

Product datasheet for MR227342

Ctsb (NM_007798) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ctsb (NM_007798) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ctsb
Synonyms: CB
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR227342 representing NM_007798
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGTGGTCCTTGATCCTTCTTTCTTGCCTGCTGGCACTGACCACTGCCATGACAAGCCTTCTTCC
ACCCGCTGTCGGATGACCTGATTAATACTATCAACAAACAGAATACAACATGGCAGGCTGGACGCAACT
CTACAATGTTGACATAAGCTATCTGAAGAAGCTGTGTGGCACTGTCTGGGTGGACCCAACTGCCAGGA
AGGTTGCGTTCGGTGAGGACATAGATCTACCTGAAACCTTTGATGCACGGGAACAATGGTCCAAGTCC
CGACATTGGACAGATTAGAGACCAGGGCTCCTGCGGCTCTTGTGGGCATTTGGGCAGTGAAGCCAT
TTCTGACCGAACCTGCATTCACACCAATGGCCGAGTCAACGTGGAGGTGTCTGCTGAAGACCTGCTTACT
TGCTGTGGTATCCAGTGTGGGGACGGCTGTAATGGTGGCTATCCCTCTGGAGCATGGAGCTTCTGGACAA
AAAAAGGCCTGGTTTCAGGTGGAGTCTACAATTCTCATGTAGGCTGCTTACCATACACCATCCCTCCCTG
CGAGCACCATGTCAATGGCTCCCGTCCCCATGCACTGGAGAAGGAGATACTCCAGGTGCAACAAGAGC
TGTGAAGCTGGCTACTCCCATCCTACAAAGAGGATAAGCACTTTGGGTACACTTCTACAGCGTGTCTA
ACAGTGTGAAGGAGATCATGGCAGAAATCTACAAAATGGCCAGTGGAGGGTGCCTTACTGTGTTTTTC
TGACTTCTTGACTTACAAATCAGGAGTATACAAGCATGAAGCCGGTGATATGATGGTGGCCACGCCATC
CGCATCTGGGCTGGGGAGTAGAGAATGGAGTTCCTACTGGCTGGCAGCCAACCTTGGAACTTGACT
GGGGTGATAATGGCTTCTTTAAAATCCTCAGAGGAGAGAACCCTGTGGCATTGAATCAGAAATTGTGGC
TGAATCCCACGCACTGACCACTACTGGGAAGATTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227342 representing NM_007798
Red=Cloning site Green=Tags(s)

MWWSLILLSCLLAL TSAHDKPSFHPLSDDLIN YINKQNTTWQAGRNFYNVDI SYLKKLCGTVLGGPKLPG
 RVAFGEDIDLPE TFDAREQWSNCP TIGQIRDQSGSCWAFGAVEAISDRTCIHTNGRVNVEVSAEDLLT
 CCGIQCGDGCNGGYP SGAWSFWTKKGLVSGGVYN SHVHGCLPYTIPPCEHHVNGSRPPCTGEGDTPRCNKS
 CEAGYSPSYKEDKHFGYTSYSVSN SVKEIMAEIYKNGPVEGAFTVFSDFLTYKSGVYKHEAGDMMGGHAI
 RILGWGVENGPY WLAANSWNL DWGDN GFFKILRGENHCGIESEIVAGIPRTDQYWGRF

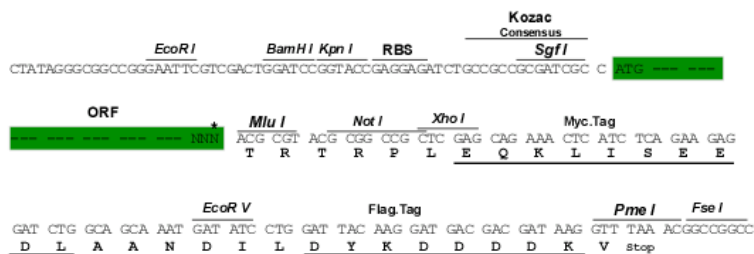
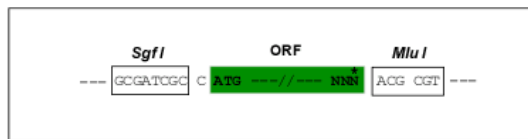
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9044_b05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007798

ORF Size: 1017 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.

RefSeq: [NM_007798.3](#), [NP_031824.1](#)

RefSeq Size: 4756 bp

RefSeq ORF: 1020 bp

Locus ID: 13030

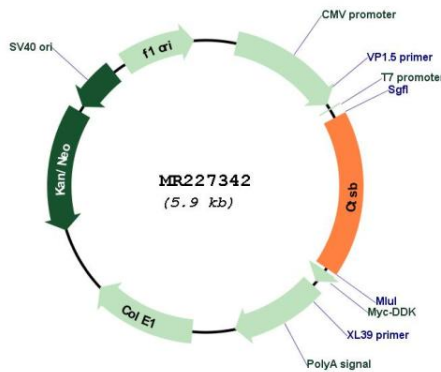
UniProt ID: [P10605](#)

Cytogenetics: 14 33.24 cM

MW: 37.7 kDa

Gene Summary: This gene encodes a member of the peptidase C1 family and preproprotein that is proteolytically processed to generate multiple protein products. These products include the cathepsin B light and heavy chains, which can dimerize to generate the double chain form of the enzyme. This enzyme is a lysosomal cysteine protease with both endopeptidase and exopeptidase activity that may play a role in protein turnover. Homozygous knockout mice for this gene exhibit reduced pancreatic damage following induced pancreatitis and reduced hepatocyte apoptosis in a model of liver injury. Pseudogenes of this gene have been identified in the genome. [provided by RefSeq, Aug 2015]

Product images:



Circular map for MR227342