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Product datasheet for SC124186

Cathepsin L (CTSL) (NM_001912) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin L (CTSL) (NM_001912) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cathepsin L
Synonyms:	CATL; CTSL1; MEP
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC124186 sequence for NM_001912 edited (data generated by NextGen Sequencing)

ATGAATCCTACACTCATCCTTGCTGCCTTTTGCCTGGGAATTGCCTCAGCTACTCTAACA
TTTGATCACAGTTTAGAGGCACAGTGGACCAAGTGGAAGGCGATGCACAACAGATTATAC
GGCATGAATGAAGAAGGATGGAGGAGAGCAGTGTGGGAGAAGAACATGAAGATGATTGAA
CTGCACAATCAGGAATACAGGGAAGGGAAACACAGCTTCACAATGGCCATGAACGCCTTT
GGAGACATGACCAGTGAAGAATTCAGGCAGGTGATGAATGGCTTTCAAAACCGTAAGCCC
AGGAAGGGGAAAGTGTTCCAGGAACCTCTGTTTTATGAGGCCCCCAGATCTGTGGATTGG
AGAGAGAAAGGCTACGTGACTCCTGTGAAGAATCAGGGTCAGTGTGGTTCTTGTTGGGCT
TTTAGTGCTACTGGTGCTCTTGAAGGACAGATGTTCCGGAAAACTGGGAGGCTTATCTCA
CTGAGTGAGCAGAATCTGGTAGACTGCTCTGGGCCTCAAGGCAATGAAGGCTGCAATGGT
GGCCTAATGGATTATGCTTTCCAGTATGTTCAGGATAATGGAGGCCTGGACTCTGAGGAA
TCCTATCCATATGAGGCAACAGAAGAATCCTGTAAGTACAATCCCAAGTATTCTGTTGCT
AATGACACCGGCTTTGTGGACATCCCTAAGCAGGAGAAGGCCCTGATGAAGGCAGTTGCA
ACTGTGGGGCCCATTTCTGTTGCTATTGATGCAGGTCATGAGTCCTTCCTGTTCTATAAA
GAAGGCATTTATTTTGAGCCAGACTGTAGCAGTGAAGACATGGATCATGGTGTGCTGGTG
GTTGGCTACGGATTTGAAAGCACAGAATCAGATAACAATAAATATTGGCTGGTGAAGAAC
AGCTGGGGTGAAGAATGGGGCATGGGTGGCTACGTAAAGATGGCCAAAGACCGGAGAAAC
CATTGTGGAATTGCCTCAGCAGCCAGCTACCCCACTGTGTGA

Clone variation with respect to NM_001912.4

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001912 unedited
CCCCGTTCAGAATTGTATACGACTCATATAGGCGGCCTGCGAATCGGCACCAGGCAACCT
TGAGCGGCATCCGTGGAGTGCGCCTGCGCAGCTACGACCGCAGCTAGGAAAGCGCCGCCG
GCCAGGCCCAGCTGTGGCCGGACAGGGACTGGAAGAGAGGACGCGGTCGAGTAGGTGTGC
ACCAGCCCTGGCAACGAGAGCGTCTACCCCGAACTCTGCTGGCCTTGAGGTGGGGAAGCC
GGGGAGGGCAGTTGAGGACCCCGCGGAGGCGCGTGACTGGTTGAGCGGGCAGGCCAGCCT
CCGAGCCGGGTGGACACAGGTTTTAAAACATGAATCCTACACTCATCCTTGCTGCCTTTT
GCCTGGGAATTGCCTCAGCTACTCTAACATTTGATCACAGTTTAGAGGCACAGTGGACCA
AGTGGAAGGCGATGCACAACAGATTATACGGCATGAATGAAGAAGGATGGAGGAGAGCAG
TGTGGGAGAAGAACATGAAGATGATTGAACTGCACAATCAGGAATACAGGGAAGGGAAAC
ACAGCTTCACAATGGCCATGAACGCCTTTGGAGACATGACCAGTGAAGAATTCAGGCAGG
TGATGAATGGCTTTCAAAACCGTAAGCCCAGGAAGGGGTAAAGTGTTCCAGGAACCTCTG
TTTTATGAGGCCCCCAGATCTGTGGATTGGAGAGAGAAAGGCTACGTGACTCCTGTGAAG
AATAGGGTCAGTGTGGTTCTTGTTGNGCTATTAGTGCTACTGGTGCTCTTGAGGNACAGA
TGTTCCGGACACTGNGAGGCTTATCTCACTGAGTGAGCAGCATCTGGTAGAGTGCTCTGG
GCCTCACGGCATGACGGCTGCATGGTGGCTACTGGATATGCTTNCCAGTATGTCAGATTA
ATGGAGCCTGGACTCTGAGAAT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001912 unedited
TCCAGGCCAGGAGAGGCACTGGGGAGGGGTCACAGGGATGCCACCCGGGATCTGTTCAGG
AAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTACATTT
GAAATTAAATTTTATTTAAACAGGTAAAAATTTATACATCCTTTTAAAAACGAAAATGCA
AAGTCAGTAAGTGAATCAATAATATAAACCTATTTATAGCAGTAATTAAAATAGAGGTAA
CATTTACCAGTGTGAAAATATCACAGAATTCAAATCACACTCGGATCTTCAATGATTCGA
GTGTGTATCCGACACAGCGGGGGCTGGTAGACTGAAGATGAATTCCTCCCATGCATGCGC
CATCCCCAGTCAAGTCCTTCCTCATCACCGTCCACCAGCTCACACAGTGGGGTAGCTGGC
TGCTGAGGCAATTCCACAATGGTTTCTCCGGTCTTTGGCCATCTTTACGTAGCCACCCAT
GCCCCATTCTTCACCCCAGCTGTTCTTCACCAGCCAATATTTATTGTTATCTGATTCTGT
GCTTTCAAATCCGTAGCCAACCACCAGCACACCATGATCCATGTCTTCACTGCTACAGTC
TGGCTCAAAATAAATGCCTTCTTTATAGAACAGGAAGGACTCATGACCTGCATCAATAGC
AACAGAAATGGGCCCCACAGTTGCAACTGCCTTCATCAGGGCCTTCTCCTGCTTAGGGAT
GTCCACAAAGCCCGTGTCATTAGCAACAGAATN

Restriction Sites: NotI-NotI

ACCN: NM_001912

Insert Size: 1600 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. 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:	NM_001912.2, NP_001903.1
RefSeq Size:	1632 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
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] Transcript Variant: This variant (1) represents the longest transcript. Variants 1-4 encode the same isoform (1).