

Product datasheet for **RC200589**

Calumenin (CALU) (NM_001219) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calumenin (CALU) (NM_001219) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calumenin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200589 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGACCTGCGACAGTTTCTTATGTGCCTGTCCCTGTGCACAGCCTTTCCTTGAGCAAACCCACAGAAA
AGAAGGACCGTGTACATCATGAGCCTCAGCTCAGTGACAAGGTTCAATGATGCTCAGAGTTTTGATTA
TGACCATGATGCCTTCTGGGTGCTGAAGAAGCAAAGACCTTTGATCAGCTGACACCAGAAGAGAGCAAG
GAAAGGCTTGGAAAGATTGTAAGTAAAAAGATGGCGACAAGGACGGGTTTGTACTGTGGATGAGCTCA
AAGACTGGATTAATTTGCACAAAAGCGCTGGATTTACGAGGATGTAGAGCGACAGTGAAGGGGCATGA
CCTCAATGAGGACGGCCTCGTTTTCTGGGAGGAGTATAAAAAATGCCACCTACGGCTACGTTTTAGATGAT
CCAGATCCTGATGATGGATTTAACTATAAACAGATGATGGTTAGAGATGAGCGGAGGTTTTAAATGGCAG
ACAAGGATGGAGACCTCATTGCCACCAAGGAGGAGTTCACAGCTTTCCTGCACCCTGAGGAGTATGACTA
CATGAAAGATATAGTAGTACAGGAAACAATGGAAGATATAGATAAGAATGCTGATGGTTTCATTGATCTA
GAAGAGTATATTGGTGACATGTACAGCCATGATGGGAATACTGATGAGCCAGAATGGGTAAGACAGAGC
GAGAGCAGTTTGTGAGTTTCGGGATAAGAACCGTGTGGGAAGATGGACAAGGAAGAGACCAAAGACTG
GATCCTTCCCTCAGACTATGATCATGCAGAGCCAGAAGCCAGGCACCTGGTCTATGAATCAGACAAAAC
AAGGATGGCAAGCTTACCAAGGAGGAGATCGTTGACAAGTATGACTTATTTGTTGGCAGCCAGGCCACAG
ATTTTGGGGAGGCCTTAGTACGGCATGATGAGTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200589 protein sequence
Red=Cloning site Green=Tags(s)

MDLRQFLMCLSLCTAFALSKPTEKKDRVHHEPQLSDKVHNDASQSFYDHDFAFLGAEAAKTFDQLTPPEESK
 ERLGKIVSKIDGDKDGFVTVDLKDVIKFAQKRWIYEDVERQWKGHDLNEDGLVSWEYKNATYGYVLDL
 PDPDDGFNYKQMMVRDERRFKMADKGDGLIATKEEFTAFLLHPEEYDYMKDIVVQETMEDIDKNADGFIDL
 EEYIGDMYSHDGNTDEPEWVKTEREQFVEFRDKNRDGGKMDKEETKDWILPSDYDHAEAEARHLVYESDQN
 KDGKLTKEEIVDKYDLFVGSQATDFGEALVRHDEF

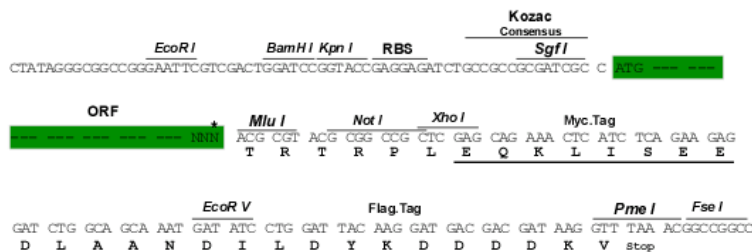
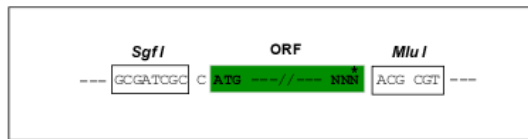
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6146_d10.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_001219

ORF Size: 945 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_001219.5](#)

RefSeq Size: 5366 bp

RefSeq ORF: 948 bp

Locus ID: 813

UniProt ID: [O43852](#)

Cytogenetics: 7q32.1

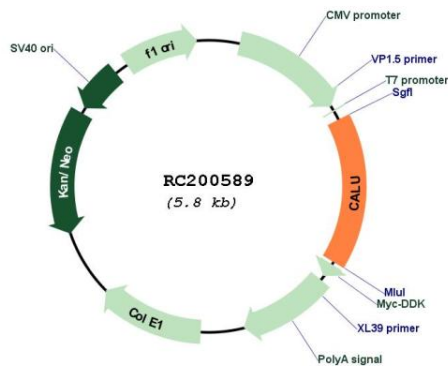
Domains: EFh

Protein Families: Secreted Protein

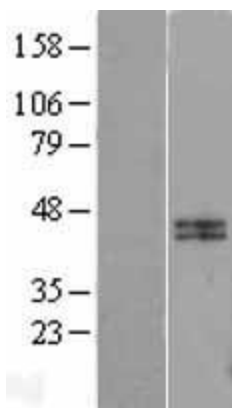
MW: 37.1 kDa

Gene Summary: The product of this gene is a calcium-binding protein localized in the endoplasmic reticulum (ER) and it is involved in such ER functions as protein folding and sorting. This protein belongs to a family of multiple EF-hand proteins (CERC) that include reticulocalbin, ERC-55, and Cab45 and the product of this gene. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Oct 2008]

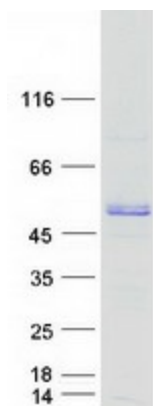
Product images:



Circular map for RC200589



Western blot validation of overexpression lysate (Cat# [LY427231]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225448] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CALU protein (Cat# [TP300589]). The protein was produced from HEK293T cells transfected with CALU cDNA clone (Cat# RC200589) using MegaTran 2.0 (Cat# [TT210002]).