

Product datasheet for RC208341

Cathepsin Z (CTSZ) (NM_001336) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin Z (CTSZ) (NM_001336) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cathepsin Z
Synonyms:	CTSX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208341 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAGGCGCGGGCCAGGGTGGCGGCCGTTCTGCTGCTCGTGTCTGGCGGGCGGGCGCAGGGCG
GCCTCTACTTCCGCCGGGACAGACCTGTACCGCCTCTGCGGGGGACGGGCTGGCTCCGCTGGGGCG
CAGCACATACCCCGCCTCATGAGTACCTGTCCCAGCGGATCTGCCAAGAGCTGGGACTGGCGCAAT
GTGGATGGTGTCAACTATGCCAGCATCACCGGAACCAGCACATCCCCAATACTGCGGCTCCTGTGG
CCCACGCCAGCACCAGCGCTATGGCGGATCGGATCAACATCAAGAGGAAGGGAGCGTGGCCCTCCACCT
CCTGTCCGTGCAGAACGTATCGACTGCGGTAACGCTGGCTCCTGTGAAGGGGTAAAGACTGTCCGTG
TGGGACTACGCCACCAGCACGGCATCCCTGACGAGACCTGCAACAACCTACCAGGCCAAGGACCAGGAGT
GTGACAAGTTTAACCAATGTGGGACATGCAATGAATCAAGAGTGCACGCCATCCGGAATACACCT
CTGGAGGGTGGGAGACTACGGCTCCCTCTCTGGGAGGGAGAAGATGATGGCAGAAATCTACGCAATGGT
CCCATCAGCTGTGGAATAATGGCAACAGAAAGACTGGCTAACTACACCGGAGGCATCTATGCCGAATACC
AGGACACCACATATAAACCATGTCGTTTCTGTGGCTGGTGGGCATCAGTGTGGGACTGAGTACTG
GATTGTCCGGAATTCATGGGGTGAACCATGGGGCAGAGAGGCTGGCTGAGGATCGTGACCAGCACCTAT
AAGGATGGGAAGGCGCCAGATACAACCTTGCCATCGAGGAGCACTGTACATTTGGGACCCCATCGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208341 protein sequence
Red=Cloning site Green=Tags(s)

MARRGPGWRPLLLL VLLAGAAQGGLYFRRGQTCYRPLRGDGLAPLGRSTYPRPHEYLSPADLPKSWDWRN
 VDGVNYASITRNQHIPQYCGSCWAHASTSAMADRINIKRKGAWPSTLLSVQNVIDCGNAGSCEGGNDSL
 WDYAHQHGIPTDTCNNYQAKDQECDFNQCGTCNEFKCHEAIRNYTLWRVGDYGSLSGREKMMAEIYANG
 PISCGIMATERLANYTGGIYAQYDQTTTYINHVVSVAGWGISDGTGEYWIWRNSWGEPWGERGWLRIVTSTY
 KDGGKARYNLAIEEHCTFGDPIV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6143_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001336

ORF Size: 909 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:

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_001336.3](#)

RefSeq Size: 1517 bp

RefSeq ORF: 912 bp

Locus ID: 1522

UniProt ID: [Q9UBR2](#)

Cytogenetics: 20q13.32

Domains: Pept_C1

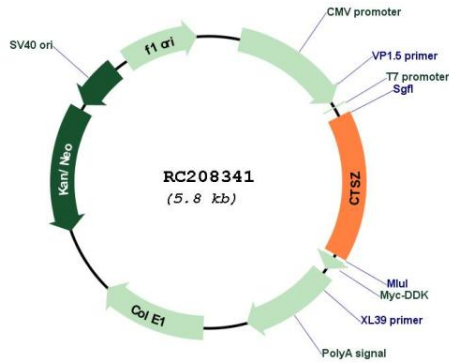
Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome

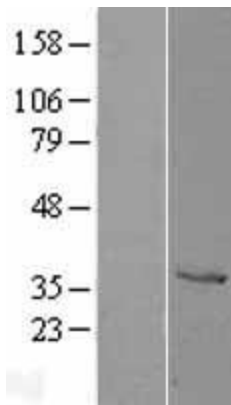
MW: 33.9 kDa

Gene Summary: The protein encoded by this gene is a lysosomal cysteine proteinase and member of the peptidase C1 family. It exhibits both carboxy-monopeptidase and carboxy-dipeptidase activities. The encoded protein has also been known as cathepsin X and cathepsin P. This gene is expressed ubiquitously in cancer cell lines and primary tumors and, like other members of this family, may be involved in tumorigenesis. [provided by RefSeq, Oct 2008]

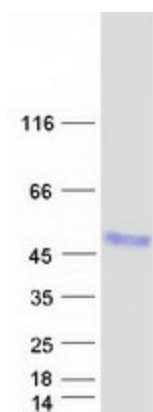
Product images:



Circular map for RC208341



Western blot validation of overexpression lysate (Cat# [LY400531]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208341 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CTSZ protein (Cat# [TP308341]). The protein was produced from HEK293T cells transfected with CTSZ cDNA clone (Cat# RC208341) using MegaTran 2.0 (Cat# [TT210002]).