

Product datasheet for **MG221982**

Ctsl (NM_009984) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ctsl (NM_009984) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ctsl
Synonyms:	1190035F06Rik; CatL; Ctsl1; fs; ME; MEP; nkt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221982 representing NM_009984 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCTTTTACTCCTTTGGCTGTCCTCTGCTTGGAAACAGCCTTAGCTACTCCAAAATTTGATCAAA
CCTTTAGTGCAGAGTGGCACCAGTGAAGTCCACACACAGAAGACTGTATGGCACGAATGAGGAAGAGTG
GAGGAGAGCGATATGGGAGAAGAACATGAGAATGATCCAGCTACACAACGGGGAATACAGCAACGGGCAG
CACGGCTTTTCCATGGAGATGAACGCCTTCGGTGACATGACCAATGAGGAATTCAGGCAGGTGGTGAATG
GCTACCGCCACCAGAAGCACAAGAAGGGGAGGCTTTTTCAGGAACCGCTGATGCTTAAGATCCCCAAGTC
TGTGGACTGGAGAGAAAAGGGTTGTGTGACTCCTGTGAAGAACCAGGGCCAGTGCGGTCTTGTGGGCG
TTTAGCGCATCGGGTTGCTAGAAAGGACAGATGTTCTTAAGACCGGCAAACTGATCTCACTGAGTGAAC
AGAACCTTGTGGACTGTTCTCACGCTCAAGGCAATCAGGGCTGTAAACGGAGGCTGATGGATTTTGTCTT
CCAGTACATTAAGGAAAATGGAGGTCTGGACTCGGAGGAGTCTTACCCTATGAAGCGAAGGACGGATCT
TGTAATAACAGAGCCGAGTTCGCTGTGGCTAATGACACAGGGTTCGTGGATATCCCTCAGCAAGAGAAA
CCCTCATGAAGGCTGTGGCAGTGTGGGCCTATTTCTGTTGCTATGGACGCAAGCCATCCGCTCTCCA
GTTCTATAGTTCAGGCATCTACTATGAACCAACTGTAGCAGCAAGAACCTCGACCATGGGGTTCTGTTG
GTGGGCTATGGCTATGAAGGAACAGATTCAAATAAGAATAAATATTGGCTTGTCAAGAACAGCTGGGGAA
GTGAATGGGGTATGGAAGGCTACATCAAAATAGCCAAGACCGGACAACCACTGTGGACTTGCCACCGC
GGCCAGCTATCCTGTCGTAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG221982 representing NM_009984
 Red=Cloning site Green=Tags(s)

MNLLLLLAVLCLGTALATPKFDQTFSAEWHQWKSTHRRLYGTNEEEWRRAIWEKNMRMIQLHNGEYSNGQ
 HGFSMEMNAFGDMTNEEFRQVVNGYRHQKHKKGRLFQEPLMLKIPKSVDWREKGCVTPVKNQGCGSCWA
 FSASGCLEGMFLKTGKLI SLSEQNLVDCSHAQGNQGCNGGLMDFAFQYIKENGLDSEESYPYEAKDGS
 CKYRAEFVAVNDTGFVDIPQQEKALMKAVATVGPISVAMDASHPSLQFYSSGIYYEPNCSSKNLDHGVL
 VGYGYEGTDSNKNKYWLVKNSWGSEWGMGYIKIAKDRDNHCGLATAASYPVVN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009984

ORF Size: 1002 bp

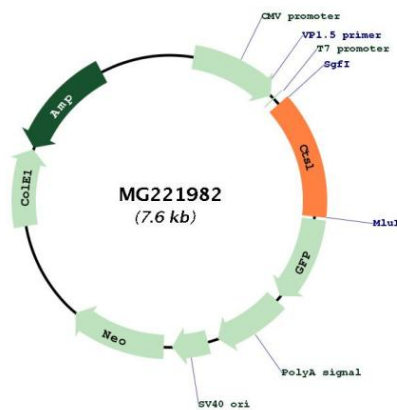
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:**
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_009984.4](#), [NP_034114.1](#)
- RefSeq Size:** 1971 bp
- RefSeq ORF:** 1005 bp
- Locus ID:** 13039
- UniProt ID:** [P06797](#)
- Cytogenetics:** 13 33.26 cM
- Gene Summary:** This gene encodes a member of the peptidase C1 (papain) family of cysteine proteases. The encoded preproprotein is proteolytically processed to generate multiple protein products. These products include the activation peptide and the cathepsin L1 heavy and light chains. The mature enzyme appears to be important in embryonic development through its processing of histone H3 and may play a role in disease progression in a model of kidney disease. Homozygous knockout mice for this gene exhibit hair loss, skin thickening, bone and heart defects, and enhanced susceptibility to bacterial infection. A pseudogene of this gene has been identified in the genome. [provided by RefSeq, Aug 2015]

Product images:



Circular map for MG221982