

Product datasheet for **SC304422**

Calpain 9 (CAPN9) (NM_016452) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calpain 9 (CAPN9) (NM_016452) Human Untagged Clone
Tag:	Tag Free
Symbol:	CAPN9
Synonyms:	GC36; nCL-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

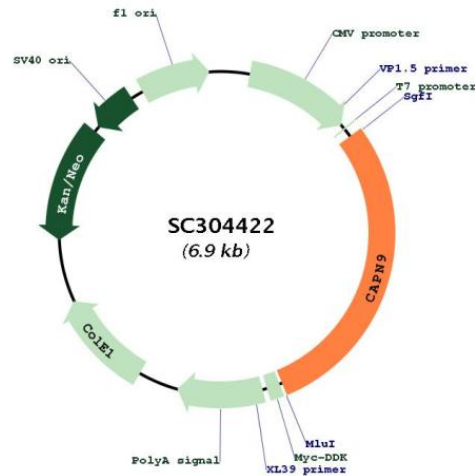


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Fully Sequenced ORF: >SC304422 representing NM_016452.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGCCTTACCTCTACCGGGCCCCAGGGCCTCAGGCACACCCGGTCCCAAGGACGCCGGATCACCAC
TCCTCAGGCCAGAGCTTTGAGCAATGAGCAGGAGTGCCTGCAGAGAGGCACCCTGTTTGAGGATGCA
GACTTCCAGCCAGCAATTCCTCCTGTTCTACAGTGAGAGGCCGAGATCCCCTTTGTGTGAAACGA
CCAGGGGAAATCGTGAAAAACCCAGAATTCATTCTTGAGGGGCCACCAGGACTGATATCTGCCAGGGA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_016452

Insert Size: 1995 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).

OTI Annotation: 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.

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_016452.2](#)

RefSeq Size: 2284 bp

RefSeq ORF: 1995 bp

Locus ID: 10753

UniProt ID: [O14815](#)

Cytogenetics: 1q42.2

Protein Families: Druggable Genome, Protease

MW: 76.2 kDa

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 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]
Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.