

Product datasheet for MC224325

Cadps (NM_001042617) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cadps (NM_001042617) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cadps
Synonyms:	AU067781; CAPS; CAPS1; mKIAA1121
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224325 representing NM_001042617 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGACCCTTCGTCCAGCGAAGAGGAGTCAGATGAGATCCTGGAAGAGGAGAGGGGCAAGGATGTGC
TGGGCTCGGCCGCTCTGGAGCGCGCTGTCTCCAGCCGACCAGCGAGGGCTCGGCAGGCAGCGCCGG
GATGGGGGCGAGTGGCGCCGGGGCGGGTGGGCGCCGGCGGGTGGGGTAGCGGCGCAGCAGCGGC
GGCGGGGCGGGGGCTGCAGCCAGCAGCGCGCCGGCGGGCGGGCCTTCCAGCCCTAGCCCGTCCG
TGGTGAGCGAGAAGGAGAAGGAAGAGTTGGAGAGGCTGCAGAAGGAGGAGGAAGAGGAAGAAGAGGCT
GCAGCTGTACGTGTTCTGTATGCGCTGCATCGCCTACCCCTCAACGCCAAGCAGCCACCACATGGCT
CGGCGGCAGCAGAAGATCAGCAAACAGCAGCTACAGACTGTCAAAGACCGTTCCAGGCTTTTCTCAATG
GGGAGACCCAAATCGTAGCTGATGAAGCCTTTATGAATGCTGTCCAGAGCTACTATGAGGTGTTTCTCAA
GAGTGACCGTGTGGCCGCATGGTGCAGAGTGGGGGCTGCTCAGCCAATGACTCTCGGGAGGTCTTCAAG
AAACACATCGAGAAGAGGGTGGCAGCCTACCTGAGATTGACGGCCTCAGCAAGGAGACAGTGCTAAGCT
CTTGGATGGCCAAGTTTGTATGCCATCTACCGTGGTGAGGAGGACCCAGGAAGCAGCAAGCCCGATGAC
AGCCAGTGCAGCTTCTGAGTTGATTCTGAGCAAGGAACAGCTCTATGAGATGTTTCAGAACATTCTTGGG
ATCAAGAAGTTTGAACATCAACTCCTGTATAATGCCTGTCAGCTGGACAATCCAGATGAGCAGGCAGCC
AGATCAGACGAGAGCTGGATGGACGTCTCAAATGGCAGATCAAATAGCCAGGGAACGAAATTTCTCTAA
GTTCTGATCCAAAGAAATGGAACATGTACATTGAGGAGCTGAAAGTCCCTCCGTCAACTGCTCATGGCC
AACTTGGAGAGCATGCCGGTGTCCAAGGGTGGAGAGTTCAAGCTACAGAACTGAAACGCAGTCACAATG
CTTCCATCATTGACATGGGTGAGGAGAGTGAGAACCAGCTTTCTAAGTCAGATGTCCTGTCTCTCTC
CTTGGAGTGGTGTATCATGGAAGTCCAAGGCTTAAGTCTTGGCTCAAATCGAATTGTATACTGCACA
ATGGAGTGGAGGTGGAGAACTTCAGACAGATCAAGCAGAGGCTTCAAACCAACCTGGGGCACTC
AAGGCGACTTCTCCACAACCCATGCGCTGCCAGCTGTTAAAGTAAACTATTACAGAGAGCACTGGTGT
CCTGGCCTTGAAGACAAGGAACCGGGCGGGTATCCTCCATCCACCCCAAATAGCCCAAACAATCT



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GAGTGGCACAAAATGACAGTCTCCAAAACTGCCCGATCAAGACCTCAAAATCAAACCTGCTGTCCGAA
 TGGATAAGCCTCAAAACATGAAGCACTCTGGTACTTATGGACATTGGTAAGAATGTGTGGAAGAGGTG
 GAAGAAGAGGTTCTTTGTGTTGGTGCAGGTGAGCCAGTACACTTTTGCCATGTGCAGCTATCGAGAAAAG
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 ACCCAGGTGCAGAAGCTCAACGCCAAGGGCGGAAATGTGCCTCAGCTGGATGCCCCATCTCACAATTTT
 CTGGACTGAAGGACGCAGATAGAGCTCAGAAGCATGGCATGGATGAATTTATCTCTTCAACCCCTGTAA
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 TCTTGCCTGGGCTGGTTCAGTCTGCCAGGTGTTTGTGTAGATGAGTATTGCGCCAGAAAATGGAGTCC
 GAGGATGTACCCGGCATCTCTGACTCTTAGAGACTTGTGGAACGAGCAGAAAATGGCGCATGATTGA
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 GGAAGTGTGACTGTTGAAGAAAAGAACGCTTTGAAGAAATCAAAGAGAGACTCCGAGTTCTGCTGGAAA
 ATCAAATTACACATTTCAAGTACTGCTTTCCATTTGGTCGACCTGAAGGTGCTTTGAAAGCTACTCTCTC
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 CGTAAATGCCTAGAGCAGGCTGCTCTAGTCAACTACTCAGCCTATCTGAGTATGCCAAAATGAAGAGA
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 GAAGCCTTTGCGTGGTGGTGCAGACTTAATGGTGGAGCATGCGGAGACGTTCTGTCACTCTTTCAGTGG
 ACATGGATGCAGCCTTAGAGGTGCAACCCCGAGACAGTGGGACAGTTTCCCACTCTTCCAGCTGCTGAA
 TGACTTTCTCCGTACAGACTATAATTTGTGCAATGGAAAGTTTCAACAACCTGCAGGACCTGTTCCGCC
 CCAGTGTGTTAGATATGTGGATCTGATGGAGTCCCTCATTGCACAATCTATCCACAGGGGCTTTGAGC
 GGGAGTCATGGGAGCCAGTCAAGAGTTTAAACAGTAACCTACCCAATGTGAACCTACCCAATGTGAACCT
 ACCCAAAGTACCAAATCTACCAGTTAACATCCCTCTAGGCATCCACAGATGCCCACTTTTTCGGCACCG
 TCATGGATGGCTGCTATATATGATGCTGATAATGGATCAGGTACATCAGAAGATTTGTTCTGAAAACCTG
 ATGCCCTTCACTTTTCCGTGACCTACACTGGCCTGAGGAAGAGTTTGGAAAACACTTAGAGCAGCG
 GCTAAAACCTGATGGCAAGTGACATGATTGAGTCTGCGTCAAAGAACCAGGATTGCATTTGAAGTTAAG
 CTGCAAAAACCAGTCGATCAACAGATTTTCGAGTCCCACAGTCAATATGCACCATGTTAATGTTATGG
 TTGATGCCAAAGCTCAATCAACAAAACCTTGCAGCATGGAAATGGGCCAAGAGCATCAATACCATTCAA
 AATAGATGAACTAATTGAAGAAACCGTTAAAGAAATGATCACACTTTTGGTGGCAAAGTTTGTAACTATA
 TTGGAAGCGTACTGGCAAAGTTATCCAGATATGACGAGGGGACTTTGTTTTCTCGTTTCTGTCATTCA
 CGGTGAAGGCAGCTTCCAAGTATGTGGACGTGCCTAAACCCGGGATGGAGTGGCCGACGCTACGTGAC
 TTTCTGTCGCCATTCTCAGGATGTCCTTCTGTGATAAGGTCAATGAGGAGATGTATATAGAAAGGTTATTT
 GATCAATGGTACAACAGCTCCATGAACATCATCTGCACGTGGCTGACCGACAGGATGGACCTGCAGCTCC
 ACATTTACCAGCTGAAAACCTGATCAGGATGGTAAAGAAAACCTATAGAGATTTCCGATTGCAAGGGGT
 CCTGGATTCCACCTTAAACAGCAAGACCTATGAGACCATCCGAAACCGTCTCACTGTGGAGGAAGCTACA
 GCGTCAGTGAGTGAGGGTGGGGCTTACAAGGTATCAGCATGAAGGACAGTGATGAGGAAGATGAAGAAG
 ATGATTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1885_d10.zip
 Restriction Sites: SgfI-MluI
 ACCN: NM_001042617
 Insert Size: 4068 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 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](#)

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

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]
 Transcript Variant: This variant (2) has multiple differences in the coding region but maintains the reading frame, compared to variant 1. This variant encodes isoform 2 which is 6 aa shorter than isoform 1.