

Product datasheet for RC209125L3

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Caspase 1 (CASP1) (NM_033293) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Caspase 1 (CASP1) (NM_033293) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Caspase 1

Synonyms: ICE; IL1BC; P45

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(RC209125).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_033293

ORF Size: 933 bp



Caspase 1 (CASP1) (NM_033293) Human Tagged Lenti ORF Clone - RC209125L3

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 033293.2</u>

RefSeq Size: 1112 bp

RefSeq ORF: 936 bp

Locus ID: 834

UniProt ID: P29466

Cytogenetics: 11q22.3

Protein Families: Druggable Genome, Protease

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Cytosolic DNA-sensing pathway, NOD-like receptor

signaling pathway

MW: 35 kDa

Gene Summary: This gene encodes a protein which 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 which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This gene was identified by its ability to proteolytically

cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the

processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Mar

2012]