**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

# Product datasheet for SC330624

## Cathepsin L (CTSL) (NM_001257973) Human Untagged Clone

### Product data:

**Product Type:** Expression Plasmids

**Product Name:** Cathepsin L (CTSL) (NM_001257973) Human Untagged Clone

**Tag:** Tag Free

**Symbol:** CTSL

**Synonyms:** CATL; CTSL1; MEP

**Vector:** pCMV6-Entry (PS100001)

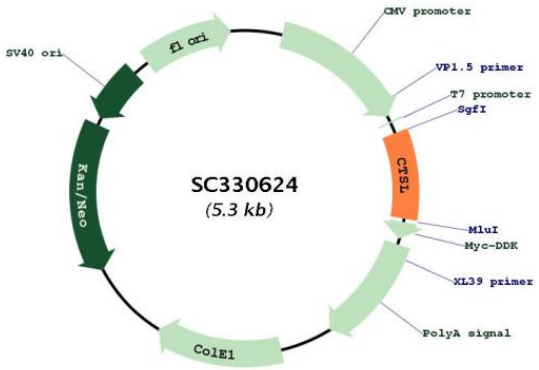
**Fully Sequenced ORF:**

>SC330624 representing NM_001257973.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGATTATGCTTTCCAGTATGTTCAGGATAATGGAGGCCTGGACTCTGAGGAATCCTATCCATATGAG
GCAACAGAAGAATCCTGTAAGTACAATCCCAAGTATTCTGTTGCTAATGACACCGGCTTTGTGGACATC
CCTAAGCAGGAGAAGGCCCTGATGAAGGCAGTTGCAACTGTGGGGCCCATTTCTGTTGCTATTGATGCA
GGTCATGAGTCCTTCCTGTTCTATAAAGAAGGCATTTATTTTGAGCCAGACTGTAGCAGTGAAGACATG
GATCATGGTGTGCTGGTGGTTGGCTACGGATTTGAAAGCACAGAATCAGATAACAATAAATATTGGCTG
GTGAAGAACAGCTGGGGTGAAGAATGGGGCATGGGTGGCTACGTAAAGATGGCCAAAGACCGGAGAAAC
CATTGTGGAATTGCCTCAGCAGCCAGCTACCCCACTGTGTGA

**Restriction Sites:** SgfI-MluI

**Plasmid Map:**




View online »

| | |
|---|---|
| **ACCN:** | NM_001257973 |
| **Insert Size:** | 456 bp |
| **OTI Disclaimer:** | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| **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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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:** | NM_001257973.1 |
| **RefSeq Size:** | 1141 bp |
| **RefSeq ORF:** | 456 bp |
| **Locus ID:** | 1514 |
| **Cytogenetics:** | 9q21.33 |
| **Protein Families:** | Druggable Genome, Protease |
| **Protein Pathways:** | Antigen processing and presentation, Lysosome |
| **MW:** | 16.8 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]<br>Transcript Variant: This variant (5) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream AUG, compared to variant 1. The resulting isoform (2) has a shorter N-terminus, compared to isoform 1. |