

Product datasheet for RC204711L4

OriGene Technologies, Inc.

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Caspase 4 (CASP4) (NM_033306) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Caspase 4 (CASP4) (NM 033306) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Caspase 4

Synonyms: ICE(rel)II; ICEREL-II; ICH-2; Mih1; Mih1/TX; TX

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204711).

Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:





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

ACCN: NM_033306

ORF Size: 1131 bp



OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by calling 301.340.3188 option 3 for pricing and delivery.

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 033306.2</u>

 RefSeq Size:
 1352 bp

 RefSeq ORF:
 966 bp

 Locus ID:
 837

 UniProt ID:
 P49662

Cytogenetics: 11q22.3

Domains: CASc, ICE_p10, ICE_p20

Protein Families: Druggable Genome, Protease

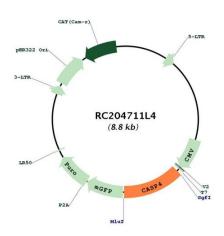
MW: 43.3 kDa



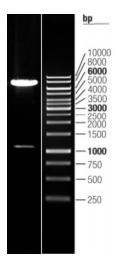
Gene Summary:

This gene encodes a protein that is 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 composed of a prodomain and a large and small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This caspase is able to cleave and activate its own precursor protein, as well as caspase 1 precursor. When overexpressed, this gene induces cell apoptosis. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204711L4



Double digestion of RC204711L4 using Sgfl and Mlul