

Product datasheet for **SC124134**

Calpain 9 (CAPN9) (NM_006615) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calpain 9 (CAPN9) (NM_006615) Human Untagged Clone
Tag:	Tag Free
Symbol:	Calpain 9
Synonyms:	GC36; nCL-4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC124134 sequence for NM_006615 edited (data generated by NextGen Sequencing)

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ATGCCTTACCTCTACCGGGCCCCAGGGCCTCAGGCACACCCGGTCCCAAGGACGCCCCG
ATCACCCACTCCTCAGGCCAGAGCTTTGAGCAAATGAGGCAGGAGTGCCTGCAGAGAGGC
ACCCTGTTGAGGATGCAGACTTCCCAGCCAGCAATTCCTCCCTGTTCTACAGTGAGAGG
CCGCAGATCCCCTTTGTGTGAAACGACCAGGGGAAATCGTAAAAACCCAGAATTCATT
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GCCGCCATCGCCTCCCTTACGCTTAATCAAAAAGCACTGGCCAGAGTCATCCCCCAGGAC
CAAAGATTTGGCCCTGGTTATGCCGGGATATTCCATTTCCAGTTCTGGCAGCACAGTGAG
TGGCTGGACGTGGTGATCGATGACCGCCTGCCACCTTCAGGGACCGCTTGGTTTTCTC
CACTCTGCCGACCACAACGAGTTCTGGAGCGCCTTGCTGGAAAAAGCCTACGCCAAGCTA
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ATTGACCAGGTAAGCTTCCGAGGCCAGAGAATCGAGCTCATCCGAATCCGGAACCTTGG
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AAAGCTGCAGGCTTTCAGCTGAGCAGCCACCTCCTGCAGCTGATTGTGCTCAGGTATGCG
GATGAGGAGCTCCAGCTGGACTTCGATGACTTCTCAACTGCCTGGTCCGGCTGGAGAAT
GCGAGCCGGGTGTTCCAGGCTCTCAGTACAAAAGAACAAGGAGTTCATTCTCAATATA
AATGAGTTCATCCATTTGACAATGAACATCTGA
    
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Clone variation with respect to NM_006615.2
 366 c=>a;964 a=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006615 unedited
 CAAAGTACAGAATTTGTAACGACTCACTATAGGGCGGCCGGAATTCGCACCAGGGCCA
 CTCAGCCCAGTGGCCCTCTGAGCTGTTCTTCTTGACCGGCACACACAGCTCGCTTCTTC
 ACTTTCTTTTCCATCCACTGCCGGACCCAAGCCAGCCTTCCAGGGAGCAGCCATGCCTTA
 CCTCTACCGGGCCCCAGGGCCTCAGGCACACCCGGTCCCAAGGACGCCCGGATCACCCA
 CTCCTCAGGCCAGAGCTTTGAGCAAATGAGGCAGGAGTGCCTGCAGAGAGGCACCCTGTT
 TGAGGATGCAGACTTCCAGCCAGCAATTCCTCCCTGTTCTACAGTGAGAGGCCGCAGAT
 CCCCTTTGTGTGAAACGACCAGGGGAAATCGTGAAAAACCAGAATTCATTCTTGGAGG
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 CGCCTCCCTTACGCTTAATCAAAAAGCACTGGTCAGAGTCATCCCCAGGACCAAAGATT
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 TAAGAGGAAGCTATGACTGCCAGTGGAGAAGAGAAAACACATTGAAACGAAAAACAAGA
 CACCACCGAGCCGAGAAGAATAGCCGTAGCGCAAGATGGAGAGATCGATATAAAGAGCG
 GTGAGAAGTCTCAAGACAAGTGCGCCACGAGAATAGGGGCACGAGATAGCACGAGAAAGC
 CGAGCGATAAGAATAAGGATATTACCTCGAT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006615 unedited
 ACGGGCAGGAGAGGCACTGGGGAGGGTACAGGGATGCCACCCGGGATCTGTTTCAGGAA
 ACAGCTATGACCGTTGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTGTAGCT
 GAGTTCATTTCTTCTCCAGATCAAGATGAAGGGAGAAGGCCCGGACGATGAGAGGGGA
 GTGAACCTGGGCGTAATGGTTCCACACCAAGAGAAGTCTGAAGGTCAAGGTCCAGAAG
 CCAAGATTCAGCTGGGCAGGCTGCATCTCTACAAGGCAGCCTCAGATGTTTATTGCAAA
 TGGATGAACTCATTTATATTGAGATGAATGAACTCCTTGTCTTTGTAAGTACTGAGAGCCTGG
 AACACCCGGCTCGCATTCTCCAGCCGACAGGCAGTTGAGGAAGTCATCGAAGTCCAGC
 TGGAGCTCCTCATCCGCATACCTGAGCACAATCAGCTGCAGGAGGTGGCTGCTCAGCTGA
 AAGCCTGCAGCTTTCAGTGCAGTCCGTAGTTCATAGGTAGACATGGTGCCGGACTTGTC
 GCATCAAACCGAAGGAAAAGGTTAATCCACTGCTTCAGCTTGTCCAGAACACTTTGAAT
 TCATCAAACCTCCAGCTTCCATTGCCGCTGGTGTCCATCAGGGAATGATGTTTTTACAG
 GAGATCAGGCTTAGCTTCTGATTGGAGTCCCTTTTTCTTTTGCAGCACAGCATTTAAAA
 CATACTCAAGTTCCTCTGCTG

Restriction Sites:

NotI-NotI

ACCN:

NM_006615

Insert Size:

2500 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:	<ol style="list-style-type: none">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:	<u>NM_006615.2, NP_006606.1</u>
RefSeq Size:	2362 bp
RefSeq ORF:	2073 bp
Locus ID:	10753
UniProt ID:	<u>O14815</u>
Cytogenetics:	1q42.2
Domains:	Calpain_III, EFh
Protein Families:	Druggable Genome, Protease
Gene Summary:	<p>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 protein encoded by this gene is expressed predominantly in stomach and small intestine and may have specialized functions in the digestive tract. This gene is thought to be associated with gastric cancer. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).</p>