

Product datasheet for **RG237039**

Caspase 9 (CASP9) (NM_001278054) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 9 (CASP9) (NM_001278054) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CASP9
Synonyms:	APAF-3; APAF3; ICE-LAP6; MCH6; PPP1R56
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237039 representing NM_001278054. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACGAAGCGGATCGGCGGCTCCTGCGGCGGTGCCGGTGGTGGGAGAGCTGCAGGTGGAC
CAGCTCTGGGACGTCCTGCTGAGCCGCGAGCTGTTGAGGCCCCATATGATCGAGGACATCCAGCGGGCA
GGCTCTGGATCTCGCGGGATCAGGCCAGGACGCTGATCATAGATCTGGAGACTCGAGGGAGTCAGGCT
CTTCCTTTGTTTCATCTCCTGCTTAGAGGACACAGGCCAGGACATGCTGGCTTCGTTTCTGCGAACTAAC
AGGCAAGCAGCAAAGTTGTCGAAGCCAACCTAGAAAACCTTACCCAGTGGTGTCTCAGACCAGAGATT
CGCAAACCAGAGGTTCTCAGACCGGAAACACCCAGACCAGTGGACATTGTTTCTGGAGGATTTGGTGAT
GTGAGCAGAAAGACCATGGGTTTGAGGTGGCCTCCACTTCCCCTGAAGACGAGTCCCCTGGCAGTAAC
CCCGAGCCAGATGCCACCCCGTTCCAGGAAGGTTTGGAGACCTTCGACCAGCTGGACGCCATATCTAGT
TTGCCACACCCAGTGACATCTTTGTGTCTACTCTACTTTCCAGGTTTTGTTTCTGGAGGGACCCC
AAGAGTGGCTCCTGGTACGTTGAGACCTGGACGACATCTTTGAGCAGTGGGCTCACTCTGAAGACCTG
CAGTCCCTCCTGCTTAGGGTCGCTAATGCTGTTTCGGTGAAGGGATTTATAACAGATGCCTGGTTGC
TTTAATTTCTCCGAAAAAATTTTCTTTAAACATCA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```



[View online »](#)

Protein Sequence: >Peptide sequence encoded by RG237039
 Blue=ORF Red=Cloning site Green=Tag(s)

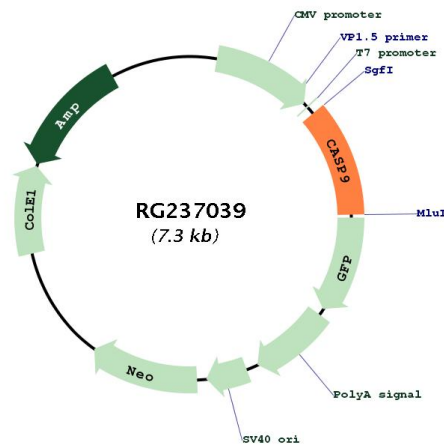
MDEADRRLLRRCLRLVEELQVDQLWDVLLSRELFRPHMIEDIQRAGSGSRRDQARQLIIDLETRGSQA
 LPLFISCLEDTGQDMLASFLRTNRQAALKSKPTLENLTPVVLRPEIRKPEVLRPETPRPVDIGSGGFGD
 VEQKDHGFVAVSTPEDESPGSNPEPDATPFQEGLRTFDQLDAISSLPTPSDIFVSYSTFPFGFVSWRDP
 KSGSWYVETLDDIFEQWAHSEDLQSLLLRVANAVSVKGIYKQMPGCFNFLRKKLFFKTS
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001278054

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).
RefSeq:	NM_001278054.1 , NP_001264983.1
RefSeq Size:	2588 bp
RefSeq ORF:	801 bp
Locus ID:	842
UniProt ID:	P55211
Cytogenetics:	1p36.21
Protein Families:	Druggable Genome, Protease, Stem cell - Pluripotency
Protein Pathways:	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
MW:	30.2 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. 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]