

Product datasheet for RC202059

Caspase-7 (CASP7) (NM_033339) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase-7 (CASP7) (NM_033339) Human Tagged ORF Clone
Tag:	Myc-DDK
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)
ORF Nucleotide Sequence:	>RC202059 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCAGATGAGCAGGGCTGTATTGAAGAGCAGGGGGTTGAGGATTCAGCAAATGAAGATTCAGTGGATG
CTAAGCCAGACCGGTCTCGTTTGTACCGTCCCTCTTCAGTAAGAAGAAGAAAAATGTCACCATGCGATC
CATCAAGACCACCGGGACCGAGTGCCTACATATCAGTACAACATGAATTTTAAAAAGCTGGGCAAATGC
ATCATAATAACAACAAGAAGCTTTGATAAAGTACAGGTATGGGCGTTCGAAACGGAACAGACAAAGATG
CCGAGGCGCTCTCAAGTCTCCGAAGCCTGGGTTTTGACGTGATTGTCTATAATGACTGCTCTTGTGC
CAAGATGCAAGATCTGCTTAAAAAGCTTCTGAAGAGGACCATACAAATGCCGCCTGCTTCGCCTGCATC
CTCTTAAGCCATGGAGAAGAAAATGTAATTTATGGGAAAGATGGTGTACACCAATAAAGGATTTGACAG
CCCCTTTAGGGGGGATAGATGCAAAACCTTTTAGAGAAAACCCAACTCTTCTTCATTACAGGCTTGCCG
AGGGACCGAGCTTGATGATGGCATCCAGGCCGACTCGGGGCCATCAATGACACAGATGCTAATCCTCGA
TACAAGATCCCAGTGGAAGCTGACTTCTCTTCGCCTATTCCACGGTTCAGGCTATTACTCGTGGAGGA
GCCCAGGAAGAGGCTCCTGGTTTGTGCAAGCCCTCTGCTCCATCCTGGAGGAGCAGGAAAAGACCTGGA
AATCATGCAGATCCTCACCAGGGTGAATGACAGAGTTGCCAGGCCTTTGAGTCTCAGTCTGATGACCCA
CACTTCCATGAGAAGAAGCAGATCCCCTGTGTGGTCTCCATGCTACCAAGGAAGCTACTTCAGTCAA

ACGCGTACGCGGGCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC202059 protein sequence
 Red=Cloning site Green=Tags(s)

MADEQGCIEEQGVEDSANEDSVDAKPDRSSFVPSLFSKSKKKNVTMRSIKTTRDRVPTYQYNMFEKLGKC
 I I I N N K N F D K V T G M G V R N G T D K D A E A L F K C F R S L G F D V I V Y N D C S C A K M Q D L L K K A S E E D H T N A A C F A C I
 L L S H G E E N V I Y G K D G V T P I K D L T A H F R G D R C K T L L E K P K L F F I Q A C R G T E L D D G I Q A D S G P I N D T D A N P R
 Y K I P V E A D F L F A Y S T V P G Y Y S W R S P G R G S W F V Q A L C S I L E E H G K D L E I M Q I L T R V N D R V A R H F E S Q S D D P
 H F H E K K Q I P C V V S M L T K E L Y F S Q

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6306_h02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_033339

ORF Size: 909 bp

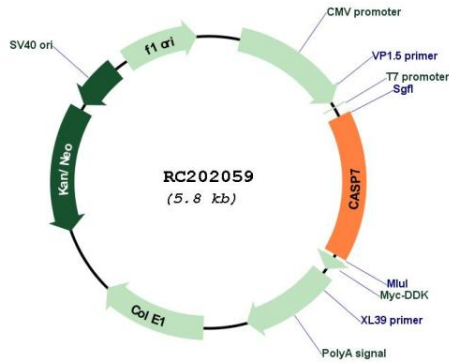
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

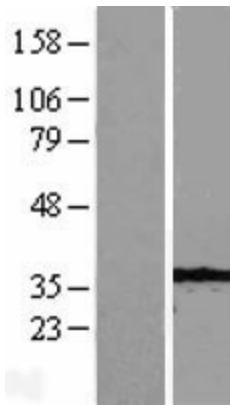
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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_033339.5
RefSeq Size:	2681 bp
RefSeq ORF:	912 bp
Locus ID:	840
UniProt ID:	P55210
Cytogenetics:	10q25.3
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Alzheimer's disease, Apoptosis
MW:	34.3 kDa
Gene Summary:	<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 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]</p>

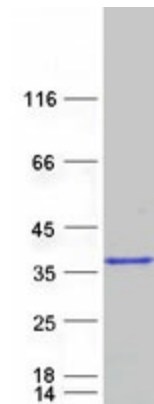
Product images:



Circular map for RC202059



Western blot validation of overexpression lysate (Cat# [LY420060]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221545] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CASP7 protein (Cat# [TP302059]). The protein was produced from HEK293T cells transfected with CASP7 cDNA clone (Cat# RC202059) using MegaTran 2.0 (Cat# [TT210002]).