

Product datasheet for **RC226657**

Calpain 14 (CAPN14) (NM_001145122) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calpain 14 (CAPN14) (NM_001145122) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calpain 14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC226657 representing NM_001145122
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCTCTGTGGCCACCTTTCCGATGCAGATGGAAGCTGGCGCCAAGGTAAGTCTAGGAGGGCGTCTCCAC
 AGCAACCCCAACAGGACTTTGAGGCCCTGCTGGCAGAGTGCCTGAGGAATGGCTGCCTCTTTGAAGACAC
 CAGCTTCCCGGCCACCCTGAGCTCCATCGGCAGTGGCTCCCTGCTGCAGAAGCTGCCACCCCGCCTGCAG
 TGAAGAGGCCCCCGGAGCTGCACAGCAATCCCCAGTTTTATTTTCCAAGGCCAAAAGGCTGGATCTGT
 GCCAGGGGATAGTAGGAGACTGCTGGTTCTTGGCTGCTTTGCAAGCTCTGGCCTTGACACAGGACATCCT
 GAGCCGGGTTGTTCCCTGAATCAGAGTTTCACTGAGAAGTATGCTGGCATCTCCGGTTCTGGTTCTGG
 CACTATGGGAAGTGGGTTCTGTGGTGATCGATGACCGTCTGCCTGTGAATGAGGCTGGCCAGCTGGTCT
 TTGTCTCTCCACCTATAAGAACTTGTCTGGGAGCACTTCTGAAAAGGCCTATGCCAAGCTCTCTGG
 TTCCTATGAAGACTTGCAGTCAGGACAGGTGTCTGAAGCCCTTGTAGACTTCACTGGAGGGGTGACAATG
 ACCATCAACCTGGCAGAAAGCCATGGCAACCTCTGGGACATCCTCATCGAAGCCACTACAACAGAACCC
 TCATTGGCTGCCAGACCACTCAGGGGAGAAGATTCTGGAGAATGGGCTGGTGAAGGCCATGCCTATAC
 TCTCACAGGAATCAGGAAGGTGACCTGCAACATAGACCTGAATATCTCGTCAAGCTACGGAACCCCTGG
 GGAAAGGTGGAATGGAAGGAGACTGGAGTGACAGTTCAAGTAAATGGGAGCTGCTGAGCCCCAAGGAGA
 AGATTCTGCTTCTGAGGAAAGACAATGACGGAGAATTCTGGATGACGCTGCAGGACTTTAAACACATTT
 CGTGCTCCTGGTTATCTGTAACTGACCCAGGCCTGTTGAGCCAGGAGGCGGCCAGAAGTGGACGTAC
 ACCATGCGGGAGGGGAGATGGGAGAAGCGGAGCACAGCTGGTGGCCAGAGGCAGTTGCTGCAGGACACAT
 TTTGGAAGAACCAGCAGTTCTCTGTCTGTCTGGAGGCCGAGGAGGGCAGGAGATCCCTGAGGCCCTG
 CAGCGTGCTGGTGTCCCTGCTCCAGAAGCCAGGCACAGGTGCCGCAAGCGGAAGCCTCTCCTCGCCATT
 GGCTTCTACCTGTATAGGATGAACAAGTACCATGATGACCAGAGGAGACTGCCCCCTGAGTTCTTCCAGA
 GAAACACTCCTCTGAGCCAGCCTGATAGGTTTCTCAAGGAGAAAGAGTGAAGTCAAGGAGCTGTGTCTGGA
 ACCAGGGACGTACCTCATCGTCCCTGCATATTGGAGGCCACCAGAAGTCAAGTTCGTCCTCAGGGTC
 TTCTCCAGGAAGCACATCTTTATGAAATTGGCAGCAATTCTGGTGTCTCTCTCAAAGGAGATAGAAG
 ACCAAAATGAAAGGCAGGATGAATTCTTACCAAATTCTTTGAAAAGCATCCAGAGATTAATGCAGTTCA
 ACTTCAGAACCTCCTGAACCAGATGACCTGGTCAAGTCTGGGAGCAGACAGCCCTTCTTTAGCCTGGAA
 GCCTGCCAGGGGATCCTGGCCTTACTGGACCTTAATGCATCAGGTAATGAGCATCCAGGAATTCAGGG
 ACCTGTGGAAGCAGCTGAAGCTCTCTCAGAAGGTTTTCCACAAGCAAGACCGTGGGTGAGGATACCTGAA
 CTGGGAGCAGCTGCACGCTGCCATGAGGGAGGCAGGAATCATGCTCAGTGATGACGTCTGTGAGCTGATG
 CTCATCCGCTACGGCGGCCCGCCCTCCAGATGGACTTTGTGAGTTTCATCCACTTGATGCTGCGTGTAG
 AGAACATGGAGGATGTCTTCCAAAACCTAACCCAAGATGGCAAAGGGATATACCTCCAGAAGCCAGAGTG
 GATGATGATGGCACTGTACTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226657 representing NM_001145122
 Red=Cloning site Green=Tags(s)

MSLWPPFRCRWKLAPRYSRRASPQQPQQDFEALLAECLRNGLFEDTSFPATLSSIGSGSLLQKLPRLQ
 WKRPELHNSNPQFYFAKAKRLDLCQIGVDCWFLAALQALAHQDILSRVPLNQSFTEKYAGIFRFWFW
 HYGNWVPVVIDRPLVNEAGQLVFVSSTYKNLFWGALLEKAYAKLSGSYEDLQSGQVSEALVDFTGGVTM
 TINLAEAHGNLWDILIEATYNRTLIGCQTHSGEKILENGLVEGHAYTLTGIRKVTCKHRPEYLVKLRNPW
 GKVEWKGDWSDSSSKWELLSPKEKILLRKDNDGEFWMTLQDFKTHFVLLVICKLTPGLLSQEAQKWY
 TMREGRWKRSTAGGQRQLLQDTFWKNPQFLLSVWRPEEGRRSLRPCSVLVSLQKPRHRCRKRKPLLA
 GFYLYRMNKYHDDQRRLLPEFFQRNTPLSQPDRFLKEKEVSQELCLEPGTYLIVPCILEAHQKSEFVLRV
 FSRKHIFYEIGNSGVVFSKEIEDQNERQDEFFTKFEKHPEINAVQLQNLLNQMTWSSLGSRQPPFSLE
 ACQGILALLDLNASGTMSIQEFRDLWKQLKLSQKVFBKQDRGSGYLNWEQLHAAMREAGIMLSDDVCQLM
 LIRYGGPRLQMDFVSFIHMLRVENMEDVFQNLTDGKGIYLQKPEWMMALYS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8031_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145122

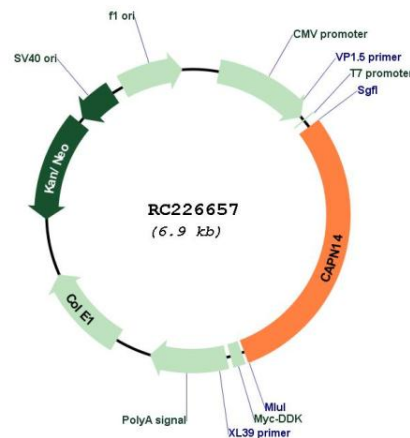
ORF Size: 2052 bp

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](#)

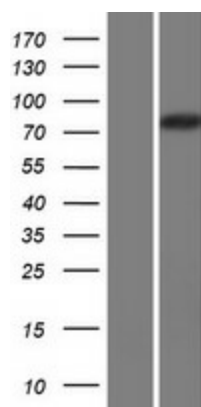
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001145122.2</u>
RefSeq ORF:	2055 bp
Locus ID:	440854
UniProt ID:	<u>A8MX76</u>
Cytogenetics:	2p23.1
MW:	79.4 kDa
Gene Summary:	Calpains are a family of cytosolic calcium-activated cysteine proteases involved in a variety of cellular processes including apoptosis, cell division, modulation of integrin-cytoskeletal interactions, and synaptic plasticity (Dear et al., 2000 [PubMed 10964513]). CAPN14 belongs to the calpain large subunit family.[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC226657



Western blot validation of overexpression lysate (Cat# [LY428704]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226657 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).