

Product datasheet for **SC115098**

Calpain 7 (CAPN7) (NM_014296) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Calpain 7 (CAPN7) (NM_014296) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Calpain 7 |
| Synonyms: | CALPAIN7; PALBH |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >OriGene ORF within SC115098 sequence for NM_014296 edited (data generated by NextGen Sequencing)

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ATGGACGCCACAGCACTGGAGCGGGACGCTGTGCAGTTCGCCCGTCTGGCGGTTTCAGCGC
GACCACGAAGGCCGCTACTCCGAGGCGGTGTTTTATTACAAGGAAGCTGCACAAGCCTTA
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TCAAAACATCAGTTGGACTTAGAGCGTGTCTCATTTCCTTGTACACAAGCTTTTGATGAA
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Clone variation with respect to NM_014296.2
2434 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_014296 unedited
 GATTTTGTATACGACTACTATAGCGGCCGCGACATTTCGCACGAGGGCCGCGAAGTGGG
 GCGGCCGGTGGGCTACGAGCCGGTCTGGGCTGAGGGGCGCGGCTTCGCGGTGGACCCC
 AGCCCCGCAACGGGAAGGCGAGCTCTCCTCCACCGTCCAAAGTAACTTTGCCGCTCCTT
 CCGCGCGCTCCCGAGTCTCGCCGCCCGGGCCGCGCAGTCCGCGAAGAGCCGCTCT
 GCGTCAGGGCTCCTTCCCTGCCCGGAGCGGGGCCACTGCGCCATGGACGCCACAGCAC
 TGGAGCGGGACGCTGTGCAGTTCGCCCTGCTGGCGTTTACGCGGACCACGAAGGCCGCT
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 CAGGATCAAGCCTAGAAAATATTCAAGAAAAATAACTGAGTATCTGGAAGAGTTCAAG
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 ACTTAGAGCGTGTCTATTTCTTGTACACAAGCTTTTGATGAAGATGAAAAAGAGAATG
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 GAGCAGAAGCGCTGAGTGAAGCTTTGACCAAGCCAGTTGGCAAAATCAGTTCAACAAGTG
 TTAAGCCAAAGCCACCTCCAGTGAAGCAGATTTTCCACTGGGCGCTAATNCCTTCTTG
 AAGACCTCAGTCATTATAAGTCCCTCAGTCATGTGATGCACAGGACAGAGATCACAGCNGA
 AGAAATAGAAGTCTCAGGACACATCAAAAATAATGGTNTANAATATGTCCTTTATGAATG
 TGACCTGAAGACGTNTTCTCCATGCCTTCTGGGAAGAGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_014296 unedited
 NAAAATACTTGTACGCGCCGATTTTANGATCGATTTTTTTTTTTTTTTTTTTTATCCGTA
 AGTATAAACATTTTATTTCAATTTAAGGTAGTAGCAATACAAAATAAGTTTTGATAATTA
 TAAAGTAGAGACAATGAAAAATCCACCTATTTTTAGAAATTTAAAATATTGAGCATCA
 TTCTGTCTGATGGGTTTTATGTAAAAGTGGGAATTTACATGACACCAAGTATCTTGGCAA
 TTCACTTTTTTGAATGTACATATCCCAATCACCATATATTAATTTCTCTATTTTCTTC
 AAAGTGTATTGCCACAAGAGACTGAACGATACAGCAATTTAAAAAAGACCACACAAAC
 TAAATTGTAATGTCTTCAATATCTCAATTAAGTGTTTTTAAAAATAAAACTGCAGTAGT
 GAATTTCTTTAAGTCTTGTCTACCTGATTGAATGGGAGAAATACCTCAACAATTTTCATTC
 TTTAGCATGAGCATCTTCATGCTAAGGTAGTCCATACTTAAAAGCTTTTATTTCTTTCTTA
 ACACCTGGGCCACCAATATTTAAAAATACATAAATAAGGCCAAAATTAATAATCCAGTTG
 TGGGGGCAAAAGTTTCATTTGGGTAAACCAGTTGCCCAAAAATGTTTAGGGAAAATACCAC
 CCGGCTTTTAATTTCCCACTGCCCTGCGTGAAAAGGGGAACACCGGGGAAAATGGTCCC
 GGGTTAGTGAGACGAAGGCGCCCTTATTCGGTGCAGGGAGGGATGGTGGCTTTTCTT
 TGTGCTGACGGTGGGTGCGGGCTTTTATAACCGCGGACAAACGAAGACCTTTTTGGA
 ATGTATGATGACCGCTCATGATGTTTATTTCTCTCGGGCTATTGTTCTTACCAGATTA
 GGGGCGCGCAGTGCAGGACGCGAGTAGCCTTTATGGTCCCGCAGGCGCACTGGGG

Restriction Sites:

NotI-NotI

ACCN:

NM_014296

Insert Size:

4000 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_014296.2](#), [NP_055111.1](#)

RefSeq Size: 4385 bp

RefSeq ORF: 2442 bp

Locus ID: 23473

UniProt ID: [Q9Y6W3](#)

Cytogenetics: 3p25.1

Domains: Calpain_III, MIT

Protein Families: Druggable Genome, Protease

Gene Summary: Calpains are ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The large subunit possesses a cysteine protease domain, and both subunits possess calcium-binding domains. Calpains have been implicated in neurodegenerative processes, as their activation can be triggered by calcium influx and oxidative stress. The function of the protein encoded by this gene is not known. An orthologue has been found in mouse but it seems to diverge from other family members. The mouse orthologue is thought to be calcium independent with protease activity. [provided by RefSeq, Jul 2008]