

Product datasheet for **MR230849**

Cast (NM_001301157) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cast (NM_001301157) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cast
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR230849 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGAGTACCACAGAGACTAAGGCTGTGAAAACAGAGTCTAAGAAACCACAATCAAGTGAGCAACCTGTGG
TTCACGAGAAAAAGTCAAAGGAGGGCCAAAGGAAGGGTCAGAGCCAAAAATCTCCGAAGCACACATC
AAGTACAGGAAGCAAGCATGCTCATAAAGAAAAAGCACTTTCCAGATCAAATGAACAGATGGTGTCAAG
AAACCATCAGAATCAAAGACAAAATTTCAAGATGTTCTTCAGCTGGTGGAGAGAGTGTGGCTGGAGGTG
GGACTGTGGCCACTGCCTTGGACAAAGTGGTGGTAAGAAAAAGAACAGAAACCATTACACCAGCTTC
ACCTGTGCAGTCCACACCGAGCAAGCCATCTGACAAGTCAGGCATGGATGCTGCCTTGGATGACCTGATA
GACACCTTAGGTGGACATGAAGATACTAACAGAGATGATCCACCATACTGGACCAGTAGTTTTGGACC
CAATGTATTCTACCTACCTTGGGCACTGGGTATAAAAAGAAGGGACTATTCCTCCAGAGTATAGGAACT
TTTGGAAAAAATGAAGGGATCACACAACCTCTCCAGACTCTCCTAAACCTATGGGGACTGACCAGGCT
ATAGATGCCTTGTCACTGATTTACCTGTAGTTCTCCAAGTGAAGAAAGCAAGTGAAGAAAGAGAAGTCTA
CTGGGGAAATTTCAAAGCTCAGTCTGCAGGAGTGACCAGAAGTTCTGTTCCCCCAAGGAGAAGAAAAAG
GAAGGTGGAAGAGGAGGTCAATAATGATCAAGCACTTCAGGCTCTGTGAGATTCACTGGGCACCCGGCAG
CCAGATCTCCGAGCCACGTTAGCCAAGCTGAACAAGTCAAAGAGGCAAAAAGCAAAAAGAAGAAAGGCAGG
AGAAGTGTGGTGAAGATGAGGACACAGTCCCAGCTGAGTACAGGTTAAAACCAGCAAAGGATAAAGATGG
AAAACCACTATTGCCAGAGCCTGAAGAAACATCTAAGAGCCTGAGTGAGTCGGAGCTGATTGGGGAGCTT
TCAGCAGATTTTGACCGATCTACATATCAAGACAAACCTCTACGCCAGCTGAAAAGAAATCCAATGACA
CATCCCAAACCTCCGGGGGAGACTGTGCCTCGGGCCTCCATGTGCAGTATACGGTCAGCGCCACCCAA
ACTAGCATCCTTGAAGGGCGTGGTACCAGAAGATGCTGTTGAAACCTTGGCTGGAAGCCTGGGGACAAGG
GAAGCAGATCCAGAACATGAAAAAAGTGTGGAGGATAAAGTCAAGGAGAAAGCTAAAAGAAGAAGAGCATG
AAAAAAGTGTGAAAAGAAGAAACAGTGCCTCCTGATTATCGACTAGAAGAAGTCAAGGATAAGGATGG
AAAACCACTCCTGCCAAAGAATCCCAGGAACAACCTTGCACCCTTAAGCGATGACTTCCTTCTTGATGCC
TTGTCTCAGGACTTCTCCAGTCCGGCAAACATATCGTCTCTTGAATTTGAAGATGCCAACTTTCTGCTG
CCATTTCTGAAGTAGTTTCTCAGACACCTGCTCCAAGCACCCATGCAGCAGCTCCACTGCCTGGCACTGA
GCAGAAAGACAAAGAAGTGTGATGATGCCTTGGATGAAGTCTGACAGTCTTGGACAAAGGCCCGCTGAT
CCAGATGAGAACAACCACTGGATGACAAAGTGAAGGAGAAAATCAAACCAGAGCATAGCGAGAACTGG
GAGAAAGAGACGACCAATCCCCCTGAATACAGGCATCTCTGGATAATGATGGGAAGAAACCTGATCA
GGACCGGGACCCATTGATGCCCTCTCAGAAGATTTGGATAGTCCCTCAACTACAGAGACCTCAAAG
AATACAGCAAAGGGGAAGAGCAAGAAGACTTCAAGTTCCAAAGCATCCAAGGACGGAGAGAAAACAAAGG
ACTCTTCCAAGAAGACAGAGGAAGTGTCCAAGCCAAAGGCTAAAGAAGATGCAAGACACAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230849 protein sequence
Red=Cloning site Green=Tags(s)

MSTTETKAVKTESKPKQSSEQPVVHEKKS KGGPKEGSEPKNLPKHTSSTGSKHAHKEKALSR SNEQMVSE
 KPSESKTKFQDVPSAGGESVAGGGTVATALDKVVGKKKEQKPFTPASPVQSTPSKPSDKSGMDAALDDLI
 DTLGGHEDTNRDDPPYTPVVLDPMYSTYLEALGIKEGTIPPEYRKLLEKNEGITQPLPDSPKPMGTDQA
 IDALSSDFTCSSPTGKQSEKEKSTGEIFKAQSAGVTRSSVPPKEKKRKRVEEEVINDQALQALSDSLGTRQ
 PDPPSHVSQAEQVKEAKAKEERQEKCGEDEDTPAEYRLKPAKDKDGKPLLPEPEETSKSLSESELIGEL
 SADFDIRSTYQDKPSTPAEKSSNDTSQTTPGETVPRASMCSIRSAPPKLASLKGVPVEDAVETLAGSLGTR
 EADPEHEKTVEDKVKEKAKEEEHEKLGEKEETVPPDYRLEEVKDKDGKPLLPKESQEQALPLSDDFLDDA
 LSQDFSSPANISSLEFEDAKLSAAISEVVSQTPAPSTHAAAPLGTEQKDKELDDALDELSDSLGQRPPD
 PDENKPLDDKVKEKIKPEHSEKLGERRDITIPPEYRHLLDNDGKKPDQDRDPIDALSEDLDSCPSTTETSK
 NTAKGSKKTSKSSKASKDGEKTKDSSKKTTEEVS KPKAKEDARHS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001301157

ORF Size: 2025 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:

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_001301157.1](#), [NP_001288086.1](#)

RefSeq Size: 3803 bp

RefSeq ORF: 2025 bp

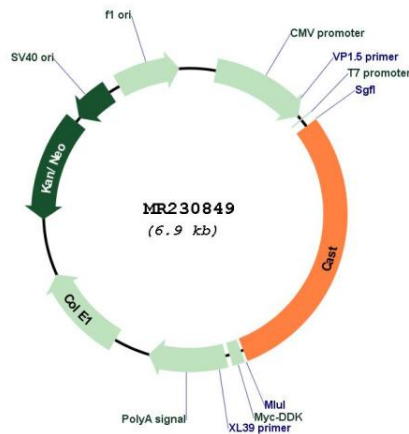
Locus ID: 12380

Cytogenetics: 13 C1

MW: 73 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]

Product images:



Circular map for MR230849