

Product datasheet for SC109030

Caspase 10 (CASP10) (NM_001230) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Caspase 10 (CASP10) (NM_001230) Human Untagged Clone

Tag: Tag Free
Symbol: Caspase 10

Synonyms: ALPS2; FLICE-2; FLICE2; MCH4

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

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Fully Sequenced ORF: >SC109030 representing NM_001230.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAAATCTCAAGGTCAACATTGGTATTCCAGTTCAGATAAAAACTGTAAAGTGAGCTTTCGTGAGAAG CTTCTGATTATTGATTCAAACCTGGGGGTCCAAGATGTGGAGAACCTCAAGTTTCTCTGCATAGGATTG GTCCCCAACAAGAAGCTGGAGAAGTCCAGCTCAGCCTCAGATGTTTTTGAACATCTCTTGGCAGAGGAT CTGCTGAGTGAGGAAGACCCTTTCTTCCTGGCAGAACTCCTCTATATCATACGGCAGAAGAAGCTGCTG CAGCACCTCAACTGTACCAAAGAGGAAGTGGAGCGACTGCTGCCCACCCGACAAAGGGTTTCTCTGTTT AAAGACTCGCTTCCCAAAACTGAAATGACCTCCCTAAGTTTCCTGGCATTTCTAGAGAAACAAGGTAAA ATAGATGAAGATAATCTGACATGCCTGGAGGACCTCTGCAAAACAGTTGTACCTAAACTTTTGAGAAAC ATAGAGAAATACAAAAGAGAGAAAGCTATCCAGATAGTGACACCTCCTGTAGACAAGGAAGCCGAGTCG TATCAAGGAGAGAACTAGTTTCCCAAACAGATGTTAAGACATTCTTGGAAGCCTTACCGAGGGCA GCTGTGTACAGGATGAATCGGAACCACAGAGGCCTCTGTGTCATTGTCAACAACCACAGCTTTACCTCC CTGAAGGACAGACAAGGAACCCATAAAGATGCTGAGATCCTGAGTCATGTGTTCCAGTGGCTTGGGTTC ACAGTGCATATACACAATAATGTGACGAAAGTGGAAATGGAGATGGTCCTGCAGAAGCAGAAGTGCAAT CCAGCCCATGCCGACGGGGACTGCTTCGTGTTCTGTATTCTGACCCATGGGAGATTTGGAGCTGTCTAC TCTTCGGATGAGGCCCTCATTCCCATTCGGGAGATCATGTCTCACTTCACAGCCCTGCAGTGCCCTAGA CTGGCTGAAAAACCTAAACTCTTTTTCATCCAGGCCTGCCAAGGTGAAGAGATACAGCCTTCCGTATCC ATCGAAGCAGATGCTCTGAACCCTGAGCAGGCACCCACTTCCCTGCAGGACAGTATTCCTGCCGAGGCT GACTTCCTACTTGGTCTGGCCACTGTCCCAGGCTATGTATCCTTTCGGCATGTGGAGGAAGGCAGCTGG ACTGCTGTCAACGATGATGTGAGTCGAAGAGTGGACAAACAGGGAACAAGAAACAGATGCCCCAGCCT GCTTTCACACTAAGGAAAAAACTAGTATTCCCTGTGCCCCTGGATGCACTTTCATTA<mark>TAG</mark> **ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul ACCN: NM_001230 **Insert Size:** 1440 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

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



Cytogenetics:

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: <u>NM 001230.4</u>

 RefSeq Size:
 5777 bp

 RefSeq ORF:
 1440 bp

 Locus ID:
 843

 UniProt ID:
 Q92851

Domains: Peptidase_C14, DED, CASc

Protein Families: Druggable Genome, Protease

2q33.1

Protein Pathways: Apoptosis, RIG-I-like receptor signaling pathway

MW: 54.6 kDa

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]

Transcript Variant: This variant (3) lacks two in-frame coding exons compared to variant 1. This results in a shorter isoform (3, also known as Mch4 and caspase-10/a) missing an internal protein segment compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were

based on transcript alignments.