

Product datasheet for **RG200373**

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:	TurboGFP
Symbol:	CTSH
Synonyms:	ACC-4; ACC-5; ACC4; ACC5; CPSB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200373 representing NM_004390 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GGCGGCC**

ATGTGGGCCACGCTGCCGCTGCTCTGCGCCGGGCGCTGGCTCCTGGGAGTCCCCGTCTGCGGTGCCCGC
AACTGTCCGTGAACCTCTTAGAGAAGTTTCACTTCAAGTCATGGATGTCTAAGCACCGTAAGACCTACAG
TACGGAGGAGTACCACCACAGGCTGCAGACGTTTGCCAGCAACTGGAGGAAGATAAACGCCACAACAAT
GGGAACCACACATTTAAATGGCACTGAACCAATTTTCAGACATGAGCTTTGCTGAAATAAACACAAGT
ATCTCTGGTCAGAGCCTCAGAATTGCTCAGCCACCAAAAGTAACCTACCTCGAGGTACTGGTCCCTACCC
ACCTTCGGTGGACTGGCGAAAAAAGGAAATTTGTCTCACCTGTGAAAAATCAGGGTGCCTGCGGCAGT
TGCTGGACTTTCTCCACCACTGGGGCCCTGGAGTCTGCGATCGCCATCGCAACCGGAAAGATGCTGTCTCT
TGGCGGAACAGCAGCTGGTGGACTGCGCCAGGACTTCAATAATCACGGCTGCCAAGGGGGTCTCCCCAG
CCAGGCTTTTCAGTATATCCTGTACAACAAGGGGATCATGGGTGAAGACACCTACCCCTACCAGGGCAAG
GATGGTTATTGCAAGTTCCAACCTGAAAGGCCATCGGCTTTGTCAAGGATGTAGCCAACATCACAATCT
ATGACGAGGAAGCGATGGTGGAGGCTGTGGCCCTTACAACCTGTGAGCTTTGCCTTTGAGGTGACTCA
GGACTTCATGATATAGAACGGGCATCTACTCCAGTACTTCTGCCATAAACTCCAGATAAAGTAAAC
CATGCACTACTTGCTGTTGGGTATGGAGAAAAAATGGGATCCCTTACTGGATCGTGAAAAACTTTGGG
GTCCCCAGTGGGGAATGAACGGGTACTTCTCATCGAGCGCGGAAAGAACATGTGTGGCTGGCTGCCTG
CGCTCTACCCATCCCTCTGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG200373 representing NM_004390
 Red=Cloning site Green=Tags(s)

MWATLPLL CAGAWLLGVPVCGAAELSVNSLEKFFHFKSWMSKHKRKYSTEEYHRLQTFASNWRKINAHNN
 GNHTFKMALNQFSDMSFAEIKHKYLWSEPQNC SATKSNYL RGTGPYPPSVDWRKKGNFVSPVKNQGACGS
 CWTFSTTGALES AIAIATGKMLSLAEQQLV DCAQDFNNHGCQGG LPSQAFEYIL YNKGIMGEDTYPYQ GK
 DGYCKFQPGK AIGFVKDVANIT IYDEEAMVEAVAL YNPVSFAFEV TQDFMMYRTGIYSSTSCHKTPDKVN
 HAVLAVGYGEKNGIPYWIYKNSWGPQWGMNGYFLIERGKNMCGLAACASYPIPLV

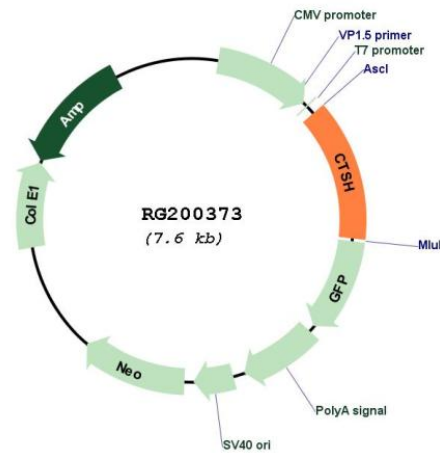
TRTRPLE - GFP Tag - V

Restriction Sites: AscI-MluI

Cloning Scheme:



Plasmid Map:



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.
RefSeq:	NM_004390.2 , NP_004381.2
RefSeq Size:	1504 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
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]