

Product datasheet for RC227593

Caspase 5 (CASP5) (NM_001136109) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Caspase 5 (CASP5) (NM_001136109) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| 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) |
| ORF Nucleotide Sequence: | >RC227593 representing NM_001136109 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTGAAGACAACCACAAAAACAGTTAAGATGTTGGAATACCTGGGCAAAGATGTTCTTCATG
GTGTTTTTAATTATTTGGCAAAACACGATGTTCTGACATTGAAGGAAGAGGAAAAGAAAAATATTATGA
TACCAAAATTGAAGACAAGGCCCTGATCTTGGTAGACTCTTTCGAAAGAATCGCGTGGCTCATCAAATG
TTTACCAAACTTCTCAATATGGACAAAAGATCACCAGTGTAAAACCTCTTCTGCAAAATCGAGGCTG
GACCACCTGAGTCAGCAGAATCTACAAATATACTCAAACCTTTCCTCGTGAAGAATTCCTGAGACTGTG
TAAAAAAATCATGATGAGATCTATCCAATAAAAAAGAGAGAGGACCGCAGACGCCTGGCTCTCATCATA
TGCAATACAAAGTTTGATCACCTGCCTGCAAGGAATGGGGCTCACTATGACATCGTGGGGATGAAAAGGC
TGCTTCAAGGCCTGGGCTACACTGTGGTTGACGAAAAGAACTCAGAGCCAGGGATATGGAGTCAGTGCT
GAGGGCATTGCTGCCAGACCAGAGCACAAGTCCTCTGACAGCACGTTCTTGGTACTCATGTCTCATGGC
ATCCTAGAGGGAATCTGCGGAATGCGCATAAAAAAGAAAAACCGGATGTGCTGCTTTATGACACCATCT
TCCAGATATTCAACAACCGCAACTGCCTCAGTCTAAAGGACAAACCAAGGTCATCATTGTCCAGGCCTG
CAGAGGTGAAAAACATGGGAACTCTGGGTCAGAGACTCTCCAGCATCCTTGGCACTCATCTCTTACAG
TCATCTGAGAACCTGGAGCAGATTCTGTTTGCAAGATCCACGAGGAGAAGGACTTCATTGCTTTCTGTT
CTTCAACACCACATAACGTGCTGCTGGAGAGACCGCACAAGGGGCTCCATCTTCATTACGGAATCATCAC
ATGCTTCCAGAAATATTCTGCTGCTGCCACCTAATGAAATATTTGGAAGGTACAGAAATCATTGAA
GTTCCACAGGCTAAAGCCAGATGCCACCATAGAACGAGCAACCTTGACAAGAGATTTCTACCTCTTTC
CTGGCAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC227593 representing NM_001136109
 Red=Cloning site Green=Tags(s)

MAEDNHKKKTVMLEYLGKDV LHGVFN YLAKHDV LTLKEEEKKKYYDTKIEDKAL I LVDSL RKNRVAHQM
 FTQTLLNMDQKITSVKPLLQIEAGPPESAESTN I LKLCPREEFLRLCKKNHDEIYPIKKREDRRRLALII
 CNTKFDHL PARNGAHYDIVGMKRLLQGLGYTVVDEKNL TARDMESV LRAFAARPEHKSSDSTFLV LMSHG
 ILEGICGTAHKKKKPDVLLYDTIFQIFNNRNCLSLKDKPKVII VQACRGEKHGELWVRDSPASLALISSQ
 SSENLEADSVCKIHEEKDFIAFCSTPHNVSWRDRTRGSIFITELITCFQKYSCCCHLMEIFRKVQKSFE
 VPQAKAQMP TIERATL TRDFYLFPGN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8055_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001136109

ORF Size: 1128 bp

OTI Disclaimer: 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_001136109.2](#)

RefSeq ORF: 1131 bp

Locus ID: 838

UniProt ID: [P51878](#)

Cytogenetics: 11q22.3

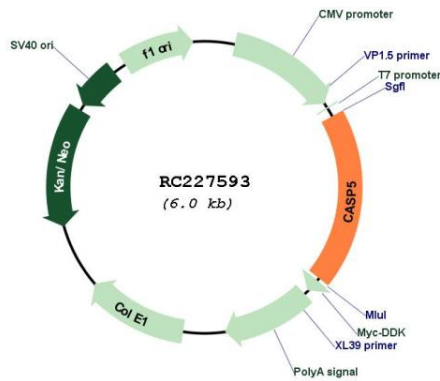
Protein Families: Druggable Genome, Protease

Protein Pathways: NOD-like receptor signaling pathway

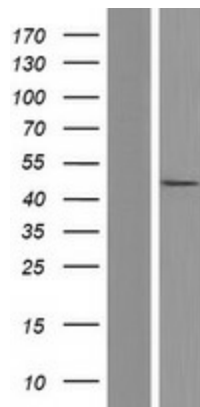
MW: 43.1 kDa

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]

Product images:



Circular map for RC227593



Western blot validation of overexpression lysate (Cat# [LY427803]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227593 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).