

Product datasheet for **MR229957**

Cast (NM_001301181) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cast (NM_001301181) 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: >MR229957 representing NM_001301181
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCCAGTTTCTGCTTCTACTTTCTGGGAGGGCTCACCTGCTGCAGTGTGGCAAGAAAAGCTTCGTG
AGGGTGAACGAAAGGGAGCTGGAGAAACCATCCCTATCCTCCAGGACCATGTAATATGCTCAGAAGAAAG
GGAACATGGGTCCAACACCATGAGGCAAAGCAAAGAAGAAAGCAGGAGAAGTGTGGTGAAGATGAG
GACACAGTCCCAGCTGAGTACAGGTTAAAACCAGCAAAGGATAAAGATGGAAAACCACTATTGCCAGAGC
CTGAAGAAACATCTAAGAGCCTGAGTGAAGTGGAGCTGATTGGGGAGCTTTCAGCAGATTTTGACCGATC
TACATATCAAGACAAACCATCTACGCCAGCTGAAAAGAAATCCAATGACACATCCCAAACCTCCCGGGG
GAGACTGTGCCTCGGGCCTCCATGTGCAGTATACGGTCAGCGCCACCCAAACTAGCATCCTTGAAGGGCG
TGGTACCAGAAGATGCTGTTGAAACCTTGGCTGGAAGCCTGGGGACAAGGGAAGCAGATCCAGAACATGA
AAAACTGTGGAGGATAAAGTCAAGGAGAAAGCTAAAGAAGAAGAGCATGAAAAACTTGGTAAAAAGAA
GAAACAGTGCCTCCTGATTATCGACTAGAAGAAGTCAAGGATAAGGATGGAAAACCACTCCTGCCAAAG
AATCCCAGGAACAACCTTGACCCCTTAAGCGATGACTTCCTTCTTGATGCCTTGTCTCAGGACTTCTCCAG
TCCGGCAAACATATCGTCTCTTGAATTTGAAGATGCCAAACTTTCTGCTGCCATTTCTGAAGTAGTTTCT
CAGACACCTGCTCCAAGCACCCATGCAGCAGCTCCACTGCCTGGCACTGAGCAGAAAGACAAAGAAGCTTG
ATGATGCCTTGGATGAACTTTCTGACAGTCTTGGACAAAGGCCGCTGATCCAGATGAGAACAAACCACT
GGATGACAAAGTGAAGGAGAAAACAAACCAGAGCATAGCGAGAAACTGGGAGAAAGAGACGACACCATC
CCCCCTGAATACAGGCATCTCTTGGATAATGATGGGAAGGACAAACCAGAGAAGCCACCGACTAAGAAA
CAGAGAAACCTGATCAGGACCGGGACCCATTGATGCCCTCTCAGAAGATTTGGATAGCTGCCCTCAAC
TACAGAGACCTCAAAGAATACAGCAAAGGGGAAGCAAGAAGACTTCAAGTTCAAAGCATCCAAGGAC
GGAGAGAAAACAAGGACTCTTCCAAGAAGACAGAGGAAGTGTCCAAGCCAAAGGCTAAAGAAGATGCAA
GACACAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR229957 representing NM_001301181
 Red=Cloning site Green=Tags(s)

MGQFLSSTFWEGSPAAVWQEKLRERKAGAGETIPILQDHVICSEEREHGSKHHEAKAKEERQEKCGEDE
 DTPVAEYRLKPAKDKDGKPLLPEPEETSKSLSESELIGELSADFDSTYQDKPSTPAEKKSNDTSQTPPG
 ETVPRASMCIRSAPPKLASLKGVPEDAVETLAGSLGTREADPEHEKTVEDKVKKEKAKEEHEKLGEKE
 ETVPPDYRLEEVKDKDGKPLLPKESQEQQLAPLSDDFLDALSQDFSSPANISSLEFEDAKLSAAISEVVS
 QTPAPSTHAAAPLPGTEQKDKELDDALDELSDSLGQRPPDPDENKPLDDKVKEKIKPEHSEKLGERRDDTI
 PPEYRHLLDNDGKDKPEKPPTKKTEKPDQDRDPIDALSEDLDSCPSTTETSKNTAKGKSKTSSSKASKD
 GEKTKDSSKKTTEEVSKPKAKEDARHS

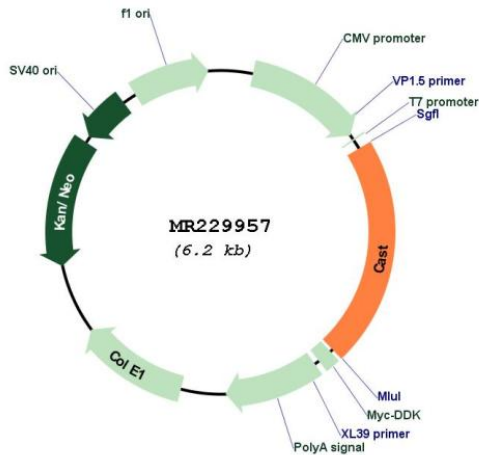
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001301181
ORF Size:	1338 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_001301181.1 , NP_001288110.1
RefSeq Size:	2973 bp
RefSeq ORF:	1341 bp
Locus ID:	12380
UniProt ID:	P51125
Cytogenetics:	13 C1
MW:	49.6 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]