

Product datasheet for **MR229874**

Cast (NM_001301160) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cast (NM_001301160) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cast
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR229874 representing NM_001301160
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCCAGTTTCTGTCTTCTACTTTCTGGGAGGGCTCACCTGCTGCAGTGTGGCAAGAAAAGCTTCGTG
AGGGTGAACGAAAGGGAGCTGGAGAAACCATCCCTATCCTCCAGGACCATGCAAAAAGCAAAAAGAAGAAA
GCAGGAGAAGTGTGGTGAAGATGAGGACACAGTCCCAGCTGAGTACAGGTTAAAACCAGCAAAGGATAAA
GATGGAAAACCACTATTGCCAGAGCCTGAAGAAACATCTAAGAGCCTGAGTGAAGTGGAGCTGATTGGGG
AGCTTTCAGCAGATTTTGACCGATCTACATATCAAGACAAACCATCTACGCCAGCTGAAAAGAAATCCAA
TGACACATCCCAAACCTCCGGGGGAGACTGTGCCTCGGGCCTCCATGTGCAGTATACGGTCAGCGCCA
CCCAAACCTAGCATCCTTGAAGGGCGTGGTACCAGAAGATGCTGTTGAAACCTTGGCTGGAAGCCTGGGGA
CAAGGGAAGCAGATCCAGAACATGAAAAAAGTGTGGAGGATAAAGTCAAGGAGAAAGCTAAAGAAGAAGA
GCATGAAAAACTTGGTAAAAAGAAGAAACAGTGCCTCCTGATTATCGACTAGAAGAAAGTCAAGGATAAG
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ATGCCTTGTCTCAGGACTTCTCCAGTCCGGCAAACATATCGTCTCTTGAATTTGAAGATGCCAAACTTTC
TGCTGCCATTTCTGAAGTAGTTTCTCAGACACCTGCTCCAAGCACCCATGCAGCAGCTCCACTGCCTGGC
ACTGAGCAGAAAGACAAAGAAGTGGATGATGCCTTGGATGAACTTCTGACAGTCTTGGACAAAGGCCGC
CTGATCCAGATGAGAACAACCACTGGATGACAAAGTGAAGGAGAAAAATCAAACCAGAGCATAGCGAGAA
ACTGGGAGAAAGAGACGACACCATCCCCCTGAAACAGGCATCTCTTGGATAATGATGGGAAGGACAAA
CCAGAGAAGCCACCGACTAAGAAAACAGAGAAACCTGATCAGGACCGGGACCCCAATTGATGCCCTCAG
AAGATTTGGATAGCTGCCCTCACTACAGAGACCTCAAAGAATACAGCAAAGGGGAAGAGCAAGAAGAC
TTCAAGTTCCAAGCATCCAAGGACGGAGAAAAACAAAGGACTTCCAAGAAGACAGAGGAAGTGTCC
AAGCCAAAGGCTAAAGAAGATGCAAGACACAGT

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229874 representing NM_001301160
 Red=Cloning site Green=Tags(s)

MGQFLSSTFWEGSPAAVWQEKLRERKAGAGETIPILQDHAKAKEERQEKCGEDEDTPAEYRLKPAKDK
 DGKPLLPEPEETSKSLSESELIGELSADFDRSTYQDKPSTPAEKKSNDTSQTPPGETVPRASMC SIR SAP
 PKLASLKGVPEDAVETLAGSLGTREADPEHEKTVEDKVKEKAKEEHEKLGEKEETVPPDYRLEEVDK
 DGKPLLPKESQEQQLAPLSDDFLLDALSQDFSSPANISSLFEDAKLSAAISEVVSQTPAPSTHAAAPLPG
 TEQKDKELDDALDELSDSLGQRPPDPDENKPLDDKVKEKIKPEHSEKLGERRDDTIPPEYRHLLDNDGKDK
 PEKPTTKTEKPDQDRDPIDALSEDLDSCPSTTETSKNTAKGKS KTS SSKASKDGEKTKDSSKKTEEVS
 KPKAKEDARHS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

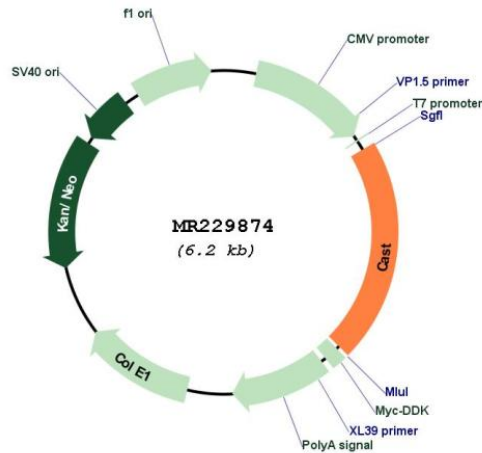
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001301160
ORF Size:	1293 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	NM_001301160.1 , NP_001288089.1
RefSeq Size:	2928 bp
RefSeq ORF:	1296 bp
Locus ID:	12380
UniProt ID:	P51125
Cytogenetics:	13 C1
MW:	47.8 kDa
Gene Summary:	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]