

Product datasheet for **SC309464**

Caspase-7 (CASP7) (NM_001227) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase-7 (CASP7) (NM_001227) Human Untagged Clone
Tag:	Tag Free
Symbol:	Caspase-7
Synonyms:	CASP-7; CMH-1; ICE-LAP3; LICE2; MCH3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309464 representing NM_001227. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTGTAAATACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCAGATGATCAGGGCTGTATTGAAGAGCAGGGGTTGAGGATTCAGCAAATGAAGATTCAGTGGAT
GCTAAGCCAGACCGGTCCTCGTTTGTACCGTCCCTCTTCAGTAAGAAGAAGAAAAATGTCACCATGCGA
TCCATCAAGACCACCGGGACCGAGTGCCTACATATCAGTACAACATGAATTTTAAAAAGCTGGGCAAA
TGCATCATAATAACAACAAGAACTTTGATAAAGTGACAGGTATGGGCGTTCGAAACGGAACAGACAAA
GATGCCGAGGCGCTCTCAAGTGCTCCGAAGCCTGGGTTTTGACGTGATTGTCTATAATGACTGCTCT
TGTGCCAAGATGCAAGATCTGCTTAAAAAGCTTCTGAAGAGGACCATACAAATGCCGCTGCTTCGCC
TGCATCCTCTAAGCCATGGAGAAGAAAAATGTAATTTATGGGAAAGATGGTGTACACCAATAAAGGAT
TTGACAGCCCACTTTAGGGGGATAGATGCAAAACCCCTTTAGAGAAACCCAAACTCTTCTTCATTAG
GCTTGCCGAGGGACCGAGCTTGATGATGGCATCCAGGCCGACTCGGGGCCATCAATGACACAGATGCT
AATCCTCGATAACAAGATCCCAGTGGAGCTGACTTCTCTTCGCCTATCCACGGTTCAGGCTATTAC
TCGTGGAGGAGCCAGGAAGAGGCTCCTGGTTTGTGCAAGCCCTCTGCTCCATCCTGGAGGAGCACGGA
AAAGACCTGGAATCATGCAGATCCTCACCAGGGTGAATGACAGAGTTGCCAGGCACTTTGAGTCTCAG
TCTGATGACCCACACTTCCATGAGAAGAAGCAGATCCCCTGTGTGGTCTCCATGCTACCAAGGAAGCT
TACTTCAGTCAATAG
ACGCGTACGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001227
Insert Size:	912 bp



[View online »](#)

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:	<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_001227.4</u>
RefSeq Size:	2607 bp
RefSeq ORF:	912 bp
Locus ID:	840
UniProt ID:	<u>P55210</u>
Cytogenetics:	10q25.3
Domains:	CASc, ICE_p10, ICE_p20
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Alzheimer's disease, Apoptosis
MW:	34.3 kDa

Gene Summary:

This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. The precursor of the encoded protein is cleaved by caspase 3 and 10, is activated upon cell death stimuli and induces apoptosis. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012]

Transcript Variant: This variant (a, also known as alpha) differs in the 5' UTR, lacks a portion of the 5' coding region and initiates translation at a downstream, in-frame start codon, compared to variant d. Variants a, c and e encode the same isoform (alpha), which has a shorter N-terminus compared to isoform delta. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.