

Product datasheet for RC219396

Cathepsin V (CTSV) (NM_001333) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin V (CTSV) (NM_001333) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cathepsin V
Synonyms:	CATL2; CTSL2; CTSU
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219396 representing NM_001333 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCTTTGCTCGCTCGCTGGCTGCTTTTGGCTGGGAATAGCCTCCGCTGTTCCAAAATTTGACCAA
ATTTGGATACAAAGTGGTACCAGTGAAGGCAACACAGAAGATTATATGGCGGAATGAAGAAGGATG
GAGGAGAGCAGTGTGGGAAAAGAATATGAAAATGATTGAACTGCACAATGGGGAATACAGCCAAGGGAAA
CATGGCTTCACAATGGCCATGAATGCTTTTGGTGACATGACCAATGAAGAATTCAGGCAGATGATGGTT
GCTTTTCGAAACCAGAAATTCAGGAAGGGGAAAGTGTCCGTGAGCCTCTGTTTCTTGATCTTCCCAATC
TGTGGATTGGAGAAAGAAAGGCTACGTGACGCCAGTGAAGAATCAGAAACAGTGTGGTTCTTGTGGGCT
TTTAGTGCGACTGGTCTCTTGAAGGACAGATGTTCCGGAAAACCTGGGAACTTGTCTCACTGAGCGAGC
AGAATCTGGTGGACTGTTTCGCGTCTCAAGGCAATCAGGGCTGCAATGGTGGCTTCATGGCTAGGGCCTT
CCAGTATGTCAAGGAGAACGGAGGCTGGACTCTGAGGAATCCTATCCATATGTAGCAGTGGATGAAATC
TGTAAGTACAGACCTGAGAATCTGTTGCTAATGACACTGGCTTCACAGTGGTTCGACCTGGAAAGGAGA
AGGCCCTGATGAAAGCAGTCGCAACTGTGGGCCCATCTCCGTTGCTATGGATGCAGGCCATTCGTCCTT
CCAGTTCTACAAATCAGGCATTTATTTGAACCAGACTGCAGCAGCAAAAACCTGGATCATGGTGTCTG
GTGGTTGGCTACGGCTTTGAAGGAGCAAATTCGAATAACAGCAAGTATTGGCTCGTCAAAAACAGCTGGG
GTCCAGAAATGGGCTCGAATGGCTATGTAAAAATAGCCAAAGACAAGAACAACCCTGTGGAATCGCCAC
AGCAGCCAGCTACCCCAATGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219396 representing NM_001333
Red=Cloning site Green=Tags(s)

MNLSLVLAAFCLGIASAVPKFDQNLDTKWYQWKATHRRLYGANEEGWRRRAVWEKNMKMIELHNGEYSQ GK
 HGFTMAMNAFGDMTNEEFROMMGCFRNQKFRKGVFREPLFLDLPKSVDRKKGYVTPVKNQKQCGSCWA
 FSATGALEGQMFRTKGLVLSLSEQNLVDCSRPQGNQGCNGGFMARAFQYVKENGLDSEESYPYVAVDEI
 CKYRPENSVANDTGFTVVAPGKEKALMKAVATVGPISVAMDAGHSSFQFYKSGIYFEPDCSSKNLDHGVL
 VVGYGFEGANSNNKYWLKNSWGPEWGSNGYVKIAKDKNNHCGIATAASYPNV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6248_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001333

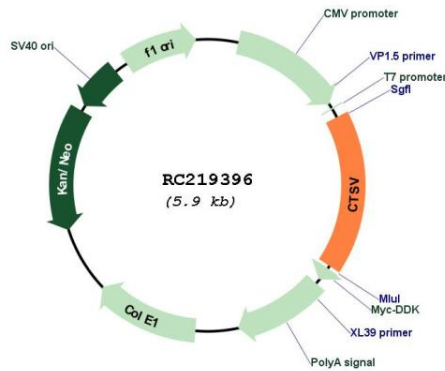
ORF Size: 1002 bp

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.

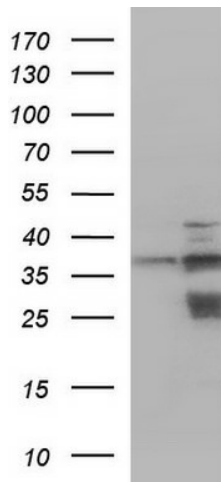
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

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:	<ol style="list-style-type: none">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_001333.4
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
MW:	37.1 kDa
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]

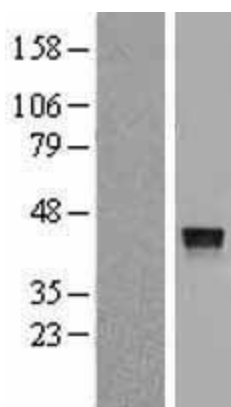
Product images:



Circular map for RC219396



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CTSV (Cat# RC219396, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CTSV (Cat# [TA590738]). Positive lysates [LY420007] (100ug) and [LC420007] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY420007]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219396 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).