

Product datasheet for **MC227739**

Cast (NM_001301158) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cast (NM_001301158) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cast
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC227739 representing NM_001301158
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGGCCAGTTTCTGTCTTCTACTTTCTGGGAGGGCTCACCTGCTGCAGTGTGGCAAGAAAAGCTTCGTG
 AGGGTGAACGAAAGGGAGCTGGAGAAACCATCCCTATCCTCCAGGACCATGTAATATGCTCAGAAGAAAG
 GGAACATGGGTCCAAACACCATGAGGCAAAAGCAAAAGAAAGGCAGGAGAAGTGTGGTGAAGATGAG
 GACACAGTCCCAGCTGAGTACAGGTTAAAACAGCAAAAGGATAAAGATGGAAAACCACTATTGCCAGAGC
 CTGAAGAAACATCTAAGAGCCTGAGTGAGTCGGAGCTGATTGGGGAGCTTTCAGCAGATTTTGACCGATC
 TACATATCAAGACAAACCATCTACGCCAGCTGAAAAGAAATCCAATGACACATCCCAAACCTCCGGGG
 GAGACTGTGCCTCGGGCCTCCATGTGCAGTATACGGTCAGCGCCACCCAACTAGCATCCTTGAAGGGCG
 TGGTACCAGAAGATGCTGTTGAAACCTTGGCTGGAAGCCTGGGGACAAGGAAGCAGATCCAGAACATGA
 AAAAAGTGTGGAGATAAAGTCAAGGAGAAAGCTAAAGAAGAAGAGCATGAAAACTTGGTAAAAAGAA
 GAAACAGTGCCTCCTGATTATCGACTAGAAGAAGTCAAGGATAAGGATGGAAAACCACTCCTGCCAAAG
 AATCCCAGGAACAACTTGACCCCTTAAGCGATGACTTCCTTCTTGATGCCTTGTCTCAGGACTTCTCCAG
 TCCGGCAAACATATCGTCTCTTGAATTTGAAGATGCCAACTTTCTGCTGCCATTTCTGAAGTAGTTTCT
 CAGACACCTGCTCCAAGCACCATGCAGCAGCTCCACTGCCTGGCACTGAGAAAGACAAAGAACTTGATG
 ATGCCTTGGATGAACCTTCTGACAGTCTTGGACAAAGGCCGCCTGATCCAGATGAGAACAAACCACTGGA
 TGACAAAGTGAAGGAGAAAATCAAACCAGAGCATAGCGAGAACTGGGAGAAAGAGACGACACCATCCCC
 CCTGAATACAGGCATCTCTTGGATAATGATGGGAAGGACAAACCAGAGAAGCCACCGACTAAGAAAACAG
 AGAAACCTGATCAGGACCGGGACCCATTGATGCCCTCTCAGAAGATTTGGATAGCTGCCCTCAACTAC
 AGAGACCTCAAAGAATACAGCAAGGGGAAGAGCAAGAAGACTTCAAGTTCCAAAGCATCCAAGGACGGA
 GAGAAAACAAAGGACTCTTCCAAGAAGACAGAGGAAGTGTCCAAGCCAAAGGCTAAAGAAGATGCAAGAC
 ACAGTTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001301158

Insert Size: 1338 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: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_001301158.1, NP_001288087.1</u>
RefSeq Size:	2970 bp
RefSeq ORF:	1338 bp
Locus ID:	12380
Cytogenetics:	13 C1
Gene Summary:	<p>This gene encodes an inhibitor of the calcium-dependent cysteine protease, calpain. This protein plays roles in multiple processes, including apoptosis, cell cycle regulation, and membrane fusion. Multiple protein isoforms exist which contain unique N-terminal domains, and multiple inhibitory domains that share homology with each other. Some isoforms may be tissue-specific. Two different pseudogenes of this gene are found on chromosome 19. [provided by RefSeq, Jul 2014]</p> <p>Transcript Variant: This variant (6) represents use of an alternate promoter and therefore differs in the 5' UTR and 5' coding region, compared to variant 1. These differences cause translation initiation at an alternate start codon and result in an isoform (6) with a shorter and distinct N-terminus. This variant (6) also uses an alternate in-frame splice site in the coding region, compared to variant 1. The resulting protein (isoform 6) has a distinct N-terminus and is shorter than isoform 1.</p>