

## Product datasheet for **RR201453**

### Capn10 (NM\_031673) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Capn10 (NM_031673) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Capn10
Synonyms:	MGC93346
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RR201453 representing NM\_031673  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATCGGGCGGTCCGGGCCGAGACCGGGCGGGAGCTCTCCGGGACGCCGATTCCCCGCTCGGACT  
 CCTCGCTCTTTACAACCTGTCCACGCCTCTGGCCAGTTTCGGGAGGACATCACTTGGAGACGGCCCA  
 GGACATTTGTGCCACACCTCAACTGTTTCCAGATAACCCATGGGAAGGACAGGTGAAGCAAGGGCTGCTG  
 GGGATTGCTGGTTCTGTGTGCCTGTGCCCCCTTCAGAAGAGTCGACACCTCTCGACCAGGTCTTCC  
 CTCAGGACAGCCAGGCTGGTCTGACCAGGAATACCAAGGCTTCTCACCTGTGGATTTGGCAGTTTGG  
 AACTGGGAGGAAGTGACCATAGATGACCGTCTGCCTTGTCTTCCGGGAGACTCTGCTTTTCTCGATGC  
 CAGAGAGAGGATGTGTTCTGGCTTCCCTTACTGGAAAAGGCCTACGCTAAGGTTTATGGATCCTATGAGC  
 ACCTGTGGGCAGGCAGGTGGCAGATGCCCTGGTGGATCTCACTGGCAGCCTGGCAGAGAGGTGGAGCCT  
 GAAGGACATAAGGAAAGCCAGCGCCAGCAGGACAGACCCAGTGGTGGAGAGCACAGAGCCTGTCAGCAG  
 CTACTCCGTCTCAAGGACCAAGTGTCTGCTCAGCTGCTCTGTGCTGAGCCCGAGAGCAGGTCTAGGGAGC  
 TCGGGGAGTTCCATGCCTTCATTATCTCAGATCTGCAGGAGCTCAGGAGTCAGACTGGTCAGGGTATCCT  
 CCTGCTGAGGATTCACAACCTTGGGGCCGGCTTGTGGCAGGGCCTCTGGAGAGAAGGCGGTGAAGGG  
 TGAACACAGGTAGAGCCAGCTAAGGAGTCTGAGCTGCTGGCACAACCTCCAGGAAGGAGAGTTCTGGGTAG  
 AGGAAGAGGAGTTCTCAGGGAGTTTGTGAGGTACCATCGGCTACCCAGTCACAGAGGCCGGCCACCT  
 GCAAAGTCTCTACACAGAGAAGGTGCTGTGCCATACGCGGGCACTGCCTGGTGCCTGGGTGACAGGGCAA  
 TCAGCTGGAGGCTGCCGGAACAACAGTTGCTTTCCCTGCAACCCCAAGTTCTGGTTACGGCTCTTGAAC  
 CCAGTGAGGTGTGTGGCTGTCTTCCAGAGACCCCGAGGCGCTTAGTGGCCAGACCCGGGCACTGGC  
 GGGCGCCAGCCCTGCACCAAGTGAACCTCCAGGCAAGACTACCAGGCTGTGGCCCTGCACATCTGGAAG  
 GTAGAGAAACGGAAGATCAGCCTGCCAGAGTCTGTCTGCACCCCGGTGGCTGGCACTGCATGCCATG  
 CGTATGATCGTGAGATCCACTTGCCTTGTGAGCTCTCACCAGGCTACTACCTGGCTGTCCCTAGCACCTT  
 TTTGAAGGATGTGCCAGGGCAGTTCTGCTCCGAGTCTTCTCCACCGGAAAAATCTCCCTCAGTGCCGTC  
 AGGCTGGCCACCAAGGGTGCATCACCTGGAGCAGCCCTGCCTGCAGGCGAGTGGGAGACTGTGCAGTTGC  
 AGGGCAGCTGGAGAGCTGGCCAGACAGCCGGGGCAGTAGAACTTTGCCTTTACCCCTGCAATCCCTG  
 CCTCCCTTCTCTGTTCTGAGGGTGTGGTCCCCGCTACATCCGTATCACCTACAGCAACACTGCCGG  
 CTCAGTGACAGCCAGCTCCACCCATTGGTTTCCATGTCTTTCAGGTTCCAGCAGACGGTAAAAACAGG  
 ATGCGTGTCCCTGCTGCTCCAGGAGCCACTGCTAAGCTGTGTACCACATTGCTATGCCAGGAAGTAAG  
 CCGCCTCTGCCTCCTTTCTGCGGGAACTACAGGATTGTGCCCTCCACCTACCTGCCAGATACAGAGGGT  
 ACCTTCACAGTGACCATAGCAACCAGAATAGACAGACAGTCCATTACAGCCAGGAGATGCTGGGCCAGC  
 TACTCCAGGAGTCTCCTTCATGGCAGTGATGAAAGCCTACTCCAGGAGGTCTCCTTCATGGCAGTGATG  
 AAAGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR201453 representing NM\_031673  
 Red=Cloning site Green=Tags(s)

MRAVRAETRARELFRDAAFPASDSSLFYNLSTPLAQFREDITWRRPQDICATPQLFPDNPWEGQVKQGLL  
 GDCWFLCACAALQKSRHLLDQVFPQPQGWSDQEQGFFTCRIWQFGHWEEVTIDRLPCLAGRLCFSRC  
 QREDFVWLP LLEKAYAKVHGSYEHLWAGQVADALVDLTGSLAERWSLKD IRKASGQDRPSGGEHRACQQ  
 LLRLKDQCLLSCSVLSPRAGARELGEFHAFIISDLQELRSQTGGI LLLRIHNPWGRRCWQGLWREGGEG  
 WNQVEPAKESSELLAQLQEGEFWVEEEFLREFDEVTIGYPVTEAGHLQSLYTEKVLCHTRALPGAWVTGQ  
 SAGGCRNNSCFPCNPKFWLRLLLEPSEVCVAVLQPRRRLVGQTRALAGASPAPVNLPGKDYQAVGLHIWK  
 VEKRKISLPRVLSAPPVAGTACHAYDREIHLRCELSPGYLAVPSTFLKDVPGQFLLRVSTGKISLSAV  
 RLATKGASPGAALPAGEWETVQLQGSWRAGQTAGGSRNFASYPCNPCLPFSVPEGAGPRYIRITLQQHCR  
 LSDSQLHPIGFHVFPVADGEKQDACSLLLQEPLLSCVPHCYAQEVSRLCLLSAGNYRIVPSTYLPDTEG  
 TFTVTIATRDRQSIHSQEMLGQLLQEVSFMAVMKAYSRSPSWQ\*\*K

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_031673

**ORF Size:** 1998 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 Size:** 2561 bp

**RefSeq ORF:** 2001 bp

**Locus ID:** 63834

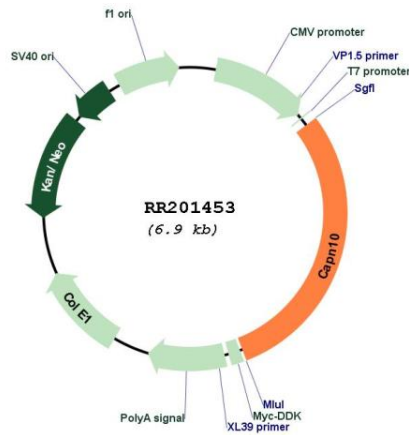
**UniProt ID:** [Q9ES66](#)

**Cytogenetics:** 9q36

**MW:** 74.5 kDa

**Gene Summary:** large subunit of calpain, a calcium-dependent cysteine protease; human homolog has been associated with type II diabetes mellitus [RGD, Feb 2006]

**Product images:**



Circular map for RR201453