

Product datasheet for **SC119311**

Cathepsin V (CTSV) (NM_001333) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin V (CTSV) (NM_001333) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cathepsin V
Synonyms:	CATL2; CTSL2; CTSU
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001333, the custom clone sequence may differ by one or more nucleotides

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ATGAATCTTTCGCTCGTCTGGCTGCCTTTTGCTTGGGAATAGCCTCCGCTGTTCCAAAATTTGACCAAA  
ATTTGGATACAAAGTGGTACCAGTGGAAGGCAACACAGAAAGATTATATGGCGGAATGAAGAAGGATG  
GAGGAGAGCAGTGTGGGAAAAGAATATGAAAATGATTGAACTGCACAATGGGGAATACAGCCAAGGGAAA  
CATGGCTTCACAATGGCCATGAATGCTTTTGGTGACATGACCAATGAAGAATTCAGGCAGATGATGGTT  
GCTTTCGAAACCAGAAATTCAGGAAGGGGAAAGTGTCCGTGAGCCTCTGTTTCTTGATCTTCCAAATC  
TGTGGATTGGAGAAAGAAAGGCTACGTGACGCCAGTGAAGAATCAGAAACAGTGTGGTTCTTGTGGGCT  
TTTAGTGCGACTGGTGCTCTTGAAGGACAGATGTTCCGAAAAC TGGGAACTTGTCTCACTGAGCGAGC  
AGAATCTGGTGGACTGTTTCGCGTCTCAAGGCAATCAGGGCTGCAATGGTGGCTTCATGGCTAGGGCCTT  
CCAGTATGTCAAGGAGAACGGAGCCTGGACTCTGAGGAATCCTATCCATATGTAGCAGTGGATGAAATC  
TGTAAGTACAGACCTGAGAATTCTGTTGCTAATGACACTGGCTTCACAGTGGTCGCACCTGGAAAGGAGA  
AGGCCCTGATGAAAGCAGTCGCAACTGTGGGGCCCATCTCCGTTGCTATGGATGCAGGCCATTCTGCCTT  
CCAGTTTACAAATCAGGCATTTATTTTGAACCAGACTGCAGCAGCAAAAACCTGGATCATGGTGTCTG  
GTGGTTGGCTACGGCTTTGAAGGAGCAAATTCGAATAACAGCAAGTATTGGCTCGTCAAAAACAGCTGGG  
GTCCAGAAATGGGGCTCGAATGGCTATGTAATAATAGCCAAAGACAAGAACAACCACTGTGGAATCGCCAC  
AGCAGCCAGCTACCCCAATGTGTGA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001333 unedited
 GCAGGTTTNGTAACCCACCTCGAGTGTGGCGTTAAAAACATCCCCACGAGGTAATCTC
 ATTTCTTGTGCTGATGGTGCCTGCGCCCTGCGACGGCTGCTGGTTTTGAAACATGAA
 TCTTTTCGCTCGTCTGGCTGCCTTTTGTGGGAATAGCCTCCGCTGTTCCAAAATTTGA
 CCAAAAATTTGGATACAAAGTGGTACCAGTGGATTGTTTACACAGAAGATTATATGGCGCG
 AATGAAGAATGATGGAGGAGAGCAGTGTGGGAAAAGAATATGAAAATGATTGAACTGCAC
 AATGGGAATACAGCCAAGGGAACATGGCTTCACAATGGCCATGAATGCTTTTGGTGAC
 ATGACCAATGAAGAATTCATGCAGATGATGGGTTGCTTTTCGAAAACCAGAAATTCAGGAAG
 GGGAAAGTGTTCGCTGAGCCTCTGTTTCTTGATCTTCCCAAATCTGTGGATTGGAGAAAG
 AAAGGCTACGTGACGCCAGTGAAGAATCAGAAACAGTGTGGTTCTTGTGGGCTTTTGT
 GCGACTGGTGCTTGAAGGACAGATGTTCCGGATAACTGGGAACTTGTCTCACTGAGC
 GAGCAGAACTGGTGGACTGTTTCGCTCCTCAAGGCAATCATGGCTGCAATGGTGGCTTC
 ATGGCTAGGGCCTCCAGTATGTCAAGGAGAACGGAGGCCTGGACTCTGAGGAATCCTAT
 CCATATGTAGCAGTGGATGATATCTGTGAGTACAGACCTGAGAATTCTGTTGCTAATGAC
 ACTGGCTTACAGTGGTGCACCTGGAATGAGTAGGCCCTGATGAAAGCAGTCGCACTG
 TGGGGCCCTTCTCCGTGCTATGGATGCAGGCCATTTCGCTCTCCAGGTCTACAAATCAG
 GCATTTATTTTGGACCAGACTGCAGCACTAAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001333 unedited
 CGCGGCCCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTA
 TATACGAATTAATAATTTATTTCAAACACTGTTTTGTACATCTTTTTAAAAAATGAAAATTC
 AAAGTCTTAAATAAAGCAATGAGTCTTTGATATCATAAAGCTGGGTATAACAATAATTA
 AAGTAGGGTAACATTTTACCCTTGTAATAATGTCACAAAATTAATCTCAACTGGAT
 CCTCAATGATTAACCTGGTTTATCTTACACAATAAGCGTTTGGTCAGTTTCAAAAATAAA
 TTTCCCAAACATGCTGGCCTTAAGTCCTTCTCCTCACCATCCATCAGCTCACACATTG
 GGGTAGCTGGCTGCTGTGGCGATTCCACAGGGGGTGGTCTTGGCTTTGGCTATTTTTACA
 TAGCCATTCGAGCCCCATTTGAGCCCCAGCTGTTTTTACGAGCCAATACTTGTGTTA
 TTCGAATTTGCTCCTTCAAAGCCGTAGCCAACCACCAGAACACCATGATCCAGGTTTTTG
 CTGCTGCAGTCTGGTTCAAATAAATGCCTGATTTGTAGAAGTGAAGGACGAATGGCCT
 GCATCCATAGCAACGGAGATGGGCCCCACAGTTGCGACTGCTTTCATCAGGGCCTTCTCC
 TTTCCAGGTGCGACCACTGTGAAGCCAGTGTATTACCAACAGATTCTAGGTCTGTACTA
 CAGATTCATCCCTGCTACTATGGTAGGATTCCTCAGATCCAAGCCTCCGTTTCTGACTC
 TGAAAGCCTACCCTGAAGCCCTTGCAACCTGATGCCTGGGACCGAACATCACC AATTTG
 TTCGATGAAACAGTTCAGTTTCGAAAATTTGTCTAAGAGCCCGGCGACTAAGCCACAGA
 CCCTTGTTGATTTCCGGGCGCT

Restriction Sites:

NotI-NotI

ACCN:

NM_001333

Insert Size:

1350 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_001333.2](#), [NP_001324.2](#)

RefSeq Size: 1496 bp

RefSeq ORF: 1005 bp

Locus ID: 1515

UniProt ID: [O60911](#)

Cytogenetics: 9q22.33

Domains: Pept_C1

Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome

Gene Summary:

The protein encoded by this gene, a member of the peptidase C1 family, is a lysosomal cysteine proteinase that may play an important role in corneal physiology. This gene is expressed in colorectal and breast carcinomas but not in normal colon, mammary gland, or peritumoral tissues, suggesting a possible role for this gene in tumor processes. Alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Jan 2011]

Transcript Variant: This variant (1) represents the longer transcript. Both variants 1 and 2 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.