

Product datasheet for **SC300585**

CAPNS1 (NM_001003962) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CAPNS1 (NM_001003962) Human Untagged Clone
Tag:	Tag Free
Symbol:	CAPNS1
Synonyms:	CALPAIN4; CANP; CANPS; CAPN4; CDPS; CSS1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_001003962 edited

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ATGTTCTGTTAACTCGTTCTTGAAGGGCGGCGGGCGGGGGAGCGGGGGC
CTGGGTGGGGCCTGGAAATGTGCTTGGAGCCTGATCAGCGGGCGGGGGCGGCGGC
GGCGGCGGGCGGCGGGCGGGCGGTGGTGGAGCGGCGGTGGCGGTGGAACGGCCATGCGC
ATCCTAGGCGGAGTCATCAGCGCCATCAGCGAGGCGGCTGCGCAGTACAACCCGGAGCCC
CCGCCCCACGCACACATTACTCCAACATTGAGGCCAACGAGAGTGAGGAGGTCCGGCAG
TTCCGGAGACTCTTTGCCAGCTGGCTGGAGATGACATGGAGGTCAGCGCCACAGAACTC
ATGAACATTCTCAATAAGGTTGTGACACGACACCCTGATCTGAAGACTGATGGTTTTGGC
ATTGACACATGTCGCAGCATGGTGGCCGTGATGGATAGCGACACCACAGGCAAGCTGGGC
TTTGAGGAATTCAAGTACTTGTGGAACAACATCAAAGGTGGCAGGCCATATAACAACAG
TTCGACACTGACCGATCAGGGACATTTGCAGTAGTGAACCTCCAGGTGCCTTTGAGGCA
GCAGGGTTCCACCTGAATGAGCATCTCTATAACATGATCATCCGACGCTACTCAGATGAA
AGTGGGAACATGGATTTTGACAACCTCATCAGCTGCTTGGTCAGGCTGGACGCCATGTTCC
CGTGCCTTCAAATCTCTTGACAAAGATGGCACTGGACAAATCCAGGTGAACATCCAGGAG
TGGCTGCAGCTGACTATGTATTCCTGA
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_001003962 unedited NNGGGTTACATTTGTATACGACTCCTATAGGCGGCCGCGNATTCGGCACGAGCGGGAGCG GCAGTGGAAACCGACTCCCANAAC TCCGGACGTGTGCGGCGTGAGTCGCAGCCATGTTCT GGTAACTCGTTCCTTGAAGGGCGGCGGCGGCGGCGGGGGAGGCGGGGGCCTGGGTGG GGGCCTGGGAAATGTGCTTGGAGGCCTGATCAGCGGGGCCGGGGCGGCGGCGGCGGCGG CGGCGGCGGCGGCGGTGGTGGAGGCGGCGGTGGCGGTGGAACGGCCATGCGCATCCTAGG CGGAGTCATCAGCGCCATCAGCGAGGCGGCTGCGCAGTACAACCCGGAGCCCCCGCCCC ACGCACACATTACTCCAACATTGAGGCCAACGAGAGTGAGGAGGTCCGGCAGTTCGGGAG ACTCTTTGCCAGCTGGCTGGAGATGACATGGAGGTGAGCGCCACAGAATCATGAACAT TCTCAATAAGGTTGTGACACGACACCCTGATCTGAAGACTGATGGTTTTGGCATTGACAC ATGTGCGCAGCATGGTGGCCGTGATGGATAGCGACACCACAGGCAAGCTGGGCTTTGAGGA ATTCAAGTACTTGTGGAACAACATCAAAAGGTGGCAGGCCATATACAAACAGTTCGACAC TGACCGATCAGGGACCATTTGCAGTAGTGAACCTCCAGGTGCCTTTGAGGCAGCANGGTT CCACCTGAATGAGCATCTCTATAACATGATCATCCGACGCTACTCAGATGAAAGTGGGAA CATGGATTNTGACAACTTCATCAGCTGCTTGGTCANGCTGGACGCCATGTTCCGTGCCTT CAAATCTCTTTGACAAGATGGCACTGGACANATNNCAGTGAACATCCAGNAGTGGCTGCA GCTGACTATGTATTCTGAACTGGAGCCCCAGACCCCGCCCTC
Restriction Sites:	NotI-NotI
ACCN:	NM_001003962
Insert Size:	1400 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:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:	<ol style="list-style-type: none"> 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:	<u>NM_001003962.1</u> , <u>NP_001003962.1</u>
RefSeq Size:	1489 bp
RefSeq ORF:	807 bp
Locus ID:	826
UniProt ID:	<u>P04632</u>
Cytogenetics:	19q13.12

Protein Families: Druggable Genome, Protease

Gene Summary: 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]
Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 encode the same protein.