

Product datasheet for **RG217592**

Caspase 10 (CASP10) (NM_001230) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 10 (CASP10) (NM_001230) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Caspase 10
Synonyms:	ALPS2; FLICE-2; FLICE2; MCH4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG217592 representing NM_001230
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAATCTCAAGTCAACATTGGTATTCCAGTTCAGATAAAAACTGTAAGTGAGCTTTCTGTGAGAAGC
 TTCTGATTATTGATTCAACCTGGGGTCCAAGATGTGGAGAACCCTCAAGTTTCTCTGCATAGGATTGGT
 CCCCAACAAGAAGCTGGAGAAGTCCAGCTCAGCCTCAGATGTTTTTGAACATCTCTTGGCAGAGGATCTG
 CTGAGTGAGGAAGACCCTTTCTTCTGGCAGAACTCCTCTATATCATACGGCAGAAGAAGCTGCTGCAGC
 ACCTCAACTGTACCAAAGAGGAAGTGGAGCGACTGCTGCCACCCGACAAAGGGTTTCTCTGTTAGAAA
 CCTGCTCTACGAAGTGTGAGAAGCATTGACTCAGAGAAGTAAAGGACATGATCTTCTTCTGAAAGAC
 TCGCTTCCAAAAGTAAATGACCTCCCTAAGTTTCTGGCATTCTAGAGAAACAAGGTAAGATAGATG
 AAGATAATCTGACATGCCTGGAGACCTCTGCAAAACAGTTGTACCTAACTTTTGAAGAACATAGAGAA
 ATACAAAAGAGAGAAAGCTATCCAGATAGTGACACCTCCTGTAGACAAGGAAGCCGAGTCGTATCAAGGA
 GAGGAAGAAGTAGTTTCCCAAACAGATGTTAAGACATTCTTGAAGCCTTACCGAGGGCAGCTGTGTACA
 GGATGAATCGGAACACAGAGGCCTCTGTGTCATTGTCAACAACACAGCTTTACCTCCCTGAAGGACAG
 ACAAGGAACCCATAAAGATGCTGAGATCCTGAGTCATGTGTTCCAGTGGCTTGGGTTTACAGTGCATATA
 CACAATAATGTGACGAAAGTGGAAATGGAGATGGTCTGCAGAAGCAGAAGTGAATCCAGCCCATGCCG
 ACGGGGACTGCTTCGTGTTCTGTATTCTGACCCATGGGAGATTTGGAGCTGTCTACTCTTCGGATGAGGC
 CCTCATTTCCATTTCGGGAGATCATGTCTCACTTACAGCCCTGCAGTGCCTAGACTGGCTGAAAAACCT
 AAACCTTTTTTCCAGGCCTGCCAAGGTGAAGAGATACAGCCTTCCGTATCCATCGAAGCAGATGCTC
 TGAACCTGAGCAGGCACCCACTTCCCTGCAGGACAGTATTCTGCCGAGGCTGACTTCTACTTGGTGT
 GGCCACTGTCCCAGGCTATGTATCCTTTTCGGCATGTGGAGGAAGGCAGCTGGTATATTCAGTCTCTGTGT
 AATCATCTGAAGAAATTGGTCCCAGACATGAAGACATCTTATCCATCCTCACTGCTGTCAACGATGATG
 TGAGTCGAAGAGTGGACAAAAGGGAACAAAGAAACAGATGCCCCAGCCTGCTTTCACACTAAGGAAAAA
 ACTAGTATTCCTGTGCCCTGGATGCACTTTCATTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG217592 representing NM_001230
 Red=Cloning site Green=Tags(s)

MKSQGGHWYSSSDKNCKVSFREKLLIIDSNLGVQDVENLKFLCIGLVPNKKLEKSSASDVFEHLLAEDL
 LSEEDPFFLAELLYIIRQKLLQHLNCTKEEVERLLPTRQRVSLFRNLLYELSEGIDSENKDMIFLLKD
 SLPKTEMTSLSFLAFLEKQKIDEDNLTCLDLCKTVVPKLLRNIKEYKREKAIQIVTPPVKAEASYQG
 EEELVSQTDVKTFLALPRAAVYRMNRNHRGLCVIVNHSFTSLKDRQGTGTHKDAEILSHVFQWLGFTVHI
 HNNVTKVEMEMVLQKQKCNPAHADGDCFVFCILTHGRFGAVYSSDEALPIREIMSHFTALQCPRLAEKP
 KLFFIQACQGEIQQPSVSIADALNPEQAPTSLQDSIPAEDFLGLATVPGYVFRHVEEGSWYIQLSC
 NHLKKLVPRHEDILSILTAVNDDVSRVDKQGTGKQMPQPAFTLRKKLVFPVPLDALSL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001230

ORF Size: 1437 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](#)

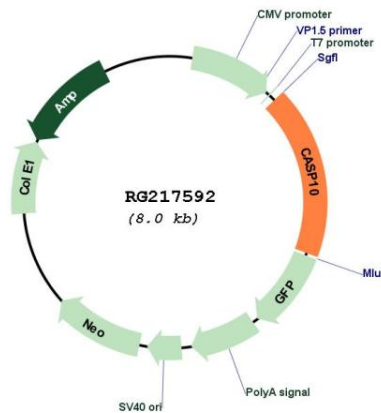
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:
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_001230.5](#)
RefSeq Size: 3651 bp
RefSeq ORF: 1440 bp
Locus ID: 843
UniProt ID: [Q92851](#)
Cytogenetics: 2q33.1
Domains: Peptidase_C14, DED, CASc
Protein Families: Druggable Genome, Protease
Protein Pathways: Apoptosis, RIG-I-like receptor signaling pathway
Gene Summary: This gene encodes a protein which is 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. This protein cleaves and activates caspases 3 and 7, and the protein itself is processed by caspase 8. Mutations in this gene are associated with type IIA autoimmune lymphoproliferative syndrome, non-Hodgkin lymphoma and gastric cancer. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Apr 2011]

Product images:



Circular map for RG217592