

Product datasheet for RC200373

Cathepsin H (CTSH) (NM_004390) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin H (CTSH) (NM_004390) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cathepsin H
Synonyms:	ACC-4; ACC-5; ACC4; ACC5; CPSB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200373 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCC

ATGTGGGCCACGCTGCCGCTGCTCTGCGCCGGGGCCTGGCTCCTGGGAGTCCCCGTCTGCGGTGCCCGC
AACTGTCCGTGAACCTCTTAGAGAAGTTTCACTTCAAGTCATGGATGTCTAAGCACCGTAAGACCTACAG
TACGGAGGAGTACCACCACAGGCTGCAGACGTTTGCCAGCAACTGGAGGAAGATAAACGCCACAACAAT
GGGAACCACACATTTAAATGGCACTGAACCAATTTTCAGACATGAGCTTTGCTGAAATAAACACAAGT
ATCTCTGGTCAGAGCCTCAGAATTGCTCAGCCACCAAAAGTAACCTACCTCGAGGTACTGGTCCCTACCC
ACCTTCGGTGGACTGGCGAAAAAGGAAATTTGTCTCACCTGTGAAAAATCAGGGTGCCTGCGGCAGT
TGCTGGACTTTCTCCACCACTGGGGCCCTGGAGTCTGCGATCGCCATCGCAACCGGAAAGATGCTGTCT
TGGCGGAACAGCAGCTGGTGGACTGCGCCAGGACTTCAATAATCACGGGTGCCAAGGGGGTCTCCCCAG
CCAGGCTTTGAGTATATCCTGTACAACAAGGGGATCATGGGTGAAGACACCTACCCCTACCAGGGCAAG
GATGGTTATTGCAAGTTCCAACCTGAAAGGCCATCGGCTTTGTCAAGGATGTAGCCAACATCACAATCT
ATGACGAGGAAGCGATGGTGGAGGCTGTGGCCCTACAACCTGTGAGCTTTGCCTTTGAGGTGACTCA
GGACTTCATGATATAGAACGGGCATCTACTCCAGTACTTCTGCCATAAACTCCAGATAAAGTAAAC
CATGCGACTTGTGTTGGGTATGGAGAAAAAATGGGATCCCTTACTGGATCGTGAAAAACTTTGGG
GTCCCCAGTGGGAATGAACGGGTACTTCTCATCGAGCGCGGAAAGAACATGTGTGGCTGGCTGCCTG
CGCTCTACCCATCCCTCTGGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200373 protein sequence
Red=Cloning site Green=Tags(s)

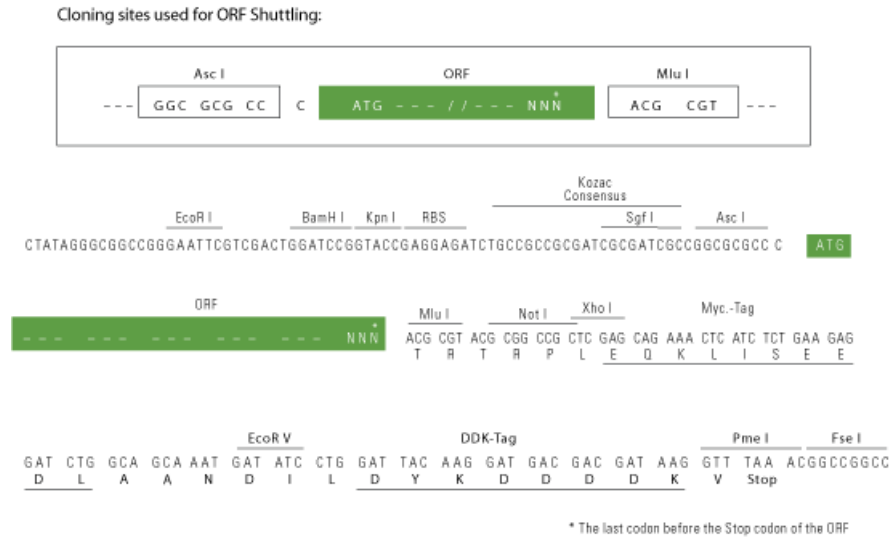
MWATLPLLCAGAWLLGVPVCGAAELSVNSLEKFFHFKSWMSKHKRKYSTEEYHRLQTFASNWRKINAHNN
 GNHTFKMALNQFSDMSFAEIKHKYLWSEPQNC SATKSNYL RGTGPYPSPVDWRKGNFVSPVKNQGACGS
 CWTFSTTGALESAIAIATGKMLSLAEQQLV DCAQDFN NHGCGGLPSQAFEYIL YNKGIMGEDTYPYQ GK
 DGYCKFQPGKAI GFVKD VANIT IYDEEAMVEAVAL YNPVSFAFEVTQDFMMYRTGIYSSTSCHKTPDKVN
 HAVLAVGYGEKNGIPYWIYKNSWGPQWGMNGYFLIERGKNMCGLAACASYPIPLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6800_d02.zip

Restriction Sites: AscI-MluI

Cloning Scheme:



ACCN: NM_004390

ORF Size: 1005 bp

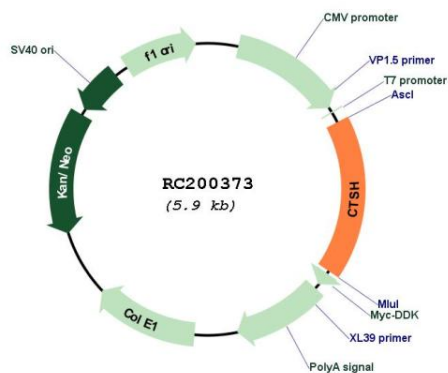
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

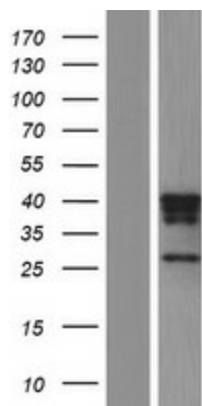
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004390.5
RefSeq Size:	1494 bp
RefSeq ORF:	1008 bp
Locus ID:	1512
UniProt ID:	P09668
Cytogenetics:	15q25.1
Domains:	Pept_C1
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Lysosome
MW:	37.4 kDa
Gene Summary:	The protein encoded by this gene is a lysosomal cysteine proteinase important in the overall degradation of lysosomal proteins. It is composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. The encoded protein, which belongs to the peptidase C1 protein family, can act both as an aminopeptidase and as an endopeptidase. Increased expression of this gene has been correlated with malignant progression of prostate tumors. Alternate splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016]

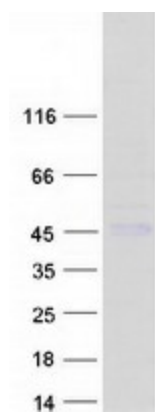
Product images:



Circular map for RC200373



Western blot validation of overexpression lysate (Cat# [LY418016]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200373 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CTSH protein (Cat# [TP300373]). The protein was produced from HEK293T cells transfected with CTSH cDNA clone (Cat# RC200373) using MegaTran 2.0 (Cat# [TT210002]).