

Product datasheet for **RR200418**

Cast (NM_001033716) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cast (NM_001033716) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cast
Synonyms:	MGC108997
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RR200418 representing NM_001033716
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCCCGGCCCGCCGAAGCCCGCCCTCTCCAGGCCCGCGCGGGCGGCAGCTAGCCACACC
AGGAGCATGTTAATGAAAAGAATTGGATCATCTTCTAAACCAGCAGAAAAGAAAGGATCTGATGAGGT
GACAGTTCCTCTGCTGCCACTGGCACATCTCCAGAATGAGTACCACAGGAGCTAAGGCTGTGAAAATA
GAGTCTGAGAAGTCACAATCAAGTGAGCCACCTGTGATTCATGAGAAAAAGCCAAAAGAAAGCCAAAGG
AAGGGTCAGAGACAAAATTTCAAGATGCTCTTCTGCTGATGGAGAGAGTGTGGCTGGAGGTGTGACTGT
GGCCACTGCCTCAGACAAGGTGGTTGTTAAGTCAGGCGTGAATGCTGCTTTGGATGACCTGATAGACACC
TTAGTGAAATGTGAAGATACTAACAAAGATGATCCACCATATACTGGACCAGTAGTTCTGGACCCAATGG
ATTCTACCTACCTTGAGGCACTGGGTATAAAGAAGGGACTATTCCTCCAGAGTATAGGAACTTCTGGA
GAAAAATGAAGCTATCACAGGACCTCTCCAGATTCTCCTAAACCTATGGGAATCGACCATGCTATAGAT
GCCTTGTCATCTGATTTACCTGTAGCTCTCCAAGTGGAAAGCAAAGTGGAAAGAGAAGTCTACTGGGG
AAAGTTCGAAAGCTCAGTCTGCAGGAGTGACCAGAAGTGTGTTCTCCAGGAGAAGAAAGGAAAGT
AGAAGAGGAGGTCAATGATCAAGCCCTGCAGGCTCTGTGATTCAGTTCAGTGGCCACCCGGCAGCCAGAC
CCTCAGAGCCATCTTAGGCAAGCCAAACAAGTCAAGAGGCAAAAAGCAAAAAGAAAGGAGGAGAAAT
GTGGTGAAGATGAGGACACAGTACCTGTGAGTACAGGTTAAACCAGCCAAGGATAAAGATGAAAAACC
ACTATTGCCAGAACCCTGAAGAAACATCTAAGTGCCTGAGTGAAGTACAGAGTATTGGGGAGCTTTTCAGCA
GATTTTGTCCAACCTACATATCAAGAAAAACCTATGCCAGCTGCAAAAATAAAGAAGGGCGTAGTGC
CAGATGATGCTGTAGAAACCTTGGCTAGAAGCCTGGGGACAAGGAAAGAAAGATCCAGAAGATGAAAAATC
TCTGGTGGATAAAGTCAAGGAGAAAGCTAAAGAAGAAAGTCAATGAAAAACTTGGTAAAAAGAAAGAAACA
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AGGAACAACCTCCACCCTAAGCGATGACTTCTTCTTGTGATGCATTGTCTCAGGACTTCTCCAGTCTGC
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CCTGCTCAAGCAACCACACAGCAGCCCCACCGCCTGGCACTGAGAGGAGAGACAAGAAGTCCGATGATG
CCTTGGATGAACCTTCTGACAGTCTTGGACAAAGACAGCCTGATCCAGATGAGAACAACCACTAGATGA
TAAAGTAAAGGAAAAAATCAAAGCAGAGCATAGCGAGAACTGGGAGAAAGAGACGACCATCCCCCT
GAATATAGGCATCTCCTGGATAATGATGGGAAGGACAAACCAGAGAAGCCACTGACAAGAACACAGAGA
AGCCTGGTCAGGACCAGGACCCATTGATGCCCTCTCAGAAGACTTGGATAGCTGCCCCCAACTACAGA
GACTTCACAGAATACAACAAGGAGAAGGGTAAGAAGACTTCAAGTTCCAAGCATCCAAGAATGAAGAG
AAAAACAAGGATTCCTCCAAGAAGACAGAGGAAGTGCCCAAGCCAAAGGTGGATGAAGATGCAACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR200418 representing NM_001033716
 Red=Cloning site Green=Tags(s)

MSRPGPKPAASSRPRRGAAASHTQEHVNEKNIGSSSKPAEKKGSDEVTASSAATGTSRPMSTTGAKAVKI
 ESEKSSQSSEPPVIHEKKPKGKPEGSETKFQDAPSADGESVAGGVTVATASDKVVVKSQVNAALDDLIDT
 LGCEDTNKDDPPYTGPVVLDPMDSTYLEALGIKEGTIPPEYRKLLEKNEAITGPLPDSPKPMGIDHAID
 ALSSDFTCSSPTGKQTEKEKSTGESSKAQSAGVTRSAPVPPQEKRRKVEEVMNDQALQALSDSLGTRQPD
 PQSHLRQAKQVKEAKAKEERQEKCGEDEDTVPAEYRLKPAKDKDGKPLLPEPEETSKCLSESELIGELSA
 DVFQPTYQEKPSMPAAKIKKGVVPDDAVETLARSLGTRKEDPEDEKSLVDKVKKEAKEEDHEKLGEKEET
 IPPDYRLEIVKDKDGKPLLPEKAEELPPLSDDFLDALSDQFSSPANILSLGFEDAKLSAAVSETYSQV
 PAPSNHTAAPPPGTERRDKELDDALDELSDSLGQRQPDENKPLDDKVKKEIKAHSEKLGERDDTIPP
 EYRHLLDNDGKDKPEKPLTKNTEKPGQDQPIDALSEDLDCSPPTTETSQNTTKEKGKKTSSSKASKNEE
 KTKDSSKKTEEVKPKVDEDAT

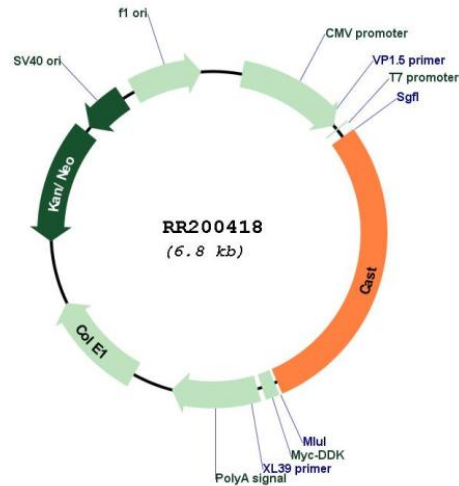
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001033716

ORF Size: 1956 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_001033716.1](#), [NP_001028888.1](#)

RefSeq Size: 4466 bp
RefSeq ORF: 1959 bp
Locus ID: 25403
UniProt ID: [P27321](#)
Cytogenetics: 2q11
MW: 70.6 kDa
Gene Summary: inhibitor of calpain; degradation is required for myoblast fusion; exists in multiple alternatively spliced isoforms [RGD, Feb 2006]