

## Product datasheet for **RC218434**

### NCALD (NM\_001040629) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NCALD (NM\_001040629) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NCALD  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC218434 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGAAACAGAACAGCAAGCTGCGCCCGGAGGTCATGCAGGACTTGCTGGAAAGCACAGACTTTACAG  
AGCATGAGATCCAGGAATGGTATAAAGGCTTCTTGAGAGACTGCCCCAGTGGACATTTGTCAATGGAAGA  
GTTTAAGAAAATATATGGGAACTTTTCCCTTATGGGGATGCTTCCAAATTTGCAGAGCATGTCTCCGC  
ACCTTCGATGCAAATGGAGATGGGACAATAGACTTTAGAGAATTCATCATCGCCTTGAGTGTAACTCGA  
GGGGAAAGCTGGAGCAGAAGCTGAAATGGGCCTTCAGCATGTACGACCTGGACGAAATGGCTATATCAG  
CAAGGCAGAGATGCTAGAGATCGTGCAGGCAATCTATAAGATGGTTTCTCTGTAATGAAAATGCCTGAA  
GATGAGTCAACCCAGAGAAAAGAACAGAAAAGATCTTCCGCCAGATGGACACCAATAGAGACGGAAAAC  
TCTCCATGGAAGAGTTTCATCCGAGGAGCCAAAAGCGACCCGTCATTGTGCGCCTCTGCAGTGCAGCC  
GAGCAGTGCCGGCCAGTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC218434 protein sequence  
Red=Cloning site Green=Tags(s)

MGKQNSKLRPEVMQDLLESTDFTEHEIQEWYKGFRLDCPSGHL SMEEFKKIYGNFFPYGDASKFAEHVFR  
TFDANGDGTIDFREFIIALS SVTSRGKLEQKLK WAFSMYDL DNGYISKAEMLEIVQAIYKMVSSVMKMP  
DESTPEKRTEKIFRQMDTNRDGKLSMEEFIRGAKSDPSIVRLLQCDPSSAGQF

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6320\\_g08.zip](https://cdn.origene.com/chromatograms/mk6320_g08.zip)



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Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001040629

ORF Size: 579 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.

RefSeq: [NM\\_001040629.1](#), [NP\\_001035719.1](#)

RefSeq Size: 3642 bp

RefSeq ORF: 582 bp

Locus ID: 83988

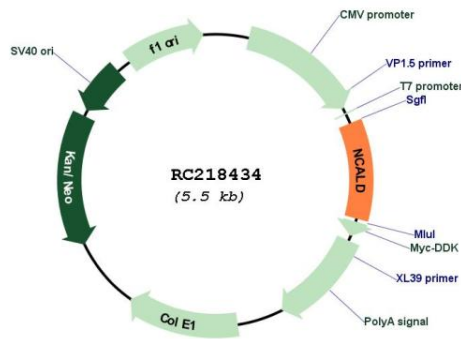
UniProt ID: [P61601](#)

**Cytogenetics:** 8q22.3

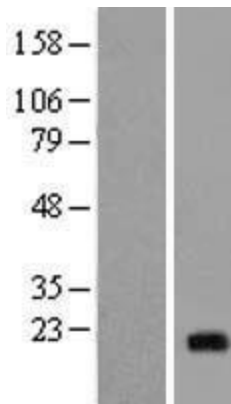
**MW:** 22.3 kDa

**Gene Summary:** This gene encodes a member of the neuronal calcium sensor (NCS) family of calcium-binding proteins. The protein contains an N-terminal myristoylation signal and four EF-hand calcium binding loops. The protein is cytosolic at resting calcium levels; however, elevated intracellular calcium levels induce a conformational change that exposes the myristoyl group, resulting in protein association with membranes and partial co-localization with the perinuclear trans-golgi network. The protein is thought to be a regulator of G protein-coupled receptor signal transduction. Several alternatively spliced variants of this gene have been determined, all of which encode the same protein; additional variants may exist but their biological validity has not been determined. [provided by RefSeq, Jul 2008]

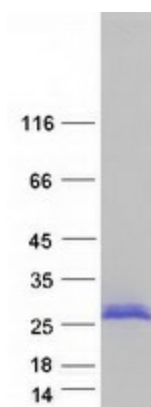
**Product images:**



Circular map for RC218434



Western blot validation of overexpression lysate (Cat# [LY421783]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221428] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NCALD protein (Cat# [TP318434]). The protein was produced from HEK293T cells transfected with NCALD cDNA clone (Cat# RC218434) using MegaTran 2.0 (Cat# [TT210002]).