

Product datasheet for SC330567

OriGene Technologies, Inc.

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Caspase 1 (CASP1) (NM_001257118) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Caspase 1 (CASP1) (NM_001257118) Human Untagged Clone

Tag: Tag Free
Symbol: Caspase 1

Synonyms: ICE; IL1BC; P45

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001257118, the custom clone sequence may differ by one or

more nucleotides

ATGGCCGACAAGGTCCTGAAGGAGAAGAGAAAGCTGTTTATCCGTTCCATGGGTGAAGGTACAATAAATG GCTTACTGGATGAATTATTACAGACAAGGGTGCTGAACAAGGAAGAGATGGAGAAAGTAAAACGTGAAAA TGCTACAGTTATGGATAAGACCCGAGCTTTGATTGACTCCGTTATTCCGAAAGGGGCACAGGCATGCCAA ATTTGCATCACATACATTTGTGAAGAAGACAGTTACCTGGCAGGGACGCTGGGACTCTCAGCAGATCAAA CATCTGGAAATTACCTTAATATGCAAGACTCTCAAGGAGTACTTTCTTCCTTTCCAGCTCCTCAGGCAGT GCAGGACAACCCAGCTATGCCCACATCCTCAGGCTCAGAAGGGAATGTCAAGCTTTGCTCCCTAGAAGAA GCTCAAAGGATATGGAAACAAAAGTCGGCAGAGATTTATCCAATAATGGACAAGTCAAGCCGCACACGTC TTGCTCTCATTATCTGCAATGAAGAATTTGACAGTATTCCTAGAAGAACTGGAGCTGAGGTTGACATCAC ATGACTACAGAGCTGGAGGCATTTGCACACCGCCCAGAGCACAAGACCTCTGACAGCACGTTCCTGGTGT TCATGTCTCATGGTATTCGGGAAGGCATTTGTGGGAAGAACACTCTGAGCAAGTCCCAGATATACTACA ACTCAATGCAATCTTTAACATGTTGAATACCAAGAACTGCCCAAGTTTGAAGGACAAACCGAAGGTGATC ACCTATCTTTACCAACTACAGAAGAGTTTGAGGATGATGCTATTAAGAAAGCCCACATAGAGAAGGATTT TATCGCTTTCTGCTCTTCCACACCAGATAATGTTTCTTGGAGACATCCCACAATGGGCTCTGTTTTTATT GGAAGACTCATTGAACATATGCAAGAATATGCCTGTTCCTGTGATGTGGAGGAAATTTTCCGCAAGGTTC GATTTTCATTTGAGCAGCCAGATGGTAGAGCGCAGATGCCCACCACTGAAAGAGTGACTTTGACAAGATG TTTCTACCTCTTCCCAGGACATTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001257118





OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:

Cytogenetics:

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 001257118.1, NP 001244047.1

 RefSeq Size:
 2019 bp

 RefSeq ORF:
 2019 bp

 Locus ID:
 834

 UniProt ID:
 P29466

Protein Families: Druggable Genome, Protease

11q22.3

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Cytosolic DNA-sensing pathway, NOD-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 2 subunits, large and small, that dimerize to form the active enzyme. This gene was identified by its ability to proteolytically

cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the

processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Mar

2012]

Transcript Variant: This variant (6) differs in the 3' UTR compared to variant alpha. Variant alpha and variant 6 encode the same protein. 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.