OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC205791

CALML3 (NM_005185) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CALML3 (NM_005185) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CALML3
Synonyms:	CLP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205791 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGACCAGCTGACTGAGGAGCAGGTCACAGAATTCAAGGAGGCCTTCTCCCTGTTTGACAAGGATG
GGGACGGCTGCATCACCACCCGCGAGCTGGGCACGGTCATGCGGTCCCTGGGCCAGAACCCCACGGAGGC
CGAGCTGCGGGACATGATGAGTGAGATCGACCGGGACGGCAACGGCACCGTGGACTTCCCCGAGTTCCTG
GGCATGATGGCCAGGAAGATGAAGGACACGGACAACGAGGAGGAGATCCGCGAGGCCTTCCGCGTGTTCG
ACAAGGACGGCAACGGCTTCGTCAGCGCCGCCGAGCTGCGACACGTCATGACCCGGCTGGGGGAGAAGCT
GAGTGACGAGGAGGTGGACGAGATGATCCGGGCCGCGGACACGGACGGAGACGGACAGGTGAACTACGAG
GAGTTTGTCCGTGTGCTGGTGTCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205791 protein sequence
Red=Cloning site Green=Tags(s)

MADQLTEEQVTEFKEAFSLFDKDGDGCITTRELGTVMRSLGQNPTEAELRDMMSEIDRDGNGTVDFPEFL
GMMARKMKDTDNEEEIREAFRVFDKDGNGFVSAAELRHVMTRLGEKLSDEEVDEMIRAADTDGDGQVNYE
EFVRVLVSK

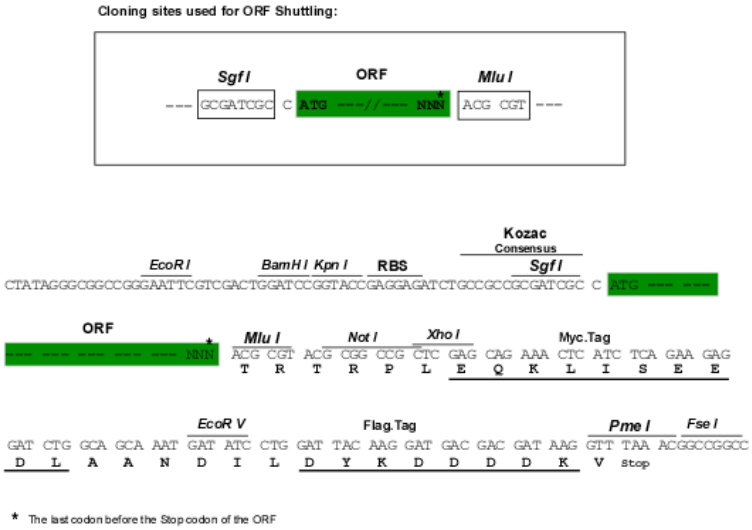
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6326_h05.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005185

ORF Size: 447 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.

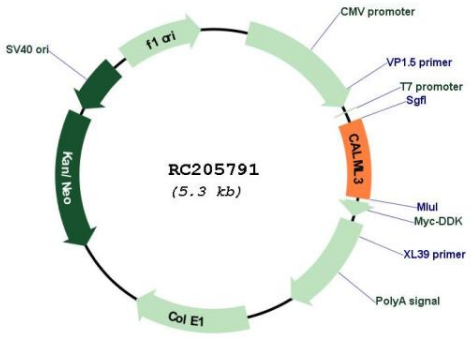
RefSeq: NM_005185.4

RefSeq Size: 1417 bp

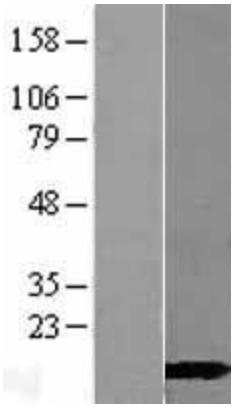
RefSeq ORF: 450 bp

Locus ID:	810
UniProt ID:	P27482
Cytogenetics:	10p15.1
Protein Pathways:	Alzheimer's disease, Calcium signaling pathway, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term potentiation, Melanogenesis, Neurotrophin signaling pathway, Olfactory transduction, Oocyte meiosis, Phosphatidylinositol signaling system, Vascular smooth muscle contraction
MW:	16.9 kDa
Gene Summary:	May function as a specific light chain of unconventional myosin-10 (MYO10), also enhances MYO10 translation, possibly by acting as a chaperone for the emerging MYO10 heavy chain protein. May compete with calmodulin by binding, with different affinities, to cellular substrates.[UniProtKB/Swiss-Prot Function]

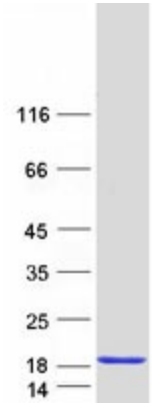
Product images:



Circular map for RC205791



Western blot validation of overexpression lysate (Cat# [LY417458]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205791 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CALML3 protein (Cat# [TP305791]). The protein was produced from HEK293T cells transfected with CALML3 cDNA clone (Cat# RC205791) using MegaTran 2.0 (Cat# [TT210002]).