

## Product datasheet for MR227666

### Casp1 (NM\_009807) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Casp1 (NM_009807) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Casp1
Synonyms:	ICE; Il1bc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR227666 representing NM_009807 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGACAAGATCCTGAGGGCAAAGAGGAAGCAATTTATCAACTCAGTGAGTATAGGGACAATAAATG  
GATTGTTGGATGAACTTTTAGAGAAGAGAGTGCTGAATCAGGAAGAAATGGATAAAAATAAACTTGCAA  
CATTACTGCTATGGACAAGGCACGGGACCTATGTGATCATGTCTCTAAAAAGGGCCCCAGGCAAGCCAA  
ATCTTTTACACTTACATTTGTAATGAAGACTGCTACCTGGCAGGAATTCGGAGCTTCAATCAGCTCCAT  
CAGCTGAAACATTTGTTGCTACAGAAGATTCTAAAGGAGGACATCCTTCATCCTCAGAAACAAAGGAAGA  
ACAGAACAAGAAGATGGCACATTTCCAGGACTGACTGGGACCCTCAAGTTTTGCCCTTAGAAAAAGCC  
CAGAAGTTATGGAAAGAAAATCCTTCAGAGATTTATCCAATAATGAATACAACCCTCGTACACGCTTGG  
CCCTCATTATCTGCAACACAGAGTTTCAACATCTTTCTCCGAGGGTTGGAGCTCAAGTTGACCTCAGAGA  
AATGAAGTTGCTGCTGGAGGATCTGGGGTATACCGTGAAAGTGAAGAAAATCTCACAGCTCTGGAGATG  
GTGAAAGAGGTGAAAGAATTTGCTGCCTGCCAGAGCACAAAGACTTCTGACAGTACTTTCCTTGTATTCA  
TGTCTCATGGTATCCAGGAGGGAATATGTGGGACCACATACTCTAATGAAGTTTCAGATATTTAAAGGT  
TGACACAATCTTTCAGATGATGAACACTTTGAAGTGCCCAAGCTTGAAGACAAGCCCAAGGTGATCATT  
ATTCAGCATGCCGTGGAGAGAAACAAGGAGTGGTGGTTTAAAGATTTCAGTAAGAGACTCTGAAGAGG  
ATTTCTTAACGGATGCAATTTTTGAAGATGATGGCATTAAAGAGGCCATATAGAGAAAGATTTTATTGC  
TTTCTGCTCTTCAACACCAGATAATGTGTCTTGGAGACATCCTGTGAGGGGCTCACTTTTTCATTGAGTCA  
CTCATCAAACACATGAAAGAATATGCCTGGTCTTGTGACTTGGAGGACATTTTCAGAAAGGTTTCGATTTT  
CATTTGAACAACCAGAATTTAGGCTACAGATGCCCACTGCTGATAGGGTGACCCTGACAAAACGTTTCTA  
CCTCTCCCGGGACAT

**ACGGT**ACGGCGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR227666 representing NM\_009807  
 Red=Cloning site Green=Tags(s)

MADKILRAKRKQFINSVSIQTINGLLDELLEKRVLNQEEMDKIKLANITAMDKARDLCDHVSKKGPQASQ  
 IFITYICNEDCYLAGILELQSAPSAETFVATEDSKGGHPSSSETKEEQNKEDGTFPGLTGLTKFCPLEKA  
 QKLWKENPSEIYIPIMNTTTRTRLALIICNTEFQHLSPRVGAQVDLREMKLLLEDLGYTVKVKENLTALEM  
 VKEVKEFAACPEHKTSDSTFLVFMHSHGIEGICGTTYNEVSDILKVDITFQMMNTLKPCSLKDKPKVII  
 IQACRGEKQGVLLKDSVRDSEEDFLDAIFEDDGIKKAHIEKDFIAFCSSTPDNVSWRHPVRSLSLFI  
 LIKHMKEYAWSCDLEDIFRKVRFSEFQPEFRLQMPADRVTLTKRFYLFPGH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_009807

**ORF Size:** 1206 bp

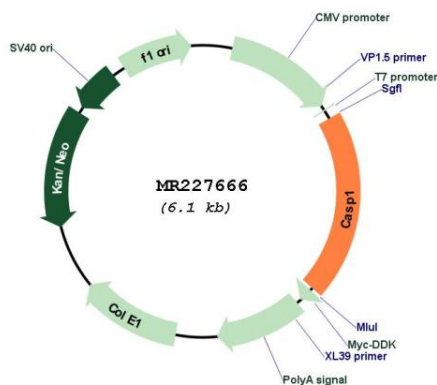
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<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_009807.2</a></u> , <u><a href="#">NP_033937.2</a></u>
<b>RefSeq Size:</b>	1533 bp
<b>RefSeq ORF:</b>	1209 bp
<b>Locus ID:</b>	12362
<b>UniProt ID:</b>	<u><a href="#">P29452</a></u>
<b>Cytogenetics:</b>	9 2.46 cM
<b>MW:</b>	46.1 kDa
<b>Gene Summary:</b>	Thiol protease that cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes. Important for defense against pathogens. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Can also promote apoptosis (By similarity). Upon inflammasome activation, during DNA virus infection but not RNA virus challenge, controls antiviral immunity through the cleavage of CGAS, rendering it inactive (PubMed:28314590). In apoptotic cells, cleaves SPHK2 which is released from cells and remains enzymatically active extracellularly (By similarity). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR227666