

## Product datasheet for RC213375

### Caspase 9 (CASP9) (NM\_032996) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 9 (CASP9) (NM_032996) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Caspase 9
Synonyms:	APAF-3; APAF3; ICE-LAP6; MCH6; PPP1R56
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213375 representing NM_032996 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGACGAAGCGGATCGGCGCTCCTGCGGCGGTGCCGGCTGCGGCTGGTGAAGAGCTGCAGGTGGACCAGCTCTGGGACGTCCTGCTGAGCCGCGAGCTGTTGAGCCCATATGATCGAGGACATCCAGCGGCAGGCTCTGGATCTCGGCGGATCAGGCCAGGCAGCTGATCATAGATCTGGAGACTCGAGGGAGTCAGGCTCTCCTTTGTTTCATCTCCTGCTTAGAGGACACAGGCCAGGACATGCTGGCTTCGTTTCTGCGAACTAACAGCCAAGCAGCAAAGTTGTCGAAGCCAACCCTAGAAAACCTTACCCAGTGGTCTCAGACCAGAGATTCGCAACCCAGAGTTCTCAGACCGGAAACACCCAGACCAGTGGACATTGGTTCTGGAGGATTTGGTGATGTCGAGCAGAAAGACCATGGGTTTGGAGTGGCCTCCACTTCCCCTGAAGACGAGTCCCCTGGCAGTAACCCCGAGCCAGATGCCACCCGTTCCAGGAAGGTTTGGAGCCTTCGACCAGCTGGACGCCATATCTAGTTTGGCCACACCCAGTGACATCTTTGTGTCCTACTCTACTTTCCAGGTTTTGTTTCTGGAGGGACCCCAAGAGTGGCTCCTGGTACGTTGAGACCCTGGACGACATCTTTGAGCAGTGGGCTCACTCTGAAGACCTGCAGTCCCTCCGCGGAAACTTTTCTTTAAACATCA

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC213375 representing NM\_032996  
 Red=Cloning site Green=Tags(s)

MDEADRRLLRRCRLRLVEELQVDQLWDVLLSRELFRPHMIEDIQRAGSGSRRDQARQLIIDLETRGSQAL  
 PLFISCLEDTGQDMLASFLRTNRQAAKLSKPTLENLTPVLRPEIRKPEVLRPETPRPVDIGSGGFGDVE  
 QKDHGFEVASTSPEDESPGSNPEPDATPFQEGLRTFDQLDAISSLPTPSDIFVSYSTFFPGFVSWRDPKSG  
 SWYVETLDDIFEQWAHSEDLQSLLLRVANAVSVKGIYKQMPGCFNFLRKKLFFKTS

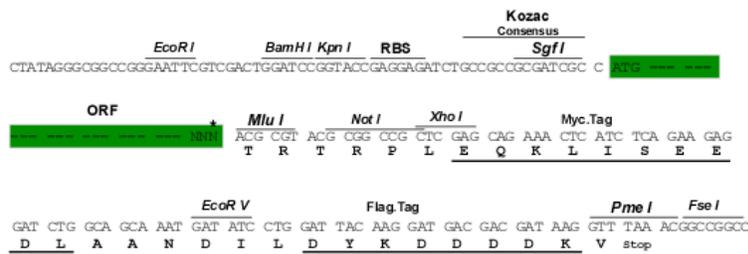
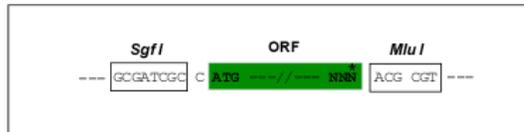
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6503\\_a04.zip](https://cdn.origene.com/chromatograms/mk6503_a04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_032996

**ORF Size:** 798 bp

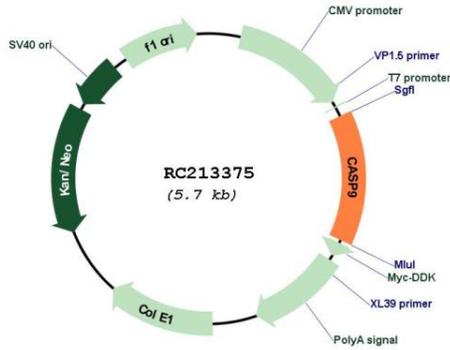
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

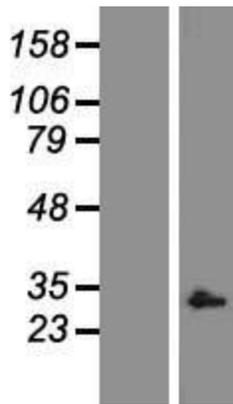
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_032996.1</a> , <a href="#">NP_127463.1</a>
<b>RefSeq Size:</b>	1584 bp
<b>RefSeq ORF:</b>	1002 bp
<b>Locus ID:</b>	842
<b>UniProt ID:</b>	<a href="#">P55211</a>
<b>Cytogenetics:</b>	1p36.21
<b>Protein Families:</b>	Druggable Genome, Protease, Stem cell - Pluripotency
<b>Protein Pathways:</b>	Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Colorectal cancer, Endometrial cancer, Huntington's disease, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Parkinson's disease, Pathways in cancer, Prostate cancer, Small cell lung cancer, VEGF signaling pathway, Viral myocarditis
<b>MW:</b>	30 kDa
<b>Gene Summary:</b>	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. This protein can undergo autoproteolytic processing and activation by the apoptosome, a protein complex of cytochrome c and the apoptotic peptidase activating factor 1; this step is thought to be one of the earliest in the caspase activation cascade. This protein is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2013]

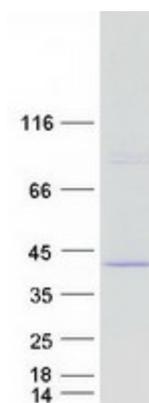
Product images:



Circular map for RC213375



Western blot validation of overexpression lysate (Cat# [LY409796]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213375 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CASP9 protein (Cat# [TP313375]). The protein was produced from HEK293T cells transfected with CASP9 cDNA clone (Cat# RC213375) using MegaTran 2.0 (Cat# [TT210002]).