

Product datasheet for **SC107961**

Caspase 4 (CASP4) (NM_033307) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 4 (CASP4) (NM_033307) Human Untagged Clone
Tag:	Tag Free
Symbol:	Caspase 4
Synonyms:	apoptotic cysteine protease Mih1/TX; Caspase 4; caspase 4, apoptosis-related cysteine peptidase; caspase 4, apoptosis-related cysteine protease; ICE(rel)II; ICEREL-II; ICH-2; Mih1/TX; TX; TX, ICH-2, Mih1/TX, ICEREL-II, ICE(rel)II
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_033307, the custom clone sequence may differ by one or more nucleotides

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ATGGCAGAAGGCAACCACAGAAAAAGCCACTTAAGGTGTTGGAATCCCTGGGCAAAGATTTCTCACTG
GTGTTTTGGATAACTTGGTGAACAAAATGTAAGTGAAGTGAAGGAGGAAAAAAGAAATATTACGA
TGCTAAAAGTGAAGACAAAGTTCGGGTCATGGCAGACTCTATGCAAGAGAAGCAACGTATGGCAGGACAA
ATGCTTCTCAAACCTTTTTTAACATAGACCAAATATCCCCAATAAAAAAGGTGATAAATTGGGTCACA
GAGGCAGAAATCACAATTTATGTTCTGCAATATCCTGCAGCTCATCCGAATATGGAGGCTGGACCACCTG
A
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_033307 unedited GACTNTCGCATTAGGAAGACAGATTTTGTCCCTATGGCAGGCAACCACAGCAAAAAAGC CACTTAAGGTGTTGGAATCCCTGGGCAAAGATTTCTCACTGGTGTTTTGGATAACTTGG TGGAAACAAAATGTACTGAACTGGAAGGAAGAGGAAAAAAGAAATATTACGATGCTAAAT CNGAGACAAAAGTTGGGTCATGGTAGACTCTATGCAAGAGAAGCAACGTATGGCAGGACA AATGCTTCTTCAAACCTTTTTTAAACATAGACCAAATATCCCCAATAAAAAAGCTCATCC GAATATGGAGGCTGGACCACCTGAGTCAGGAGAATCTACAGATGCCCTCAAGCTTTGTCC TCATGAAGAATTCTGAGACTATGTAAAGAAAGAGCTGAAGAGATCTATCCAATAAAGGA GAGAAACAACCGCACACGCCTGGCTCTCATATGCAATACAGAGTTTGACCATCTGCC TCCGAGGAATGGAGCTGACTTTGACATCACAGGGATGAAGGAGCTACTTGAGGGTCTGGA CTATAGTGTAGATGTAGAAGAGAATCTGACAGCCAGGGATATGGAGTCAGCGCTGAGGGC ATTTGCTACCAGACCAGAGCACAAAGTCTCTGACAGCACATTCTTGTTACTCAATTCTCA TGGCATCTGGAAGGAATCTGCGAACTGTGCATGATGAGAAAAAACAGATGTGCCTG CTTATGACACCATCTCCAGATATTTACAACCGCAACCTGCCTCAGTCTGAAGGACAAA CCCCAAGTCTTATTGTCCAGGCTGCAGAGTTGCAAACCGTGGGGAACCTGTGGTCTGAG GACTCTCCAGCATCTTGAAGTGGCCTTCTCACAGTCATCTG
Restriction Sites:	NotI-NotI
ACCN:	NM_033307
Insert Size:	1320 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:	NM_033307.2 , NP_150650.2
RefSeq Size:	1327 bp
RefSeq ORF:	351 bp
Locus ID:	837
Cytogenetics:	11q22.3
Domains:	Peptidase_C14
Protein Families:	Druggable Genome, Protease

Gene Summary:

This gene encodes a protein that is 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 composed of a prodomain and a large and small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This caspase is able to cleave and activate its own precursor protein, as well as caspase 1 precursor. When overexpressed, this gene induces cell apoptosis. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (delta) contains a unique internal fragment absent in variant alpha, which leads to a translation frameshift. Two polypeptides are produced from this variant. One corresponds to the N-terminal portion of isoform alpha and has a distinct C-terminus; another is identical to the N-terminal truncated isoform alpha.