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Product datasheet for RC201358

Calbindin (CALB1) (NM_004929) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calbindin (CALB1) (NM_004929) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calbindin
Synonyms:	CALB; D-28K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC201358 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGAATCCCACCTGCAGTCATCCCTCATCACAGCCTCACAGTTTTTCGAGATCTGGCTCCATTTCG
ACGCTGACGGAAGTGGTTACCTGGAAGGAAAGGAGCTGCAGAACTTGATCCAGGAGCTCCAGCAGGCGCG
AAAGAAGGCTGGATTGGAGTTATCACCTGAAATGAAAACTTTTGTGGATCAGTATGGGCAAAGAGATGAT
GGAAAAATAGGAATTGTAGAGTTGGCTCACGTATTACCCACAGAAGAGAATTTCCTGCTGCTCTTCCGAT
GCCAGCAGCTGAAGTCCTGTGAGGAATTCATGAAGACATGGAGAAAATATGATACTGACCACAGTGGCTT
CATAGAAACTGAGGAGCTTAAGAACTTTCTAAAGGACCTGCTAGAAAAAGCAAACAAGACTGTTGATGAC
ACAAAATTAGCCGAGTATACAGACCTAATGCTGAAACTATTTGATTCAAATAATGATGGGAAGCTGGAAT
TAACTGAGATGGCCAGGTTACTACCAGTGCAGGAGAATTTTCTTCTTAAATTCCAGGGAATCAAAATGTG
TGGGAAAGAGTTCAATAAGGCTTTTGAGCTGTATGATCAGGACGGCAATGGATACATAGATGAAAATGAA
CTGGATGCTTTACTGAAGGATCTGTGCGAGAAGAATAAACAGGATCTGGATATTAATAATATTACAACAT
ACAAGAAGAACATAATGGCTTTGTCGGATGGAGGGAAGCTGTACCGAACGGATCTTGCTCTTATTCTCTG
TGCTGGGGATAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC201358 protein sequence
Red=Cloning site Green=Tags(s)

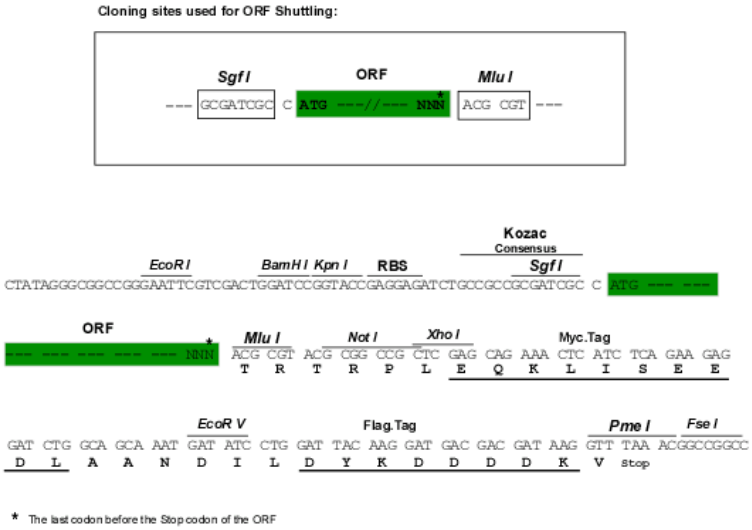
MAESHLQSSLITASQFFEIWLHFDADGSGYLEGKELQNLIQELQQARKKAGLELSPEMKTFVDQYGQRDD
GKIGIVELAHVLPTEENFLLLFRCQQLKSCEEFMKTWRKYDTDHSGFIETEELKNFLKDLLEKANKTVDD
TKLAEYTDLMLKLFDSNNDGKLELTEMARLLPVQENFLLKFQGIKMCGKEFNKAFELYDQDGNGYIDENE
LDALLKDLCEKNKQDLDINNITTYKKNIMALSDGGKLYRTDLALILCAGDN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6267_c10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004929

ORF Size: 783 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_004929.4

RefSeq Size: 2531 bp

RefSeq ORF: 786 bp

Locus ID: 793

UniProt ID: P05937

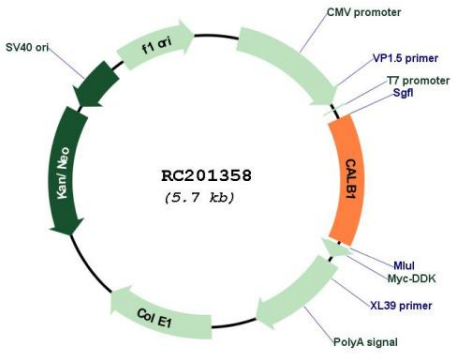
Cytogenetics: 8q21.3

Domains: EFh

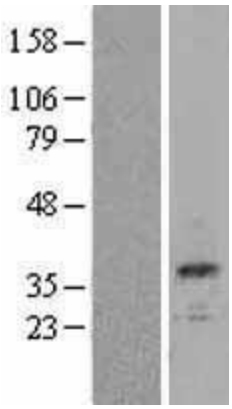
MW: 30 kDa

Gene Summary: The protein encoded by this gene is a member of the calcium-binding protein superfamily that includes calmodulin and troponin C. Originally described as a 27 kDa protein, it is now known to be a 28 kDa protein. It contains four active calcium-binding domains, and has two modified domains that are thought to have lost their calcium binding capability. This protein is thought to buffer entry of calcium upon stimulation of glutamate receptors. Depletion of this protein was noted in patients with Huntington disease. [provided by RefSeq, Jan 2015]

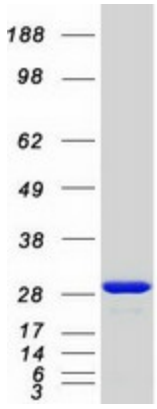
Product images:



Circular map for RC201358



Western blot validation of overexpression lysate (Cat# [LY417646]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201358 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CALB1 protein (Cat# [TP301358]). The protein was produced from HEK293T cells transfected with CALB1 cDNA clone (Cat# RC201358) using MegaTran 2.0 (Cat# [TT210002]).