

Product datasheet for **MR219341**

Capns2 (NM_027112) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Capns2 (NM_027112) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Capns2
Synonyms: 30K-2; 2310005G05Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR219341 representing NM_027112
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTTCGCAAAGGCGATCCTGGAAGTGCAGATCGGGGGCTTGGAGGGCTCTTGGAGGCCTTCTTG
GAGGAGGTGGTCAGGCAAGAGCAGGCGGGGCAACATCGGGGAATCCTTGGAGGAATTGTCAATTTAT
CAGCGAGGCTGCCGAGCTCAGTACACCCAGAGCCGCTCCCAACAGCAGCATTTTACCGTCGTGGAG
GCCTCAGAAAGTGAGGAAGTCAGACGTTTTTCGGCAGCAATTTACACAGCTGGCTGGACCCGACATGGAGG
TGGGTGCTACTGACCTGATGAATATTCTCAACAAAGTCTTTCTAAGCATAAAGAGCTGAAGACAGAGGG
CTTCAGCCTTGATACCTGTAGGAGCATTGTGTCTGTCATGGACAGTGACACCACAGGGAACTGGGATTT
GAGGAATTTAAGTACCTGTGGAACAACATCAAGAAATGGCAGTGTGTTTTCAAGCAGTACGACAGTGACC
ATTTCTGGCTCCCTCGGAAGCTCCAGCTGCACGGGGCCATGCAGGCAGCGGGCTTCCAGCTCAATGAGCA
ACTTTACCTAATGATTGTCCGTCGGTATGCTGACGAAGATGGCGGGATGGATTTTAACTTTATCAGC
TGCTGTTTCGCTGGATGCTATGTTTCGAGCTTTCAAGGCTCTGGACCGAGATAGGGATGGCCTGATTC
AGGTGTCCATCCGAGAATGGCTGCAGCTGACCATGTATTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR219341 representing NM_027112
 Red=Cloning site Green=Tags(s)

MFLAKAILEGADRGLGGALGGLLGGGGQARAGGGNIGGILGGIVNFISEAAAAQYTPPPPQQHFTVVE
 ASESEEVRRFRQQFTQLAGPDMVEGATDLMNILNKVL SKHKELKTEGFSLDTCRSIVSVMSDSTTGKLG
 EEFKYLWNNIKKWQCVFKQYSDHSGSLGSSQLHGAMQAAGFQLNEQLYLMIVRRYADEDDGGMDFNNFIS
 CLVRLDAMFRAFKALDRDRDGLIQVSIREWLQLTMYS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1988_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_027112

ORF Size: 741 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](#)

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_027112.1](#), [NP_081388.1](#)

RefSeq Size: 1015 bp

RefSeq ORF: 744 bp

Locus ID: 69543

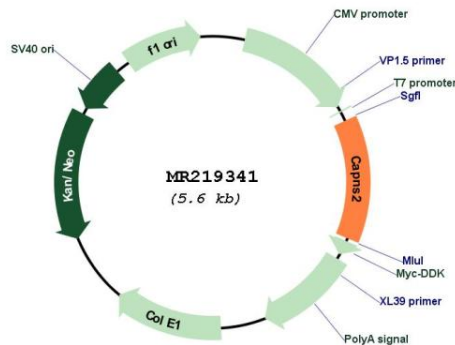
UniProt ID: [Q9D7J7](#)

Cytogenetics: 8 C5

MW: 27.6 kDa

Gene Summary: Calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. This small subunit may act as a tissue-specific chaperone of the large subunit, possibly by helping it fold into its correct conformation for activity (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219341