

## Product datasheet for **SC119997**

### Caspase 8 (CASP8) (NM\_033358) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 8 (CASP8) (NM_033358) Human Untagged Clone
Tag:	Tag Free
Symbol:	CASP8
Synonyms:	ALPS2B; CAP4; Casp-8; FLICE; MACH; MCH5
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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Fully Sequenced ORF:

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>OriGene sequence for NM_033358 edited
GAATTCGGCACGAGGGATAGGCCTGTGACGAAGGTGCTACCATCGTGAGAGTAAGATTAT
ATTCTCCTGCCTTTTAAAAAGATGGACTTCAGCAGAAATCTTTATGATATTGGGGAACAA
CTGGACAGTGAAGATCTGGCCTCCCTCAAGTTCCTGAGCTGGACTACATTCCGCAAAGG
AAGCAAGAACCCATCAAGGATGCCTTGATGTTATTCCAGAGACTCCAGGAAAAGAGAATG
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TTGCTGATTACCTACCTAAACACTAGAAAAGGAGGAGATGGAAGGGAACCTCAGACACCA
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GATGATGACATGAACCTGCTGGATATTTTCATAGAGATGGAGAAGAGGGTCATCCTGGGA
GAAGGAAAGTTGGACATCCTGAAAAGAGTCTGTGCCCAAATCAACAAGAGCCTGCTGAAG
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GATGAATTTTCAAATGGGAGGAGTTGTGTGGGTAATGACAATCTCGGACTCTCCAAGA
GAACAGGATAGTGAATCACAGACTTTGGACAAAGTTTACCAAATGAAAAGCAAACCTCGG
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CTTCACAGCATTAGGGACAGGAATGGAACACACTTGGATGCAGGGGCTTTGACCACGACC
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GTGTTTTTATTACAGGCTGTGACGGGGATAACTACCAGAAAGGTATACCTGTTGAGACT
GATTCAGAGGAGCAACCCATTTAGAAAATGGATTTATCATCACCTCAAACGAGATATATC
CCGGATGAGGCTGACTTTCTGCTGGGGATGGCCACTGTGAATAACTGTGTTTCTACCGA
AACCTGTGACAGGGAACCTGGTACATCCAGTCACTTTGCCAGAGCCTGAGAGAGCGATGT
CCTCGAGCGGATGATATTCTCACCATCCTGACTGAAGTGAATGAAAGTAAAGCAACAAG
GATGACAAGAAAAACATGGGAAACAGATGCCTCAGCCTACTTTCACACTAAGAAAAAAA
CTTGCTCTCCCTTCTGATTGATGGTGCTATTTTGTGTTTGTGTTTGTGTTTGTGTTT
GAGACAGAATCTCGCTCTGTGCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACCG
CAAGCTCCGCCTCCCGGTTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGAC
TACAGGGGCCCGCCACCACCTGGCTAATTTTTTAAAAATATTTTATAGTAGAGACAGGG
TTTCACTGTGTTAGCCAGGGTGGTCTTGATCTCCTGACCTCGTGATCCACCCACCTGGC
CTCCCAAAGTGCTGGGATTACAGCGTGAGCCACCGCGCTGGCCGATGTTACTATTTAG
ATATAACACTATGTTTATTTACTAATTTTCTAGATTTTCTACTTTATTAATTGTTTTGCA
CTTTTTTATAAGAGCTAAAGTAAATAGGATATTAACAACAATAACACTGTCTCCTTTCT
CTTATGCTTAAGGCTTTGGGAATGTTTTAGCTGGTGGCAATAAATACCAGACACGTACA
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CACTGTTAATATTTCTATTAACCTTAATTTCTTTCAAAGCTAAATCCACACTACCACAT
TAAAAAATAGAAAGTAGCCACGATGGTGGCTCATGTCTATAATCCCAGCACTTTGGG
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CACCGCTGCACTCAAGCTTGGGTGACAGAGCAAGACCCCGTCTCAAAAAAATTTTTTTT
TTAATAAAAAAATTTGTTTGAACCTTTTAAAAATCAAATGATTTTTACAAGTTTTA
AATAAGCTCTCCCAAACCTGCTTATGCCTTCTATTGCTTTTATGATATATATGCT
TGGCTAACTATATTTGCTTTTGGCTAACAATGCTCTGGGGTCTTTTTATGCATTTGCATT
TGCTCTTTCATCTGCTTGGATTATTTTAAATCATTAGGAATTAAGTTATCTTAAAAAT
TTAAGTATCTTTTTTCAAAAACATTTTTAATAGAATAAAATATAATTTGATCTTAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AACTCGAC
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_033358 unedited TCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGCGAAATTCGCACGAGGGATAGGC CTGTGACGAAGGTGCTACCATCGTGAGAGTAAGATTATATTCTCCTGCCTTTTAAAAAGA TGGACTTCAGCAGAAATCTTTATGATATTGGGGAACAACCTGGACAGTGAAGATCTGGCCT CCCTCAAGTTCCTGAGCCTGGACTACATTCCGCAAAGGAAGCAAGAACCCATCAAGGATG CCTTGATGTTATTCCAGAGACTCCAGGAAAAGAGAATGTTGGAGGAAAGCAATCTGTCTCT TCTGAAGGAGCTGCTCTTCCGAATTAATAGACTGGATTTGCTGATTACCTACCTAAACA CTAGAAAAGGAGGAGATGGAAAGGGAACCTCAGACACCAGGCAGGGCTCAAATTTCTGCCT ACAGGGTCATGCTCTATCAGATTTCAAGAAGAAGTGAGCAGATCAGAATTGAGGTCTTTTA AGTTTCTTTTGCAAGAGGAAATCTCAAATGCAAACCTGGATGATGACATGAACCTGCTGG ATATTTTCATAGAGATGGAGAAGAGGGTCATCCTGNGAGAAGGAAAGTTGGACATCCTGA AAAGAGTCTGTGCCCAAATCAACAAGAGCCTGCTGAAGATAATCAACGACTATGAAGAAT TCAGCAAAGAGAGAAGCAGCAGCCTTGAAGGAAGTCTGATGAATTTTCAAATGGGGAGG AGTTGTGTGGGTAAATGACAATCTCGGACTCTTCAAGAGAACAGGATAGTGAATCACAGA CTTTGGACANNAGTTACCAAATGAAAAGCANACCTCGNGATACTGTCTGATCATAACATC ACATTNTGCAAAGCAGGAGAAATGCCCAACTCACGCATAGGACAGGATGGACAACCTNGA TGCAGGCTTGCCCGACTTGAGAGCTATTTGAATAGCCACATACTGACATNACAATTTGA A
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_033358
<b>Insert Size:</b>	2900 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<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>	<u><a href="#">NM_033358.1</a></u> , <u><a href="#">NP_203522.1</a></u>
<b>RefSeq Size:</b>	1088 bp
<b>RefSeq ORF:</b>	708 bp
<b>Locus ID:</b>	841
<b>UniProt ID:</b>	<u><a href="#">Q14790</a></u>
<b>Cytogenetics:</b>	2q33.1
<b>Protein Families:</b>	Druggable Genome, Protease

<b>Protein Pathways:</b>	Alzheimer's disease, Apoptosis, Huntington's disease, NOD-like receptor signaling pathway, p53 signaling pathway, Pathways in cancer, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway, Viral myocarditis
<b>Gene Summary:</b>	<p>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 composed of a prodomain, a large protease subunit, and a 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 protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FADD. This protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alternatively spliced transcript variants encoding different isoforms have been described, although not all variants have had their full-length sequences determined. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (E), also known as Beta-1, has multiple differences, one of which causes a frameshift, compared to variant G. It encodes isoform E, which is shorter than isoform G.</p>