

## Product datasheet for **SC314772**

### Calpain 3 (CAPN3) (NM\_000070) Human Untagged Clone

#### Product data:

|               |  |
|---------------|--|
| Product Type: | Expression Plasmids                                      |
| Product Name: | Calpain 3 (CAPN3) (NM_000070) Human Untagged Clone       |
| Tag:          | Tag Free   |
| Symbol:       | Calpain 3  |
| Synonyms:     | CANP3; CANPL3; LGMD2; LGMD2A; LGMDD4; LGMDR1; nCL-1; p94 |
| Vector:       | <u><a href="#">pCMV6 series</a></u>                      |



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_000070, the custom clone sequence may differ by one or more nucleotides

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ATGCCGACCGTCATTAGCGCATCTGTGGCTCCAAGGACAGCGGCTGAGCCCCGGTCCCCA
GGGCCAGTTTCTCACCCGGCCAGAGCAAGGCACTGAGGCTGGGGTGGAAACCAAGT
GGCATCTATTAGCCATCATCAGCCGAATTTTCTATTATCGGAGTGAAAGAGAAGACA
TTCGAGCAACTTCACAAGAAATGTCTAGAAAAGAAAGTTCTTTATGTGGACCTGAGTTC
CCACCGGATGAGACCTCTCTCTTTATAGCCAGAAGTCCCCTCCAGTTCGTCTGGAAG
AGACCTCCGAAAATTTGCGAGAATCCCGATTTATCATTGATGGAGCCAACAGAAGTAC
ATCTGTCAAGGAGAGCTAGGGGACTGCTGGTTTCTCGCAGCCATTGCCTGCCTGACCCTG
AACCAGCACCTTCTTTCCGAGTCATACCCCATGATCAAAGTTTCATCGAAAACACGCA
GGGATCTTCCACTTCCAGTTCGGCGCTATGGAGAGTGGTGGACGTGGTTATAGATGAC
TGCCTGCCAACGTACAACAATCAACTGGTTTTCCCAAGTCCAACCACCGCAATGAGTTC
TGGAGTGTCTGTGGAGAAGGCTTATGCTAAGCTCCATGGTTCCTACGAAGCTCTGAAA
GGTGGGAACACCACAGAGGCCATGGAGGACTTCACAGGAGGGTGGCAGAGTTTTTGGAG
ATCAGGGATGCTCCTAGTGACATGTACAAGATCATGAAGAAAGCCATCGAGAGAGCTCC
CTCATGGGCTGCCATTGATGATGGCAGCAACATGACCTATGGAACCTCTCCTTCTGGT
CTGAACATGGGGGAGTTGATTGCACGGATGGTAAGGAATATGGATAACTCACTGCTCCAG
GACTCAGACCTCGACCCAGAGGCTCAGATGAAAGACCGACCCGGACAATCATTCCGGTT
CAGTATGAGACAAGAATGGCCTGCGGGCTGGTCAGAGGTACGCTACTCTGTACAGGGG
CTGGATGAGGTCCCGTTCAAAGTGAGAAAAGTGAAGCTGGTGGGCTGCGGAATCCGTGG
GGCCAGGTGGAGTGAACGGTCTTGGAGTGATAGATGGAAGGACTGGAGCTTTGTGGAC
AAAGATGAGAAGGCCGCTGCAGCACCAGTCACTGAGGATGGAGAGTTCTGGATGCTC
TATGAGGATTTTCTACCTATTTTCAAAAGTTGGAGATCTGCAACCTCACGGCCGATGCT
CTGCAGTCTGACAAGCTTACAGCTGGACAGTGTCTGTGAACGAGGGCCGCTGGGTACGG
GGTTGCTCTGCCGAGGCTGCCGCAACTTCCAGATACTTTCTGGACCAACCCTCAGTAC
CGTCTGAAGTCTGGAGGAGGACGATGACCCTGATGACTCGGAGGTGATTTGCAGCTTC
CTGGTGGCCCTGATGCAGAAGAACCAGGCGGAAGGACCGGAAGCTAGGGGCCAGTCTTTC
ACCATTGGCTTCGCCATCTACGAGGTTCCCAAAGAGATGCACGGGAACAAGCAGCACCTG
CAGAAGGACTTCTCCTGTACAACGCCTCCAAGGCCAGGAGCAAAACCTACATCAACATG
CGGGAGGTGTCCAGCGCTTCCGCCTGCCTCCAGCGAGTACGTCATCGTCCCTCCACC
TACGAGCCCCACCAGGAGGGGAATTCATCCTCCGGTCTTCTCTGAAAAGAGGAACCTC
TCTGAGGAAGTTGAAAATACCATCTCCGTGGATCGGCCAGTGAAAAGAAAAAACAAG
CCCATCATCTTCTGTTCCGACAGAGCAAACAGCAACAAGGAGCTGGGTGTGGACCAGGAG
TCAGAGGAGGGCAAAGGCAAAACAAGCCCTGATAAGCAAAAGCAGTCCCCACAGCCACAG
CCTGGCAGCTCTGATCAGGAAAGTGAGGAACAGCAACAATTCGGGAACATTTTCAAGCAG
ATAGCAGGAGATGACATGGAGATCTGTGCAGATGAGCTCAAGAAGGTCTTAACACAGTC
GTGAACAAACACAAGGACCTGAAGACACACGGGTTCACTGGAGTCTGCCGTAGCATG
ATTGCGCTCATGGATACAGATGGCTCTGGAAAGCTCAACTGCAGGAGTCCACCACCTC
TGGAAACAAGATTAAGGCCTGGCAGAAAAATTTTCAAACACTATGACACAGACCAGTCCGGC
ACCATCAACAGCTACGAGATGCGAAATGCAGTCAACGACGAGGATTCCACCTCAACAAC
CAGCTCTATGACATCATTACCATGCGGTACGCAGACAAACACATGAACATCGACTTTGAC
AGTTTCATCTGCTGCTTCGTTAGGCTGGAGGGCATGTTCCAGAGCTTTTTCATGCATTTGAC
AAGGATGGAGATGGTATCATCAAGCTCAACGTTCTGGAGTGGCTGCAGCTCACCATGTAT
GCC

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**Restriction Sites:** Please inquire

**ACCN:** NM\_000070

|                               |  |
|-------------------------------|--|
| <b>OTI Disclaimer:</b>        | <p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p> |
| <b>OTI Annotation:</b>        | <p>This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.</p>  |
| <b>Components:</b>            | <p>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).</p>  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <p><a href="#">NM_000070.2</a>, <a href="#">NP_000061.1</a></p>  |
| <b>RefSeq Size:</b>           | <p>3316 bp</p>   |
| <b>RefSeq ORF:</b>            | <p>2466 bp</p>   |
| <b>Locus ID:</b>              | <p>825</p>   |
| <b>UniProt ID:</b>            | <p><a href="#">P20807</a></p>  |
| <b>Cytogenetics:</b>          | <p>15q15.1</p>   |
| <b>Protein Families:</b>      | <p>Druggable Genome, Protease</p>  |
| <b>Gene Summary:</b>          | <p>Calpain, a heterodimer consisting of a large and a small subunit, is a major intracellular protease, although its function has not been well established. This gene encodes a muscle-specific member of the calpain large subunit family that specifically binds to titin. Mutations in this gene are associated with limb-girdle muscular dystrophies type 2A. Alternate promoters and alternative splicing result in multiple transcript variants encoding different isoforms and some variants are ubiquitously expressed. [provided by RefSeq, Jul 2008]<br/>Transcript Variant: This variant (1) encodes the longest isoform (a).</p>  |