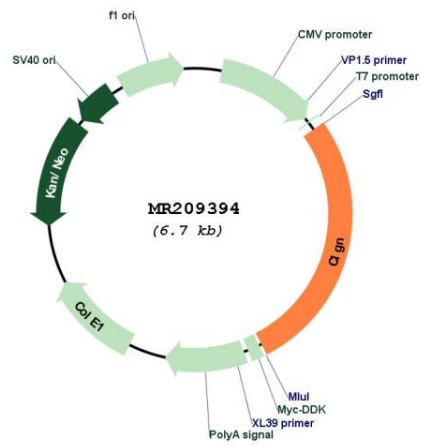
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_009904.4</u>
RefSeq Size:	2307 bp
RefSeq ORF:	1836 bp
Locus ID:	12745
UniProt ID:	<u>P52194</u>
Cytogenetics:	8 39.97 cM
MW:	69.9 kDa
Gene Summary:	This gene belongs to the calreticulin family, which includes calreticulin, calnexin, and calmeglin, and encodes a calcium-binding molecular chaperone specifically expressed in pachytene stage male germ cells. It is required for the proper folding of newly synthesized membrane proteins in the endoplasmic reticulum including those critical for sperm migration from the uterus into the oviduct and sperm adhesion to and penetration of the zona pellucida. This gene plays a key role in spermatogenesis and male infertility. Alternative splice variants exist for this gene. [provided by RefSeq, Jul 2016]

Product images:



Circular map for MR209394