

OriGene Technologies, Inc.

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Product datasheet for TP303143M

Cathepsin L (CTSL) (NM_001912) Human Recombinant Protein

Product data:

| Product Type: | Recombinant Proteins | | |
|---|---|--|--|
| Description: | Recombinant protein of human cathepsin L1 (CTSL1), transcript variant 1, 100 μg | | |
| Species: | Human | | |
| Expression Host: | HEK293T | | |
| Expression cDNA Clone or AA Sequence: | >RC203143 protein sequence <mark>Red</mark> =Cloning site Green=Tags(s) | | |
| · | MNPTLILAAFCLGIASATLTFDHSLEAQWTKWKAMHNRLYGMNEEGWRRAVWEKNVKMIELHNQEYREGK HSFTMAMNAFGDMTSEEFRQVMNGFQNRKPRKGKVFQEPLFYEAPRSVDWREKGYVTPVKNQGQCGSCWA FSATGALEGQMFRKTGRLISLSEQNLVDCSGPQGNEGCNGGLMDYAFQYVQDNGGLDSEESYPYEATEES CKYNPKYSVANDTGFVDIPKQEKALMKAVATVGPISVAIDAGHESFLFYKEGIYFEPDCSSEDMDHGVLV VGYGFESTESDNNKYWLVKNSWGEEWGMGGYVKMAKDRRNHCGIASAASYPTV | | |
| | TRTRPLEQKLISEEDLAANDILDYKDDDDKV | | |
| Tag: | C-Myc/DDK | | |
| Predicted MW: | 35.8 kDa | | |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method | | |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining | | |
| Buffer: | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol | | |
| Preparation: | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps. | | |
| Note: | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. | | |
| Storage: | Store at -80°C. | | |
| Stability: | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. | | |
| RefSeq: | <u>NP 001903</u> | | |
| Locus ID: | 1514 | | |



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| | Cathepsin L (CTSL) (NM_001912) Human Recombinant Protein – TP303143M | | |
|------------------|---|--|--|
| UniProt ID: | <u>P07711</u> , <u>A0A024R276</u> | | |
| RefSeq Size: | 1730 | | |
| Cytogenetics: | 9q21.33 | | |
| RefSeq ORF: | 999 | | |
| Synonyms: | CATL; CTSL1; MEP | | |
| 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] | | |
| Protein Families | Druggable Genome, Protease | | |
| Protein Pathway | s: Antigen processing and presentation, Lysosome | | |

Product images:

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Coomassie blue staining of purified CTSL protein (Cat# [TP303143]). The protein was produced from HEK293T cells transfected with CTSL cDNA clone (Cat# [RC203143]) using MegaTran 2.0 (Cat# [TT210002]).

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