

## Product datasheet for **MG207227**

### Casp2 (NM\_007610) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Casp2 (NM_007610) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Casp2
Synonyms:	Casp; CASP-2; Ich-; ICH-1; Nedd; NEDD-2; Nedd2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207227 representing NM\_007610  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGCGCCGAGCGGGAGGTCGCAGTCTCCCTGCACAGGAAGGGGCTGATGGCGGCTGACAGGAGGA  
 GCAGGATTTTGGCAGTGTGTGGAATGCATCCTGACCACAGGAAACACTGAAAAAAGAAATCGAGTGGTGCT  
 GGCCAAGCAGCTGCTGCTGAGCGAGCTGTAGAACACCTCTAGAGAAGGACATTATCACTTTGAAATG  
 AGGGAGCTCATCCAGGCCAAAGGGGGCAGTTTCAGCCAGAATGTGGAACCTCAACCTGCTGCCAAAGA  
 GAGGACCCAGGCTTTTGTGCTTCTGTGAAGCCCTGCGGGAGACCAGGCAGGGTCACTTGAAGACTT  
 ACTGCTCACACCCTCTCAGATATTCAGCACGTACTCCCACCGTTGAGCTGTGACTATGACACAAGTCTC  
 CCTTCTCGGTGTGTGAGTCTGCCCTCTCACAAGCAGCTCCGCCTATCCACAGATGCTACGGAACACT  
 CCTTAGATAATGGTGTGCTCCTCCTGTCTTCTGGTGAAGCCATGCACTCCTGAGTTTTACCAGGCACA  
 CTACCAGCTGGCCTATAGGTTGCAATCTCAGCCCGTGGCTTGGCACTGGTGTGAGCAATGTGCACTTC  
 ACTGGAGAGAAAGACCTGGAATTCGCTCTGGAGGGGATGTGGACCACACTACTCTAGTACCCTCTTCA  
 AGCTTTTGGGCTACAATGTCCATGTGCTACATGACCAGACCGCACAGGAAATGCAAGAGAAACTTCAGAA  
 TTTTGCACAGTTACCTGCACACCGGGTACAGACTCCTGCGTAGTGGCACTCCTCTCACATGGTGTGGAA  
 GGTGGCATCTATGGTGTAGATGGCAAATGCTTCACTCCAAGAGGTTTTTTCGACTTTTTGACAATGCTA  
 ACTGTCCAAGTCTACAGAACAAGCCAAAATGTCTTCAATCAAGCATGTCGTGGAGATGAGACAGATAG  
 AGGTGTGACAGCAAGATGGAAGAACCACACACAATCCCCTGGATGTGAGGAGAGTGTGCTGGCAA  
 GAGGAGTTGATGAAGATGAGACTGCCTACTCGCTCAGACATGATATGTGGCTATGCTTGCCTAAAGGTA  
 ATGCTGCCATGCGGAACACCAACCGGGTTCCTGGTACATTGAGGCCCTCACTCAGGTGTTCTCTGAAAG  
 AGCTTGTGACATGCACGTGGCCGACATGCTTGTAAAGTGAATGCCCTTATCAAGGAGCGTGAAGGCTAT  
 GCCCTGGCACAGAATTCACCGATGCAAGGAGATGTCTGAGTACTGTAGTACTGTGCCAGCAACTCT  
 ACCTGTTCCAGGCTACCCACCCAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207227 representing NM\_007610  
 Red=Cloning site Green=Tags(s)

MAAPSGRSQSSLHRKGLMAADRRSRILAVCGMHPDHQETLKKNRVVLAKQLLSELLEHLLLEKDIITLEM  
 RELIQAKGGFSQNVLLNLLPKRGPQAFDAFCEALRETRQGHLEDLLLTTLSDIQHVLPPLSCDYDTSL  
 PFSVCECPPHKQLRLSTDATEHSLDNGDGPPCLLVKPCPTPEFYQAHYQLAYRLQSQPRGLALVLSNVHF  
 TGEKDLFRSGGDVDHTLVTLFKLLGYNVHVLHDQTAQEMQEKLQNFAPHRVTDSCVVALLSHGVE  
 GGIYGVGKLLQLQEVFRLFDNANCPQLQNKPKMFFIQACRGDETDGVDQDQDGNHTQSPGCEESDAGK  
 EELMKMLPTRSDMICGYACLKGNAMRNTRKGSWYIEALTQVFSERACDMHVADMLVKVNALIKEREGY  
 APGTEFHRCKEMSEYCSLTCQQLYLFPGYPPT

**TRTRPLE** - GFP Tag - V

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja2244\\_e08.zip](https://cdn.origene.com/chromatograms/ja2244_e08.zip)

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_007610

ORF Size: 1356 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.

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).

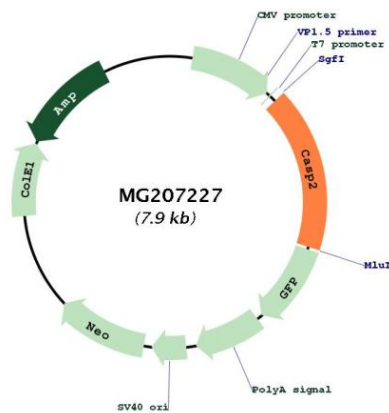
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_007610.2](#)

RefSeq Size: 3463 bp  
 RefSeq ORF: 1359 bp  
 Locus ID: 12366  
 UniProt ID: [P29594](#)  
 Cytogenetics: 6 20.54 cM

**Gene Summary:** This gene encodes the evolutionarily ancient and most conserved member of the cysteine proteases that plays important role in stress-induced apoptosis, DNA repair and tumor suppression. Mice lacking the encoded protein develop normally but display cell type-specific apoptotic defects. Germ cells and oocytes from such mice were found to be resistant to cell death after treatment with chemotherapeutic drugs. [provided by RefSeq, Apr 2015]

**Product images:**



Circular map for MG207227