

## Product datasheet for MC229530

### Cadps2 (NM\_001252105) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cadps2 (NM\_001252105) 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:** >MC229530 representing NM\_001252105  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCTCGACCCGTCCTCCAGCGAGGAGGAGTCCGACGAGGGGCTGGAGGAGGAGAGCCGCGAGGTGTTGG  
 TGGCGCCGGGCGTCTCCAGCGAGCGCCCGCGCGGCTCGGAAGGGCGCGGGACGCGCCGGGACG  
 CTCGGTGGTGGCAGCGCGCGGAGCGCCAGACCCGTGAGCCCGAGCCCTCGTACTCAGCGAGGGG  
 CGAAATGAGCCCGAGCTGCAGCTGGACGAGGAGCAGGAGCGGCGCATCCGCCTGCAGCTCTACGTCTTCG  
 TGGTGAGGTGCATCGCGTACCCATTCAACGCCAAGCAGCCACCGACATGGCCCGGAGGCAGCAGAAGCT  
 TAACAAACAACAATTGCAGTTACTGAAAGAACGGTTCCAGGCCTTTCTCAATGGAGAAACTCAGATAGTA  
 GCAGACGAAGCCTTCTGCAATGCCGTCCGGAGTTACTATGAGGTGTTCTAAAGAGTGACCGTGTGGCCA  
 GAATGGTTCAAAGTGGAGGATGCTCTGCTAATGATTTCCAGAGAGGTGTTAAGAAGAATAGAAAAACG  
 TGTCCGTAGCCTGCCAGAGATAGATGGCCTGAGCAAAGAGACAGTGTGAGCTCATGGATAGCCAAATAT  
 GACGCCATTTACAGGGGAGAAGAAGATTTGTGCAAACAGCCGAACAGGATGACCCCTAGTCCCGTGTCTG  
 AGCTTATTCTGAGTAAGGAGCAGCTCTAATAAATGTTCCAGCAGATTCTGGGCATTAAGAAGCTGGAACA  
 CCAGCTACTTTATAACGCATGCCAGCTGGATAACGCTGATGAACAAGCAGCCAGATCAGAAGGGAACTT  
 GATGGCCCGCTGCAGTTGGCAGAGAAGATGGCAAAGGAGAGAAGATTTCCCGAGTTTCATCTCGAAAGAAA  
 TGGAGAGTATGTACATTGAAGAGCTGCGAGCCTCCGTGAACCTGCTAATGGCCAATTTAGAAAGTCTTCC  
 AGTTTTCAAAGGTGGCCCGAAATTTAAATTACAAAAATTAAGCGTTTCGAGAACTCTGCGTTTCTGGAC  
 CTGGGAGATGAGAACGAGATCCAGCTGTCCAAGTCGGATGTGGTGTGTCGTTACGTTAGAGATTGTCA  
 TCATGGAAGTGAAGGACTGAAATCTGTGGCTCCCAATCGAATCGTTTACTGCACAATGGAGGTGGAAGG  
 AGGAGAAAACTCCAGACAGACCAGGCTGAAGCATCAAGGCCACAATGGGGACCCAAGGAGATTTCAAC  
 ACTACCCACCCTCGCCCTGTCGTCAAAGTGAAGCTCTTACAGAAAGCACGGGGTCTGGCCCTGGAAG  
 ACAAGGAACTGGGCAGGGTGGTGTATACCCAATTCTAATAGCTCCAAGTCAGCAGAGTTACACCGAAT  
 GACAGTACCCAAGAACAGTCAGGACTCGGACCTAAAGATCAAATTTGGCAGTGCAGATGGATAAACCGCA  
 CACATGAAGCATAGTGGGTACCTGTATGCCCTTGACAGAAGGTTTGAAAAGATGGAAAAGCGTTACT



TTGTTCTCGTTCAGGTTAGCCAGTACACCTTTGCTATGTGCAGCTATAGAGAAAAAAGTCGGAACCACA  
 GGAATTAATGCAACTGGAAGGATACACAGTGGATTACACAGACCCCTACCCAGGCCTTCAGGGTGGTCAG  
 GTGTTCTTCAACGCTGTTAAAGAGGGAGATACTGTGATCTTTGCCAGTGATGATGAACAGGACAGAATAT  
 TATGGGTACAAGCCATGTACAGGGCTACAGGCCAGTCTTACAACCAGTTCCTGCAGTCCAAAGCCAGAA  
 GCTGAATCCTAAAGGCGGAGCTCCTATGCAGATGCTCAGCTTTATGCAGACCGTTTTAGAAAACACGGG  
 ATGGATGAGTTTATTTCTGCGAGTCTTGAAGCTTGACCATGCCTTCTCTTCCAGATTTCTCCAGAGAC  
 AGACTTTGGATCACAGACTGAATGATTCTGTTGTTGGGGTGGTTAGCCCTGGCCAAAGTCTTTGT  
 GTTAGATGAGTACTGTGCCCGCTACGGAGTGAGAGGCTGTACAGGCATCTCTGCTACCTTACAGAAGT  
 ATGGAACATTCAGAAAACGGTGCTGTCATTGACCCACCCTGCTCCATTACAGCTTTGCATTCTGTGCCT  
 CTCACGTGCACGGCAACAGGCCTGATGGGATTGGAACGGTTTCAGTGGAAGAGAAAAGAAATTTGAGGA  
 GATAAAAGACCGACTTTCTCGCTTTTAAAGAACAGATCAGCCACTTCAGATACTGCTTTCCCTTCGGA  
 CGACCTGAGGGTGCCCTAAAAGCTACGCTCTCCTTACTTGAAGGGTTTTAATGAAAGACATTGCCACTC  
 CTATCCCTGCGGAGGAGTGAAGAAAGTGGTCAGAAAATGCTGGAGAAAGCTGCCTTGATCAATTACAC  
 TAGGCTCACAGAATATGCCAAAAAGAAAGGCCCGCAGAAAAGGAAACAGAGACCATGAACCAGGCAACT  
 CCTGCCAGGAAGCTGGAAGAGGTTCTTCTCATCTTGCAGAGCTCTGCATAGAAGTCTACAGCAAAATGAGG  
 AGCATCATGCTGAGGGAAGAGAGGCATTTGCCTGGTGGCCTGACTTGTGGCCGAGCATGCAGAGAAGTT  
 TTGGGCTTTATTCACAGTAGACATGGATACTGCGCTGGAGGCCAACCTCAAGACTCCTGGGATAGCTTT  
 CCCCTTTTCCAGCTGCTTAATAATTTCTCAGAAATGACACACTTTTGTGTAATGGAAAATTCACAAGC  
 ACTTGAAGAAATCTTTGTGCCCTGGTGTCCGCTACGTTGACCTGATGGAGTCTGCCATCGCCAGTC  
 CATTACAGAGGTTTTGAGCAGGAGACATGGCAGCCTGTCAACAATGGCTCAACAACCTCCGAGGATCTG  
 TTCTGGAAGCTCGATGCGCTGCAAAATGTTGCTTTGATCTCCATTGGCCAGAACAGAGTTTGGCCACC  
 ACTTAGAGCAAAGACTTAACTAATGGCCAGTGATATGATAGAGGCGTGTGTCAAAGAACAAGAAGTGC  
 GTTCGAACTCAAGCTACAAAAGGCAAAACAAAACAACTGACTTGGCATCCAGCTTCCGTGTGCACAATG  
 TTTAATGTATTAGTTGATGCTAAAAGCAAGCACCAAGCTGTGTGCCCTGGATGGAGGACAAGAGCAAC  
 AGTACCATTCAAAAATAGATGATTTGATTGACAACACCGTGAAAGAAATCATTGCACTGCTGGTTTCAAA  
 GTTTGTTTTCAGTGTGGAAGGGGTGCTTTGCAAGTTGTCGAGGTATGACGAAGGCACTTTCTTCTCATCC  
 ATCCTGTCCTTCACTGTGAAAGCAGCTGCAAAATATGTGGATGTCCTAAACCAGGAATGGATCTGGCAG  
 ACACCTACATTATGTTTGTCCGGCAAAACCAGGATATTCTTCGAGAAAAAGTCAATGAAGAGATGTACAT  
 AGAAAAGTTGTTGATCAATGGTACAGCAATCCATGAAAGTCATTTGTGTGGCTGGCTGACAGACTA  
 GACCTCCAGCTTCATATTTACCAACTGAAGACGCTCATCAAGATTGTGAAGAAAACCTATAGGGATTTCC  
 GATTGCAGGGTGTGTTGGAGGGGACGCTGAACAGTAAGACATATGATACTCTGCACAGACGTCTAACTGT  
 AGAGGAGGCCACAGCCTCTGTCTCAGAAGGCGGAGGACTTCAGGGCATTACCATGAAGGACAGTGATGAG  
 GAGGAAGAAGGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001252105
- Insert Size:** 3795 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\\_001252105.1](#), [NP\\_001239034.1](#)

**RefSeq Size:** 4849 bp

**RefSeq ORF:** 3795 bp

**Locus ID:** 320405

**UniProt ID:** [Q8BYR5](#)

**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 (2) lacks an alternate in-frame exon in the central coding region, compared to variant 1, resulting in an isoform (2, also known as CAPS2a) that is shorter than isoform 1.