

Product datasheet for RC213375L3

OriGene Technologies, Inc.

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Caspase 9 (CASP9) (NM_032996) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Caspase 9 (CASP9) (NM 032996) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Caspase 9

Synonyms: APAF-3; APAF3; ICE-LAP6; MCH6; PPP1R56

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC213375).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_032996

ORF Size: 798 bp



Caspase 9 (CASP9) (NM_032996) Human Tagged Lenti ORF Clone - RC213375L3

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: <u>NM 032996.1</u>, <u>NP 127463.1</u>

RefSeq Size: 1584 bp
RefSeq ORF: 1002 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 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]