

Product datasheet for **SC106434**

Calpastatin (CAST) (AL832349) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calpastatin (CAST) (AL832349) Human Untagged Clone
Tag:	Tag Free
Symbol:	Calpastatin
Synonyms:	BS-17; PLACK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for AL832349, the custom clone sequence may differ by one or more nucleotides

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CACTCAGAGAGCTGGGCTGGAGCTCCAAGCGGAAACCGCGGGAGCCGAGCCAGCTAGGAATGCAGACCT
CCTGAAAACCAAGCCGAGGACTGCGGGGTCCGGTGTCCACGCAGAGTGTGAGCTTCTCTGGTGCAACCA
GCAAGTCTTCCAGTATGAATCCCACAGAAACCAAGGCTGTAAAAACAGAACCTGAGAAGAAGTCACAGTC
AACCAAGCTGTCTGTGGTTCATGAGAAAAATCCCAAGAAGGAAAGCCAAAAGAACACACAGAGCCAAAA
AGCCTACCAAGCAGGCATCAGATACAGGAAGTAACTGCTCACAATAAAAAAGCAGTTTCCAGATCAG
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AAGACTTCCTTCTGGATGCTTTGTCTGAGGACTTCTCTGGTCCACAAAATGCTTCATCTCTTAAATTTGA
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 GCCCCACCCCGTGATACCTCGCAGAGTGACAAAGACCTCGATGATGCCTTGGATAAACTCTCTGACAGTC
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 GACCAAACTGAAAATCAATATTTCCATGTTTCATTAATCAAGGCATAAAAACAATTAAGCAAAAAT
 TTTACATTAAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for AL832349 unedited</p> <pre>GATTTTGTAAATACGACTTACTATAGGGCGGCCGCAATTCGCACGAGCCGCCCGTTCGC ACTCAGAGAGCTGGGCTGGAGCTCCAAGCGGAAACCGCGGGAGCCGAGCCAGCTAGGAA TGCAGACCTCCTGAAAACCAAGCCGAGGACTGCGGGGTCCGGTGTCCACGCAGAGTGTCA GCTTCCTCTGGTGAACCAAGTCTTCCTTTATGAATCCCACAGAAACCAAGGCTGTA AAAACAGAACCTGAGAAGAAGTACAGTCAACCAAGCTGTCTGTGGTTCATGAGAAAAAA TCCCAAGAAGGAAAGCCAAAAGAACACACAGAGCCAAAAGCCTACCCAAGCAGGCATCA GATACAGGAAGTAAACGATGCTCACAATAAAAAAGCAGTTTCCAGATCAGCTGAACAGCAG CCATCAGAGAAATCAACAGAACCAGACTAAACCACAAGACATGATTTCTGCTGGTGGGA GAGAGTGTGCTGGTATCACTGCAATATCTGGCAAGCCGGGTGACAAGAAAAAGAAAAAG AAATCATTAAACCCAGCTGTGCCAGTTGAATCTAAACCGATAAACCATCGGAAAGTCA GGCATGGATGCTGCTTTGGATGACTTAATAGATACTTTANGAGGACCTGAAGAAAAGTGA GAAGAAAATANCACGTATACTGGACCAGAAGTTTCAGATCCAATGAGTTTACCTACATA GAGGAATTGGGTAAAAGAGAAGTACATTTCTCCNAAATATAGGGAAGTATTGCCTAANA AGGAAAGGATCACAGNCCTCTGCAGACTCTTCGAAACCCATAGCCAGATGATGCTTT ANACGCCTGTCTGACTTCAACTGTGGTTCGACTACAGCTGCTGGGAAGAAAAAGTGA AAAGAGGATCTACAGAATTTTAAAGCTTATTCCNAGGGCAGTCAGAGTGTCTCCAC CCNAGAAAAGAAAGTGGAAAAGAN</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for AL832349 unedited</p> <pre>GTACATTATGNACGGGCCCAATCTATGATCGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTGGGGCTTCTGGTTGGCCAGGTTACCTGGTATTAATTTATTATTAGCAGCCC AAGAGGAGATATGTGCCCAATGTACAATATCTTATGTTTGACTTATAAACATTATCCCAA AGCAACATCAAATACAGTTCAAAGCCCAAGAGGAAAGGGGTAAATAAGAAATCAGAACA CTGAAGAATGGTAAAACATTGGTTTCTAAACACTAACAAAAAAATTAAGGGCAAAGTGA AAAATACAAATGAGATTTACAGGCACTGTGTGAGAATGTGCAAAAATTTCACTTAGCTTT TCTTTTTTTTTTTGGAGTTGCTTTAAGAACTTTATCAAATATATTTCTTACAAATATA AAGCTTTCTCTCCAATTGAAGGCGATTAAAAAAATTTCAAAGTTTATCAATACTCAGTAC ACAGGTGAACCAAGTCAAATTCATTTTCTTCTGAAAAAGATAACAAACCAATNTTTAGGA TGGTCAGAGACTCAACAAAAACCACTTCTAGAAATCACCCAGAACAATTGTTTTCTGTTGC CAAAGCCTTTTGTCTTCAAAGTACCATCCACCAGCTGAAGATTTTACATGCAGATAC CAGATACCTTAACCTGTATTTCTTTAGTCATCCTTTTGTGGAAGTTTCTCCGGTGGCC TTGCTGAATCCTCGCTTACCTCCATTCTTAGTGGCTTTGGAAGTGAANCAACCTTCTT TGCATATTCTTGGCGGGTCTGAGAAGTTCTGTANTGGGAAGGACAGCTGTCCACA ATTTCTGAGAAGAGCATCAAGGGGTCTTGGGCATCTGCAAGGTTTCTTG</pre>
Restriction Sites:	NotI-NotI
ACCN:	AL832349
Insert Size:	3000 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: [AL832349.1](#)

RefSeq Size: 4296 bp

RefSeq ORF: 4296 bp

Locus ID: 831

Cytogenetics: 5q15

Domains: Calpain_inhib

Gene Summary: The protein encoded by this gene is an endogenous calpain (calcium-dependent cysteine protease) inhibitor. It consists of an N-terminal domain L and four repetitive calpain-inhibition domains (domains 1-4), and it is involved in the proteolysis of amyloid precursor protein. The calpain/calpastatin system is involved in numerous membrane fusion events, such as neural vesicle exocytosis and platelet and red-cell aggregation. The encoded protein is also thought to affect the expression levels of genes encoding structural or regulatory proteins. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jun 2010]