

Product datasheet for **RG214563**

Calpain 12 (CAPN12) (NM_144691) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calpain 12 (CAPN12) (NM_144691) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Calpain 12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG214563 representing NM_144691
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGATCCAGCAGTGGGAGGGTACCATCCAGCTCGTGGATGAGGAGGCTGGGTCGGAGCCGGCGCC
TGCAGCTTTTTTCGGGGCCAGAGCTATGAGGCAATTTCGGGCAGCCTGCCTGGATTCGGGGATCCTGTTCCG
CGACCCTTACTTCCCTGCTGCCCTGATGCCCTTGCTATGACCAGCTGGGGCCGACTCGGAGAAGGCC
AAAGGCGTGAAATGGATGAGGCCCATGAGTTCTGTGCTGAGCCGAAGTTCATCTGTGAAGACATGAGCC
GCACAGACGTGTGTAGGGGAGCCTGGGTAAGTCTGGTTCCTTGACAGCCGCCCTCCCTTACTCTGTA
TCCCCGGCTCCTGCGCCGGGTGGTCCCTCCTGGACAGGATTTCCAGCATGGCTACGCAGGCGTCTTCCAC
TTCCAGCTCTGGCAGTTTGGCCCTGGATGACGCTCGTGGTGGATGACAGGCTGCCCGTGGGTGAGGGGA
AGCTGATGTTCTGTGCGCTCGGAACAGCGGAATGAGTTCTGGGCCCACTCCTGGAGAAGGCCTACGCCAA
GCTCCACGGCTCCTATGAGGTGATGCGGGGCGGCCACATGAATGAGGCTTTTGTTGATTTCACAGGCGGC
GTGGGCGAGGTGCTCTATCTGAGACAAAAACAGCATGGGGCTGTTCTCTGCCCTGCGCCATGCCCTGGCCA
AGGAGTCCCTCGTGGGCGCCACTGCCCTGAGTGATCGGGGTGAGTACCGCACAGAAGAGGGCCTGGTAAA
GGGACACCGCTATTCCATCACGGGCACACACAAGGTGTTCTTGGGCTTACCAAGGTGCGGCTGCTGCGG
CTGCGGAACCCATGGGCTGCGTGGAGTGAGAGGGGGCTGGAGCGACAGCTGCCACGCCTGGGACACAC
TCCCCACCGAGTGGCGGATGCCCTGCTGGTGAAGAAAGGAGGATGCGCAGTTCTGGATGGAGCTGCGGGA
CTTCTCTCTCCATTTGACACCGTGCAGATCTGCTCGTGAGCCCGAGGTGCTGGGCGCCAGCCGGAG
GGGGGCGGCTGGCACGTCCACACCTTCCAAGGCCGCTGGGTGCGTGGCTTCAACTCCGGCGGGAGCCAGC
CTAATGCTGAAACCTTCTGGACCAATCCTCAGTTCGGTTTAAACGCTGCTGGAGCCTGATGAGGAGGATGA
CGAGGATGAGGAAGGGCCCTGGGGGGCTGGGGGGCTGCAGGGGCACGGGGCCAGCGCGGGGGGGCCGC
ACGCCCAAGTGACAGGTCTTCTGTCCCTCATCCAGCGCAACCGCGCGCCTGAGAGCCAAGGGCCTCA
CTTACCTCACCGTTGGCTTCCAGTGTTCCAGATTCCAGAGGAGCTGCTGGGCTCTGGGATTCCCCGCG
CAGCCATGCGCTCCTGCCCCGGCTGCTGCGCGCCGACCCTCGCCCTCAGCGCCCGCGCGACGTGACC
CGCCGCTGCTGCTGCGTCCAGGCCACTACCTGGTGGTGCCGAGCACCGCCACGCGCGCACGAGGCTG
ACTTCACTCTGCGTGTCTTCTCCGAGCGCCGCCACAGGCCGCTGGAGATCGACGACGTGATCAGCGCAGA
CCTGCACTCTCTCCAGGGCCCCCTACCTGCCCTGGAGCTGGGGTTGGAGCAGCTGTTTCAGGAGCTGGCT
GGAGAGGAGGAAGAACTCAATGCCTCTCAGCTCCAGGCCTTACTAAGCATTGCCCTGGAGCCTGCCAGGG
CCCATACTCCACCCCCAGAGAGATCGGGCTCAGGACCTGTGAGCAGCTGCTGCACTGTTTCGGGCATGG
GCAAAGCCTGGCCTTACACCACTTCCAGCAGCTCTGGGGCTACCTCCTGGAGTGGCAGGCCATATTTAAC
AAGTTCGATGAGGACACCTCTGGAACCATGAACCTCTACGAGCTGAGGCTGGCAGCTGAATGCAGCAGGCT
TCCACCTGAACAACCACTGACCCAGCACTCACCAGCCGCTACCGGATAGCCGCTGCGTGTGGACTT
CGACGCGTTCTGTCTGTGTGCGCCACCTCACCTGCATCTTCTGCCACTGCAGGCAGCACTGGATGGG
GGTGAGGGGGTCATCTGCCTGACCCACAGACAGTGGATGGAGGTGGCCACCTTCTCC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

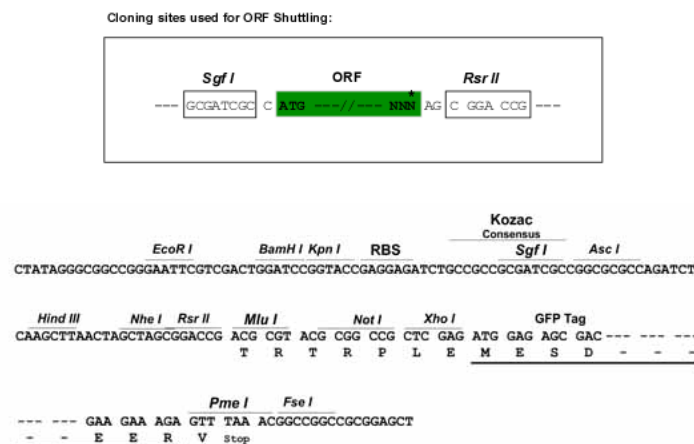
Protein Sequence: >RG214563 representing NM_144691
 Red=Cloning site Green=Tags(s)

MASSSGRVTIQLVDEEAGVGAGRLQLFRGQSYEAIIRAACLDGILFRDPYFPAGPDALGYDQLGPDSEKA
 KGVKWMRPFECAPKFI CEDMSRTDVCQGS LGNCWFLAAAASLTLYPRLLRRVPPGQDFQHGYAGVFH
 FQLWQFGRWMDVVDDRLPVREGKLMFVRSEQRNEFWAPLLEKAYAKLHGSYEV MRGGHMNEAFVDF TGG
 VGEVLYLRQNSMGLFSALRHALAKESLVGATALSDRGEYRTEEGLVKGHAYSITGTHKVFLGFTKVRLLR
 LRNPWGCVEWTGAWSDCPRWDTLPTECRDALLVKKEDGEFWMELRDFLLHFDTVQICSLSPEVLGPSPE
 GGGWHVHTFQGRWVRGFNSGGSQPNAETFWTNPQFRLTLLEPDEEDEDEEGPWGGWGAAGARGPARGGR
 TPKCTVLLSLIQNRRLRAKGLTYLTVGFHVFIPEELLGLWDSRSHALLPRLLRADRSPLSARRDVT
 RRCCLRPGHYLVVPSTAAGDEADFTLRVFSERRHTAVEIDDISADLQSLQGPYLPLELGLEQLFQELA
 GEEELNASQLQALLSIALEPARAHTSTPREIGLRTCEQLLQCFGHGQSLALHHFQQLWGYLLEWQAI FN
 KFDEDTSGTMNSYELRLALNAAGFHLNNQLTQTLTSRYRDSRLRVDFERFVSCVAHLTCIFCHCSQHLDG
 GEGVICLTHRQWMEVATFS

SGPTRRRLE – GFP Tag – V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_144691

ORF Size: 2157 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_144691.3](#), [NP_653292.2](#)

RefSeq Size: 3129 bp

RefSeq ORF: 2160 bp

Locus ID: 147968

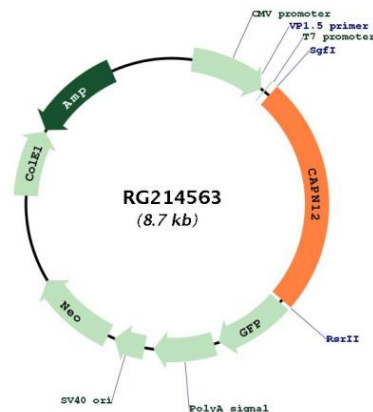
UniProt ID: [Q6ZSI9](#)

Cytogenetics: 19q13.2

Protein Families: Druggable Genome

Gene Summary: The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic subunits associated with a common small, regulatory subunit. This gene encodes a member of the calpain large subunit family. [provided by RefSeq, Jun 2012]

Product images:



Circular map for RG214563