

## **Product datasheet for SC325844**

# OriGene Technologies, Inc.

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### Caspase 5 (CASP5) (NM\_001136109) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Caspase 5 (CASP5) (NM 001136109) Human Untagged Clone

Tag: Tag Free
Symbol: Caspase 5

Synonyms: ICE(rel)III; ICEREL-III; ICH-3

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC325844 representing NM\_001136109.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCTGAAGACAACCACAAAAAAAAAAACAGTTAAGATGTTGGAATACCTGGGCAAAGATGTTCTTCAT GATACCAAAATTGAAGACAAGGCCCTGATCTTGGTAGACTCTTTGCGAAAGAATCGCGTGGCTCATCAA ATGTTTACCCAAACACTTCTCAATATGGACCAAAAGATCACCAGTGTAAAAACCTCTTCTGCAAATCGAG GCTGGACCACCTGAGTCAGCAGAATCTACAAATATACTCAAACTTTGTCCTCGTGAAGAATTCCTGAGA ATCATATGCAATACAAAGTTTGATCACCTGCCTGCAAGGAATGGGGCTCACTATGACATCGTGGGGATG AAAAGGCTGCTTCAAGGCCTGGGCTACACTGTGGTTGACGAAAAGAATCTCACAGCCAGGGATATGGAG TCAGTGCTGAGGGCATTTGCTGCCAGACCAGAGCACAAGTCCTCTGACAGCACGTTCTTGGTACTCATG TCTCATGGCATCCTAGAGGGAATCTGCGGAACTGCGCATAAAAAGAAAAAACCGGATGTGCTGCTTTAT GACACCATCTTCCAGATATTCAACAACCGCAACTGCCTCAGTCTAAAGGACAAACCCAAGGTCATCATT GTCCAGGCCTGCAGAGGTGAAAAACATGGGGAACTCTGGGTCAGAGACTCTCCAGCATCCTTGGCACTC ATCTCTTCACAGTCATCTGAGAACCTGGAGGCAGATTCTGTTTGCAAGATCCACGAGGAGAAGGACTTC ATTGCTTTCTGTTCTTCAACACCACATAACGTGTCCTGGAGAGACCGCACAAGGGGCTCCATCTTCATT ACGGAACTCATCACATGCTTCCAGAAATATTCTTGCTGCCACCTAATGGAAATATTTCGGAAGGTA CAGAAATCATTTGAAGTTCCACAGGCTAAAGCCCAGATGCCCACCATAGAACGAGCAACCTTGACAAGA

GATTTCTACCTCTTTCCTGGCAATTGA

**ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul



#### Caspase 5 (CASP5) (NM\_001136109) Human Untagged Clone - SC325844

**ACCN:** NM\_001136109

**Insert Size:** 1131 bp

**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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 001136109.1</u>

 RefSeq Size:
 1275 bp

 RefSeq ORF:
 1131 bp

 Locus ID:
 838

 UniProt ID:
 P51878

Cytogenetics: 11q22.3

**Protein Families:** Druggable Genome, Protease

**Protein Pathways:** NOD-like receptor signaling pathway

MW: 43.3 kDa



#### **Gene Summary:**

This gene encodes 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. Overexpression of the active form of this enzyme induces apoptosis in fibroblasts. Max, a central component of the Myc/Max/Mad transcription regulation network important for cell growth, differentiation, and apoptosis, is cleaved by this protein; this process requires Fas-mediated dephosphorylation of Max. The expression of this gene is regulated by interferon-gamma and lipopolysaccharide. Alternatively spliced transcript variants have been identified for this gene. [provided by RefSeq, Aug 2010]

Transcript Variant: This variant (b) is lacking an in-frame coding exon compared to transcript variant a, resulting in a shorter isoform (b) missing a 58 aa protein segment compared to isoform a.