

## **Product datasheet for RC203143L1**

#### OriGene Technologies, Inc.

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### Cathepsin L (CTSL) (NM\_001912) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Cathepsin L (CTSL) (NM\_001912) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Cathepsin L

Synonyms: CATL; CTSL1; MEP

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203143).

Sequence:

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001912

ORF Size: 999 bp





#### Cathepsin L (CTSL) (NM\_001912) Human Tagged Lenti ORF Clone - RC203143L1

**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 001912.3</u>

 RefSeq Size:
 1730 bp

 RefSeq ORF:
 1002 bp

 Locus ID:
 1514

 UniProt ID:
 P07711

Cytogenetics: 9q21.33

**Domains:** Pept\_C1

**Protein Families:** Druggable Genome, Protease

**Protein Pathways:** Antigen processing and presentation, Lysosome

**MW:** 37.5 kDa

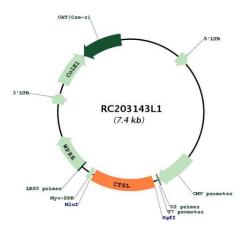
**Gene Summary:** The protein encoded by this gene is a lysosomal cysteine proteinase that plays a major role in

intracellular protein catabolism. Its substrates include collagen and elastin, as well as alpha-1 protease inhibitor, a major controlling element of neutrophil elastase activity. The encoded protein has been implicated in several pathologic processes, including myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. This protein, which is a member of the peptidase C1 family, is a dimer composed of disulfide-linked heavy and light chains, both produced from a single protein precursor. Additionally, this protein cleaves the S1 subunit of the SARS-CoV-2 spike protein, which is necessary for

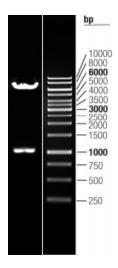
entry of the virus into the cell. [provided by RefSeq, Aug 2020]



# **Product images:**



Circular map for RC203143L1



Double digestion of RC203143L1 using Sgfl and Mlul