

Product datasheet for **RC216300**

Caspase 8 (CASP8) (NM_001080125) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 8 (CASP8) (NM_001080125) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Caspase 8
Synonyms:	ALPS2B; CAP4; Casp-8; FLICE; MACH; MCH5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216300 representing NM_001080125
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGGAGGCAGAAGAGCCAGGGTGGTTATTGAAAGTAAAAGAACTTCTCCTGGGAGCCTTTCCCA
 CCCCTTCCCTGCTGAGCACGTGGAGTTAGGCAGGTTAGGGGACTCGGAGACTGCGATGGTGCCAGGAAA
 GGGTGGAGCGGATTATATTCTCCTGCCTTTTAAAAAGATGGACTTCAGCAGAAATCTTTATGATATTGGG
 GAACAACCTGGACAGTGAAGATCTGGCCTCCCTCAAGTTCCTGAGCCTGGACTACATTCGCAAGGAAGC
 AAGAACCATCAAGGATGCCTTGATGTTATTCCAGAGACTCCAGGAAAAGAGAATGTTGGAGGAAAGCAA
 TCTGTCTTCTGAAGGAGCTGCTTCCGAATTAATAGACTGGATTTGCTGATTACCTACCTAAACACT
 AGAAAGGAGGAGATGGAAAGGAACTTCAGACACCAGGCAGGGCTCAAATTTCTGCCTACAGGGTCATGC
 TCTATCAGATTTCAGAAGAAGTGAAGATCAGAAATGAGGTCTTTAAGTTCTTTTCAAGAGGAAAT
 CTCCAAATGCAAACTGGATGATGACATGAACCTGCTGGATATTTTCATAGAGATGGAGAAGAGGGTCATC
 CTGGGAGAAGGAAAGTTGGACATCCTGAAAAGAGTCTGTGCCAAATCAACAAGAGCCTGCTGAAGATAA
 TCAACGACTATGAAGAATTCAGCAAAGAGAGAAGCAGCAGCCTTGAAGGAAGTCCTGATGAATTTTCAA
 TGGGGAGGAGTTGTGTGGGGTAATGACAACTCTCGGACTCTCAAGAGAACAGGATAGTGAATCACAGACT
 TTGGACAAAGTTTACAAATGAAAAGCAAACTCGGGGACTGTCTGATCATCAACAATCACAATTTTG
 CAAAAGCACGGGAGAAAGTGCCCAACTTCACAGCATTAGGGACAGGAATGGAACACACTGGATGCAGG
 GGCTTTGACCACGACCTTTGAAGAGCTTCATTTGAGATCAAGCCCCACGATGACTGCACAGTAGAGCAA
 ATCTATGAGATTTGAAAATCTACCAACTCATGGACCACAGTAAACATGGACTGCTTCATCTGCTGTATCC
 TCTCCCATGGAGACAAGGCATCATCTATGGCACTGATGGACAGGAGGCCCCCATCTATGAGTGCATC
 TCAGTTCACTGGTTTGAAGTGCCCTTCCCTTCTGGAAAACCCAAAGTGTTTTTTATTACAGGCTTGTCCAG
 GGGGATAACTACCAGAAAGGTATACCTGTTGAGACTGATTCAGAGGAGCAACCCTATTTAGAAATGGATT
 TATCATCACCTCAAACGAGATATATCCCGGATGAGGCTGACTTTTCTGCTGGGGATGGCCACTGTGAATAA
 CTGTGTTTCTACCGAAACCCTGCAGAGGGAACCTGGTACATCCAGTCACTTTGCCAGAGCCTGAGAGAG
 CGATGCTCTCGAGGCGATGATTTCTCACCATCCTGACTGAAGTGAACATGAAGTAAGCAACAAGGATG
 ACAAGAAAACATGGGAAACAGATGCCTCAGCCTACTTTCACACTAAGAAAAAACTTGTCTTCCCTTC
 TGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216300 representing NM_001080125
 Red=Cloning site Green=Tags(s)

MEGRRARVVIIESKRNFLLGAFPTFPFAEHVELGRLGDSETAMVPGKGGADYILLPFKMDFSRNLYDIG
 EQLDSEDLASLKFLLSLDYIPQRKQEPKDALMLFQRLQEKRMLEESNLSFLKELLFRINRLDLLITYLNT
 RKEEMERELQTPGRAQISAYRVMLYQISEEVSRSSELRSFKLLQEEISKCKLDDDMNLLDIFIEMEKRV
 LGEGKLDILKRVCQINKSLLKIINDYEEFSKERSSSLEGSPDEFNGEELCGVMTISDSPREQDSESQT
 LDKVYQMKSKPRGYCLINNHNFAKAREKVPKLHSIRDRNGTHLDAGALTTTFFELHFEIKPHDDCTVEQ
 IYEILKIYQLMDHSNMDCFICCSHGDGKIYGTGQEAPEIYELTSQFTGLKCPSLAGPKVFFIQACQ
 GDNYQKGIPIVETDSEEQPYLEMDLSSPQTRYIPDEADFLMGMATVNNCVSYRNPAGETWYIQSLCQSLRE
 RCPRGDDILTILTEVNYEVSNDKDKNMGMKQMPQPTFTLRKLVFSPD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3876_c01.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001080125

ORF Size: 1614 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001080125.2](#)

RefSeq Size: 2938 bp

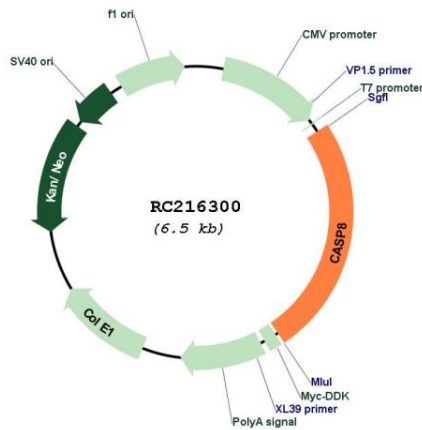
RefSeq ORF: 1617 bp

Locus ID: 841

UniProt ID: [Q14790](#)

Cytogenetics:	2q33.1
Protein Families:	Druggable Genome, Protease
Protein Pathways:	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
MW:	61.7 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 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]

Product images:



Circular map for RC216300