

## Product datasheet for MR224888

### Cadps (NM\_001042617) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cadps (NM\_001042617) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cadps  
**Synonyms:** AU067781; CAPS; CAPS1; mKIAA1121  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR224888 representing NM\_001042617  
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >MR224888 representing NM\_001042617  
 Red=Cloning site Green=Tags(s)

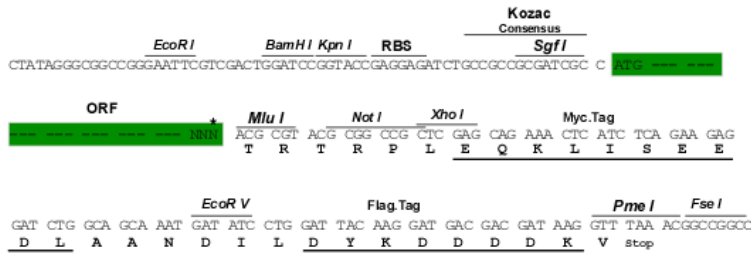
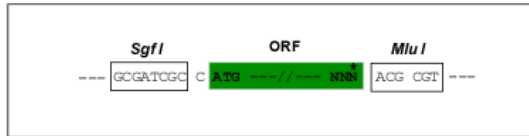
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 LEGVLAKLSRYDEGTLFSSFLSFTVKAASKYVDVPKPGMDVADAYVTFVRHSQDVLKRVNEEMYIERLF  
 DQWYNSSMNICTWL TDRMDLQLHIYQLKTLIRMVKKT YRDFRLQGVLDSTLNSKTYETIRNRLTVEEAT  
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Restriction Sites:  
 Cloning Scheme:

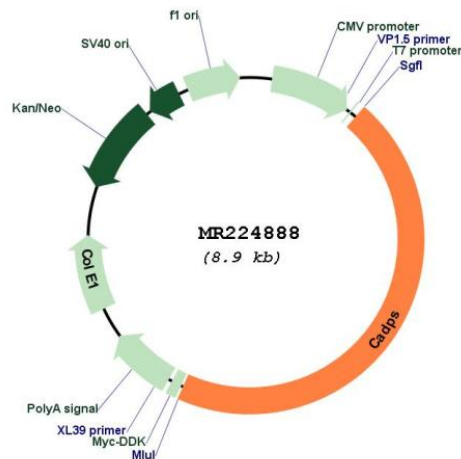
SgfI-MluI

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_001042617

ORF Size: 4065 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](mailto: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.

RefSeq: [NM\\_001042617.1](#), [NP\\_001036082.1](#)

RefSeq Size: 5475 bp

RefSeq ORF: 4068 bp

Locus ID: 27062

UniProt ID: [Q80TJ1](#)

Cytogenetics: 14 A1

MW: 153.6 kDa

**Gene Summary:** Calcium-binding protein involved in exocytosis of vesicles filled with neurotransmitters and neuropeptides. Probably acts upstream of fusion in the biogenesis or maintenance of mature secretory vesicles. Regulates catecholamine loading of DCVs. May specifically mediate the Ca(2+)-dependent exocytosis of large dense-core vesicles (DCVs) and other dense-core vesicles by acting as a PtdIns(4,5)P2-binding protein that acts at prefusion step following ATP-dependent priming and participates in DCVs-membrane fusion. However, it may also participate in small clear synaptic vesicles (SVs) exocytosis and it is unclear whether its function is related to Ca(2+) triggering (By similarity).[UniProtKB/Swiss-Prot Function]