

## Product datasheet for **MR211006**

### Cadps (BC079679) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cadps (BC079679) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cadps
Synonyms:	CAPS, CAPS1, mKIAA1121
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>MR211006 representing BC079679  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCTGGACCCTTCGTCCAGCGAAGAGGAGTCAGATGAGATCCTGGAAGAGGAGAGGGGCAAGGATGTGC  
TGGGCTCGGCCGGTCTGGAGCGCGCTGTCTCCAGCCGACACGAGGGCTCGGCAGGCAGCGCCGG  
GATGGGGGGCAGTGGCGCCGGGGCCGGGGTGGGCGCCGGCGGGTGGGGTAGCGGCAGCAGCGGC  
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TGGTGAGCGAGAAGGAGAAGGAAGAGTTGGAGAGGCTGCAGAAGGAGGAGGAAGAGGAAGAAGAGGCT  
GCAGCTGTACGTGTTCTGTGATGCGCTGCATCGCTACCCCTTCAACGCCAAGCAGCCACCACGATGGCT  
CGGCGGCAGCAGAAGATCAGCAAACAGCAGCTACAGACTGTCAAAGACCGGTTCCAGGCTTTTCTCAATG  
GGGAGACCCAAATCGTAGCTGATGAAGCCTTTATGAATGCTGTCCAGAGCTACTATGAGGTGTTTCTCAA  
GAGTGACCGTGTGGCCCGCATGGTGCAGAGTGGGGGCTGCTCAGCCAATGACTCTCGGGAGGTCTTCAAG  
AAACACATCGAGAAGAGGGTGCAGCAGCTACCTGAGATTGACGGCCTCAGCAAGGAGACAGTGCTAAGCT  
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AGCCAGTGCAGCTTCTGAGTTGATTCTGAGCAAGGAACAGCTCTATGAGATGTTTCAAGAACATTCTGGG  
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GTTTCATCCAAAGAAATGGAAAACATGTACATTGAGGAGCTGAAGTCTCCGTCAACCTGCTCATGGCC  
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TGGATAAGCCTCAAAACATGAAGCACTCTGGTACTTATGGACCATTGGTAAGAATGTGTGAAGAGGTG  
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ACAAGATCGAATTTTGTGGTCCAAGCTATGTACAGGGCCACTGGCCAGTCGCACAAACCTGTTCCCCCT  
ACCCAGGTGCAGAAGCTCAACGCCAAGGGCGGAAATGTGCCTCAGCTGGATGCCCCATCTCACAATTTT  
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GTCACTTGTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211006 representing BC079679  
 Red=Cloning site Green=Tags(s)

MLDPSSEEESEILEEERGKVDL GSAASGARLSPSRTSEGSAGSAGMGGSGAGAGVGGGGGSGASSG  
 GGAGGLQPSSRAGGGRPSSPSPSVVSEKEKEELERLQKEEEERKKRLQLYVFMRCIAYPFNAKQPTDMA  
 RRQKISKQQLQTVKDRFQAFNLGETQIVADEAFMNAVQSYVEFLKSDRVARMVQSGGCSANDSREVFK  
 KHIEKRVRSLPEIDGLSKETVLSWMMAKFDAIYRGEEDPRKQARMTASAASELILSKEQLYEMFQNILG  
 IKKFEHQLLYNACQLDNPDEQAAQIRRELDGRLQADQIARERKFPKFSKEMENMYIEELKSSVLLMA  
 NLESMVSKGGFKLQKLKRSHNASIIDMGESEENQLSKSDVLLSFSLEVVIMEVQGLKSLAPNRIYVCT  
 MEVEGGEKLQTDQAEASKPTWGTQGDFTTHALPAVKVKLFTSTGVLALEDKELGRVILHPTPNSPKQS  
 EWHKMTVSKNCPDQDLKIKLAVRMDKPQNMKHSGLWTIGKNVWKRWKRFFVLVQVSQYTFAMCSYREK  
 KAEPQELLQLDGYTVDYDTPQPLEGGRAFFNAVKEGDTVIFASDDEQDRILVWQAMYRATGQSHKPVPP  
 TQVQKLNAGGNVPQLDAPISQFYADRAQKHGMDEFISSNPCNFHASLFEMVQRLTDLHRLNDSYSLG  
 WFSQVFLDEYCARNGVRGCHRHLCYLRDLLERAENGAMIDPTLLHYSFAFCASHVHGPNRDPDGTVT  
 VEEKERFEEIKERLRLVLENQITHFRYCFPFGRPEGALKATLSLLERVLMKDIVPVPQEEVKTVIRKCL  
 EQAALVNYSRLSEYAKIEGKTSICHLF

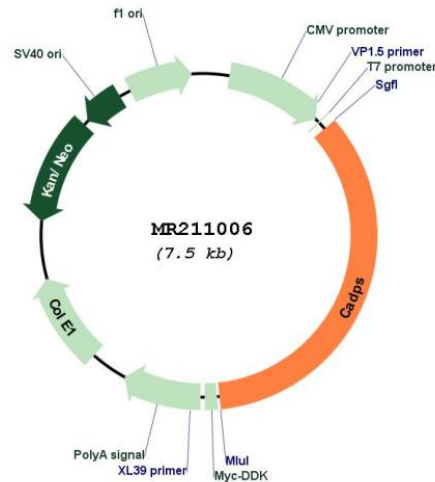
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** BC079679

**ORF Size:** 2601 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:** [BC079679](#)

**RefSeq Size:** 7872 bp

**RefSeq ORF:** 2603 bp

**Locus ID:** 27062

**Cytogenetics:** 14 A1

**MW:** 288.6 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]