

Product datasheet for **SC106252**

Calpastatin (CAST) (BC016066) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calpastatin (CAST) (BC016066) Human Untagged Clone
Tag:	Tag Free
Symbol:	CAST
Synonyms:	BS-17; calpain inhibitor; calpastatin; heart-type calpastatin; MGC9402; OTTHUMP00000158519; OTTHUMP00000158520; sperm BS-17 component
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for BC016066, the custom clone sequence may differ by one or more nucleotides

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GGAGCCCGGGTCCCTCCGCGGGCAGGAAGGGGAGGGCCCATCGGGGCTAGGGGAACCCCGGCGCAGACCT
GGGGTGGGGTCGGAAAAGCTGTTTCATCGCCCGCTCCCGGGCCCTCCGCTCCCTCCCTCCCTCTCT
CCCTGGCAGGACTCCCGCCAGGCTCCCGCCACTCTCCGCGGCGCATTCCGGGAGGCAGCGGCCGCGAG
CGGCCTCGCCATGTCCAGCCCGGCCAGAAGCCCGCCGCTCCCGCGGGCCCGGCGAGCAGCCGCCGCG
CGCCGCACCCATGAGCATGTCAGTGAAAAAACCAGTGAATCGCCTTCAAACCAGGAGAAAAAGAAAGGAT
CAGATGAGAAAAAGCAGCAAGCCTCGGCAGCAGTCAATCCTCCAGAACCTATGCTGGTGAACAGCCTC
GGCCACCAAGGTGTCAGCTTCTCTGGTGAACCAGCAAGTCTTCCAGTATGAATCCACAGAAACCAAG
GCTGTAAAAACAGAACCTGAGAAGAAGTACAGTCAACCAAGCTGTCTGTGGTTCATGAGAAAAATCCC
AAGAAGGAAAGCCAAAAGAACACACAGAGCCAAAAGCCTACCCAAGCAGGCATCAGATACAGGAAGTAA
CGATGCTCACAATAAAAAAGCAGTTTCCAGATCAGCTGAACAGCAGCCATCAGAGAAATCAACAGAACCA
AAGACTAAACCACAAGACATGATTTCTGCTGGTGGAGAGAGTGTGCTGGTATCACTGCAATATCTGGCA
AGCCGGGTGACAAGAAAAAGAAAAAGAAATCATTAACCCAGCTGTGCCAGTTGAATCTAAACCCGGATAA
ACCATCGGAAAGTCAGGCATGGATGCTGCTTTGGATGACTTAATAGATACTTTAGGAGGACCTGAAGAA
ACTGAAGAAGAAAATACAACGTATACTGGACCAGAAGTTTCAGATCCAATGAGTTCACCTACATAGAGG
AATTGGGTAAAAGAGAAGTCAACAATTCCTCCAAAATATAGGGAACCTATTGGCTAAACCCATAGGGCCAGA
TGATGCTATAGACGCCTTGTCATCTGACTTCACTGTGGGTGCGCTACAGCTGCTGGAAAAGAAAAGTAA
AAAAGAGGAATCTACAGAAGTTTTAAAAGCTCAGTCAGCAGGGACAGTCAGAAGTGTGCTCCACCCCAAG
AGAAGAAAAGAAAGGTGGAGAAGGATACAATGAGTGATCAAGCACTCGAGGCTCTGTCGGCTTCACTGGG
CACCCGGCAAGCAGAACCTGAGCTCGACCTCCGCTCAATTAAGGAAGTCGATGAGGCAAAAAAAAAAAAA
AAAAA
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5' Read Nucleotide Sequence:	>OriGene 5' read for BC016066 unedited AAGTTTACATTTGTAACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCCCATCG GGGCTAGGGGAACCCCGGCAGACCTGGGGTGGGGTCGAAAAGCTGTTTCATCGCCCG CTCCCGGGCCCTCCGCTCCCTCCCTCCCTCTCTCCCTGGCAGGACTCCCGCCAGG CCTCCCCGCCACTCTCCGCGGCATTCCGGGAGGCAGCGGCCGAGCGGCCTCGCCATG TCCAGCCCGGCCAGAAGCCCGCCCTCCCGCGGCCCGCGCAGCAGCCGCGCCCGC CGCACCCATGAGCATGTCAGTGAAAAAACCAAGTGAATCGCCTTCCAAACCAGGAGAAAAG AAAGGATCAGATGAGAAAAAGCAGCAAGCCTCGGCAGCAGTCAATCCTCCAGAACCCTAT GCTGGTGAACAGCCTCGGCCACCAAGGTGTCAGCTTCTCTGGTGCAACCAGCAAGTCT TCCAGTATGAATCCCACAGAAACCAAGGCTGTAAAAACAGAACCTGAGAAGAAGTCACAG TCAACCAAGTGTCTGTGGTTCATGAGAAAAATCCCAAGAAGGAAAGCCAAAAGAACAC ACAGAGCCAAAAAGCCTACCAAGCAGGCATCAGATACAGGAAGTAACGATGCTCACAAT AAANAAGCAGTTTCCAGATCAGCTGAACAGCAGCCATCAGAGAAATCAACAGAACCAAAG ACTAAACCCACAGACATGATTTCTGCTGGTGGAGAGAGTGTGCTGGTATCACTGCAATA TCTGGCAAGCCGNNTGACAGAAAAAGAAATCATAACCCAGCTGTGCCAGTTGAA TCTAAACCGATAAACCATCGNAAAGTCAGCATGGATGCTGCTTNGNATGACTTAATAGA AC
Restriction Sites:	NotI-NotI
ACCN:	BC016066
Insert Size:	2750 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:	<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:	BC016066.1 , AAH16066.1
RefSeq Size:	1335 bp
RefSeq ORF:	1335 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]