

Product datasheet for RC221493

Caspase-7 (CASP7) (NM_033340) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase-7 (CASP7) (NM_033340) 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:	>RC221493 representing NM_033340 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGATGATCAGGGCTGTATTGAAGAGCAGGGGTTGAGGATTCAGCAAATGAAGATTCAGTGGATG
CTAAGCCAGACCGGTCTCGTTTGTACCGTCCCTCTTCAGTAAGAAGAAGAAAAATGTCACCATGCGATC
CATCAAGACCACCCGGGACCGAGTGCCTACATATCAGTACAACATGAATTTGAAAAGCTGGGCAAATGC
ATCATAATAACAACAAGAACTTTGATAAAGTGACAGGTATGGGCGTTCGAAACGGAACAGACAAAGATG
CCGAGGCGCTCTCAAGTCTCCGAAGCCTGGGTTTTGACGTGATTGTCTATAATGACTGCTCTTGTGC
CAAGATGCAAGATCTGCTTAAAAAGCTTCTGAAGAGGACCATACAAATGCCGCCTGCTTCGCCTGCATC
CTCTTAAGCCATGGAGAAGAAAATATGGAATCTTGCTCTGTCAACCAGGCTGGAGTGCAGCGCGTGATC
TCGGAAGACTGCAACCTCCACCTCCCAGGCTTGCCGAGGGACCGAGCTTGATGATGGCATCCAGGCCGAC
TCGGGGCCCATCAATGACACAGATGCTAATCCTCGATACAAGATCCCAGTGAAGCTGACTTCTCTTCG
CCTATTCACGGTTCCAGGCTATTACTCGTGGAGGAGCCAGGAAGAGGCTCCTGGTTTGTGCAAGCCCT
CTGCTCCATCTGGAGGACACGGAAAAGACCTGGAATCATGCAGATCTCACCAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221493 representing NM_033340
 Red=Cloning site Green=Tags(s)

MADDQGCIEEQGVEDSANEDSVDAKPDRSSFVPSLFSKSKKKNVTMRSIKTTRDRVPTYQYNMNFELGKC
 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 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 M E S C S V T Q A G V Q R R D L G R L Q P P P R L A E G P S L M M A S R P T R G P S M T Q M L I L D T R S Q W K L T S S S
 P I P R F Q A I T R G G A Q E E A P G L C K P S A P S W R S T E K T W K S C R S S P G

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_033340

ORF Size: 759 bp

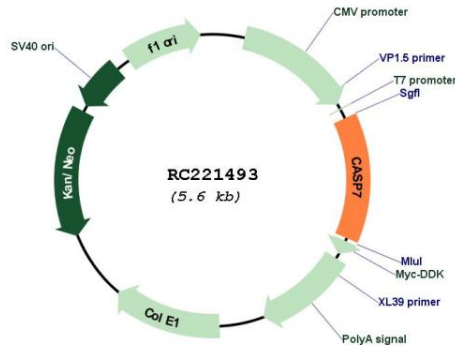
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

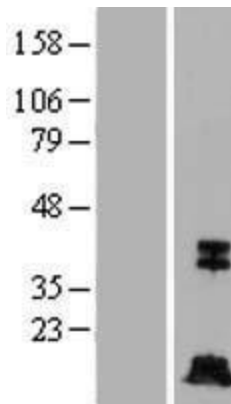
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_033340.4
RefSeq Size:	2433 bp
RefSeq ORF:	762 bp
Locus ID:	840
UniProt ID:	P55210
Cytogenetics:	10q25.3
Domains:	Peptidase_C14
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Alzheimer's disease, Apoptosis
MW:	27.8 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]

Product images:



Circular map for RC221493



Western blot validation of overexpression lysate (Cat# [LY409593]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221493 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).