

Product datasheet for MR231741

Cadps2 (NM_001252105) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cadps2 (NM_001252105) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cadps2
Synonyms:	A230044C21Rik; Caps-2; Caps2; Cpd2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231741 representing NM_001252105 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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ATGCTCGACCCGTCCTCCAGCGAGGAGGAGTCCGACGAGGGGCTGGAGGAGGAGAGCCGCGAGGTGTTGG
TGGCGCCGGGCGTCTCCAGCGAGCGCCCGCGCGGCTCGGAAGGGCGCGGGACGCGCCGGGACG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >MR231741 representing NM_001252105
 Red=Cloning site Green=Tags(s)

MLDPSSEEESEGLEEEESREVLVAPGVSQRAPPAAREGRRDAPGRSGGGSGGGAARPVSPSPVLS
 RNEPELQLDEEQERRIRLQLYVFVVRCAIYFPNAKOPTMARRQQLNKQQLQLLKERFQAFNGETQIV
 ADEAFCAVRSYVEVFLKSDRVARMVQSGGCSANDFREVFKNIEKRVRSLEIDGLSKETVLS
 SSWIAKYDAIYRGEEDLCKQPNRMTLSAVSELILSKEQLYEMFQQILGIKLEHQLLYNACQLD
 NADEQAAQIRREL DGRLQLAEKMAKERRFPRFISKEMESMYIEELRASVNLMLANLESLPVSK
 GGPEFKLQKLKRSQNSAFLD LGDENEIQLSKSDVVLSTLEIVIMEVQGLKSVAPNRIYVCTME
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 YPTSNSSKSAELHRMTVPKNSQSDSLKIKLAVRMDKPAHMKHSGYLALGQKVKRWKRYFV
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 YTRLTEYAKIEGPAEKETETMNQATPARKLEEVLHLAELCIEVLQQNEEHHAEGREAF
 AWWPDLLEAHEAEKFWALFTVDMDTALEAQPQDSWDSFPLFQLLNFLRNDTLLCNGK
 FHKHLQEIFVPLVVRVVDLMESAIQSIHRGFEQETWQPVNNGSTTSEDLFWKLDALQMF
 VFDLHWPEQEFAMHLEQRLKLMASDMIACVKRTRTAFELKLQKANKTTDLRIPASVCTM
 FNVLVDAKKQSTKLCALDGGQEQQYHSKIDDLIDNTVKEIIALLVSKFVSVLEGLVSKL
 SRYDEGTFSSILSFTVKAANKYVDVPPKPGMDLADTYIMFVRQNQDILREKVNEEMYIEK
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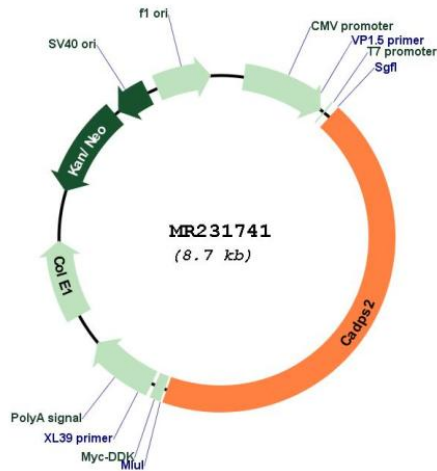
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001252105

ORF Size: 3792 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: [NM_001252105.1](#), [NP_001239034.1](#)

RefSeq Size: 4849 bp

RefSeq ORF: 3795 bp

Locus ID: 320405

UniProt ID: [Q8BYR5](#)

Cytogenetics: 6 A3.1

MW: 144.7 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 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]