

Product datasheet for **SC334022**

CAPNS1 (NM_001302633) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: CAPNS1 (NM_001302633) Human Untagged Clone
Tag: Tag Free
Symbol: CAPNS1
Synonyms: CALPAIN4; CANP; CANPS; CAPN4; CDPS; CSS1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >SC334022 representing NM_001302633.
Blue=Insert sequence **Red**=Cloning site **Green**=Tag(s)

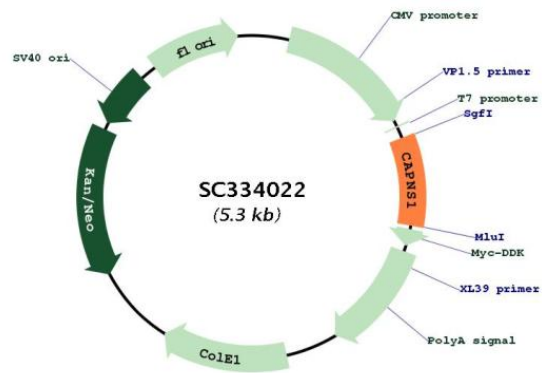
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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC
ATGGAGTCAGCGCCACAGAACTCATGAACATTCTCAATAAGGTTGTGACACGACACCCTGATCTGAAG
ACTGATGGTTTTGGCATTGACACATGTCGCAGCATGGTGGCCGTGATGGATAGCGACACCACAGGCAAG
CTGGGCTTTGAGGAATCAAGTACTTGTGGAACAACATCAAAGGTGGCAGGCCATATAACAACAGTTC
GACTGACCGATCAGGGACATTTGCAGTAGTGAACCCAGGTGCCTTTGAGGCAGCAGGTTCCAC
CTGAATGAGCATCTATAACATGATCATCCGACGCTACTCAGATGAAAGTGGGAACATGGATTTGAC
AACTTCATCAGCTGCTTGGTCAGGCTGGACGCCATGTTCCGTGCCTTCAAATCTTTGACAAAGATGGC
ACTGGACAAATCCAGGTGAACATCCAGGAGTGGCTGCAGCTGACTATGTATTCTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: Sgfl-MluI



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Plasmid Map:



ACCN: NM_001302633

Insert Size: 471 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).

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_001302633.1](#)

RefSeq Size:	1271 bp
RefSeq ORF:	471 bp
Locus ID:	826
UniProt ID:	P04632
Cytogenetics:	19q13.12
Protein Families:	Druggable Genome, Protease
MW:	18 kDa
Gene Summary:	<p>This gene is a member of the calpain small subunit family. Calpains are calcium-dependent cysteine proteinases that are widely distributed in mammalian cells. Calpains operate as heterodimers, comprising a specific large catalytic subunit (calpain 1 subunit in Calpain I, and calpain 2 subunit in Calpain II), and a common small regulatory subunit encoded by this gene. This encoded protein is essential for the stability and function of both calpain heterodimers, whose proteolytic activities influence various cellular functions including apoptosis, proliferation, migration, adhesion, and autophagy. Calpains have been implicated in neurodegenerative processes, such as myotonic dystrophy. A pseudogene of this gene has been defined on chromosome 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]</p> <p>Transcript Variant: This variant (4) lacks two 5' exons and uses an alternate 5' terminal exon which results in the use of a downstream in-frame start codon, compared to variant 1. It encodes isoform 2 which has a shorter N-terminus compared to isoform 1.</p>