

## Product datasheet for MC229466

### Cadps2 (NM\_001252106) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cadps2 (NM_001252106) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cadps2
Synonyms:	A230044C21Rik; Caps-2; Caps2; Cpd2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC229466 representing NM_001252106 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTCGACCCGTCCTCCAGCGAGGAGGAGTCCGACGAGGGGCTGGAGGAGGAGAGCCGCGAGGTGTTGG  
TGGCGCCGGGCGTCTCCAGCGAGCGCCCGCGCGGCTCGGAAGGGCGCGGGACGCGCCGGGACG  
CTCCGGTGGTGGCAGCGCGCGGAGCGCCAGACCCGTGAGCCCGAGCCCTCGTACTCAGCGAGGGG  
CGAAATGAGCCCGAGCTGCAGCTGGACGAGGAGCAGGAGCGGCGCATCCGCCTGCAGCTCTACGTCTTCG  
TGGTGAGGTGCATCGCGTACCCATTCAACGCCAAGCAGCCACCGACATGGCCCGGAGGCAGCAGAACT  
TAACAAACAACAATTGCAGTTACTGAAAGAACGGTTCCAGGCCTTTCTCAATGGAGAACTCAGATAGTA  
GCAGACGAAGCCTTCTGCAATGCCGTCCGGAGTTACTATGAGGTGTTTCTAAAGAGTGACCGTGTGGCCA  
GAATGGTTCAAAGTGGAGGATGCTCTGCTAATGATTTCCAGAGAGGTGTTAAGAAGAATAGAAAAACG  
TGTCCGTAGCCTGCCAGAGATAGATGGCCTGAGCAAAGAGACAGTGCTGAGCTCATGGATAGCCAAATAT  
GACGCCATTTACAGGGGAGAAGAAGATTTGTGCAAACAGCCGAACAGGATGACCCCTAGTCCCGTGTCTG  
AGCTTATTCTGAGTAAGGAGCAGCTCTAATAAATGTTCCAGCAGATTCTGGGCATTAAGAAGCTGGAACA  
CCAGTACTTTATAACGCATGCCAGCTGGATAACGCTGATGAACAAGCAGCCAGATCAGAAGGGAACTT  
GATGGCCCGCTGCAGTTGGCAGAGAAGATGGCAAAGGAGAGAAGATTTCCCGAGATTCATCTCGAAAGAAA  
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CTGGGAGATGAGAACGAGATCCAGCTGTCCAAGTCGGATGTGGTGTGTCGTTACGTTAGAGATTGTCA  
TCATGGAAGTGAAGGACTGAAATCTGTGGCTCCCAATCGAATCGTTTACTGCACAATGGAGGTGGAAGG  
AGGAGAAAACTCCAGACAGACCAGGCTGAAGCATCAAGGCCACAATGGGGACCCAAGGAGATTTCAAC  
ACTACCCACCCTCGCCGTGTCGTCAAAGTGAAGCTCTTACAGAAAGCACGGGGTCTGGCCCTGGAAG  
ACAAGGAACTGGGCAGGGTGGTGTATACCCAATTCTAATAGCTCCAAGTCAGCAGAGTTACACCGAAT  
GACAGTACCCAAGAACAGTCAGGACTCGGACCTAAAGATCAAATTTGGCAGTGCAGATGGATAAACCGCA  
CACATGAAGCATAGTGGGTACCTGTATGCCCTTGACAGAAGGTTTGAAAAGATGGAAAAGCGTTACT



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TTGTTCTCGTTCAGGTTAGCCAGTACACCTTTGCTATGTGCAGCTATAGAGAAAAAAGTCGGAACCACA
GGAATTAATGCAACTGGAAGGATACACAGTGGATTACACAGACCCCTACCCAGATGCAGACCGTTTTTCAG
AAACACGGGATGGATGAGTTTATTTCTGCGAGTCTTGCAAGCTTGACCATGCCTTCTCTCAGAATTC
TCCAGAGACAGACTTTGGATCACAGACTGAATGATTCTGATTCTGTTTGGGGTGGTTTAGCCCTGGCCA
AGTCTTTGTGTTAGATGAGTACTGTGCCGCTACGGAGTGAGAGGCTGTACAGGCATCTCTGCTACCTT
ACAGAACTGATGGAACATTCAGAAAACGGTGTCTGATTGACCCACCCTGCTCCATTACAGCTTTGCAT
TCTGTGCCTCTCACGTGCACGGCAACAGGCCTGATGGGATTGAAACGGTTTCAGTGAAGAGAAAGAAAG
ATTTGAGGAGATAAAAGACCGACTTTCTCGCTTTTAGAAAACAGATCAGCCACTTCAGATACTGCTTT
CCCTTCGGACGACCTGAGGGTGCCTAAAAGCTACGCTCTCCTTACTTAAAGGGTTTTAATGAAAGACA
TTGCCACTCCTATCCCTGCGGAGGAGGTGAAGAAAGTGGTCAAGAAATGTCTGGAGAAAGCTGCCTTGAT
CAATTACACTAGGCTCACAGAATATGCCAAAATAGAAGGGCCCGAGAAAAGGAAACAGAGACCATGAAC
CAGGCAACTCCTGCCAGGAAGCTGGAAGAGGTTCTTCATCTTGCAGAGCTCTGCATAGAAGTCTACAGC
AAAATGAGGAGCATCATGCTGAGGGAAGAGAGGCATTTGCCTGGTGGCCTGACTTGTGGCCGAGCATGC
AGAGAAGTTTTGGGCTTTATTACAGTAGACATGGATACTGCGCTGGAGGCCAACCTCAAGACTCTGG
GATAGCTTTCCCTTTCCAGCTGCTTAATAATTTCTCAGAAAATGACACACTTTTGTGTAATGGAAAAT
TCCACAAGCACTTGAAGAAATCTTTGTGCCCTGGTTGTCCGCTACGTTGACCTGATGGAGTCTGCCAT
CGCCACAGTCCATTACAGAGGTTTTGAGCAGGAGACATGGCAGCCTGTCAACAATGGCTCAACAACCTCC
GAGGATCTGTTCTGGAAGCTCGATGCGCTGCAAAATGTTCTGCTTTGATCTCCATTGGCCAGAAACAAGAGT
TTGCCACCACCTTAGAGCAAAGACTTAACTAATGGCCAGTGATATGATAGAGGCGTGTGCAAAAAGAAC
AAGAAGTGCCTTGAAGTCAAGCTACAAAAGGCAAAACAAAACAACTGACTTGGCATCCCAGCTTCCGTG
TGCACAATGTTTAAATGTATTAGTTGATGCTAAAAGCAAAGCACAAGCTGTGTGCCCTGGATGGAGGAC
AAGAGTTTAGGAATCAGTGGCAACAGTACCATTCAAAAATAGATGATTTGATTGACAACACCGTGAAGA
AATCATTGCACCTGCTGGTTTCAAAGTTTGTTCAGTGTGGAAGGGTGTCTTCGAAGTTGTCGAGGTAT
GACGAAGGCACCTTCTTCTCATCCATCCTGTCTTCACTGTGAAAGCAGCTGCAAAAATATGTGGATGTC
CTAAACCAGGAATGGATCTGGCAGACACCTACATTATGTTTGTCCGGCAAACCAGGATATTCTCGAGA
AAAAGTCAATGAAGAGATGTACATAGAAAAGTTGTTTGTCAATGGTACAGCAATTCCATGAAAGTCATT
TGTGTGTGGCTGGCTGACAGACTAGACCTCCAGCTTCATATTTACCAACTGAAGACGCTCATCAAGATTG
TGAAGAAAACCTATAGGGATTTCCGATTGCAGGGTGTGTTGGAGGGGACGCTGAACAGTAAGACATATGA
TACTCTGCACAGACGTCTAACTGTAGAGGAGGCCACAGCCTCTGTCTCAGAAGGCCGAGGACTTCAGGGC
ATTACCATGAAGGACAGTATGAGGAGGAAGAAGGCTGA
    
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001252106
- Insert Size:** 3609 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001252106.1](#), [NP\\_001239035.1](#)

**RefSeq Size:** 4663 bp

**RefSeq ORF:** 3609 bp

**Locus ID:** 320405

**Cytogenetics:** 6 A3.1

**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 neurotrophin release from granule cells leading to regulate cell differentiation and survival during cerebellar development. May specifically mediate the Ca(2+)-dependent exocytosis of large dense-core vesicles (DCVs) and other dense-core vesicles.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks two alternate in-frame exons in the central coding region, but includes an additional in-frame exon in the 3' coding region, compared to variant 1. The encoded isoform (3, also known as CAPS2c) is shorter than isoform 1.