

Product datasheet for **RG208268**

Cathepsin O (CTSO) (NM_001334) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin O (CTSO) (NM_001334) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cathepsin O
Synonyms:	CTSO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208268 representing NM_001334 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGTGCGGGCGCTGCCGTGGCTGCCGTGGCTGCTGTGGCTGCTGTGCCGGGGCGCGCGCATGCGG
ACTCCCGCGCCCCCTTACCCCCGACCTGGCCGCGGAGCCGCGAGCGTGAAGCCGCCCTTCCGGGAAAG
TCTTAATAGACATCGATACTTGAATTCTTTATTTCCAGTGAAAACCTCCACCGCCTTCTATGGAATAAAT
CAGTTTTCTATTTGTTTCTGAAGAGTTAAAGCCATTTATTTAAGAAGCAAACCTTCCAAGTTCCCA
GATACTCAGCAGAAGTACATATGTCCATCCCCAATGTGTCTTTGCCGTTAAGATTTGACTGGAGGGACAA
GCAGGTTGTGACACAAGTGAGAAACCAGCAGATGTGTGGAGGATGCTGGGCCTTCAGCGTGGTGGGGCA
GTGGAATCTGCTTATGCAATAAAGGGGAAGCCCCGGAAGACCTAAGTGTCCAGCAGGTCATTGACTGTT
CGTATAATAATTATGGCTGCAATGGAGGCTCTACTCTCAATGCTTTGAACTGGTTAAACAAGATGCAAGT
AAAAGTGGTGAAGATTGCAATATCCTTTTAAAGCACAAAATGGTCTGTGCCATTACTTTTCTGTTTCA
CATTCTGGATTTTCAATCAAAGTTATTCTGCATATGACTTCAGTGACCAAGAAGATGAAATGGCAAAG
CACTTCTACCTTTGGCCCTTTGGTAGTCATAGTAGATGCAGTGAGCTGGCAAGATTATCTGGGAGGCAT
TATACAGCATCACTGCTCTAGTGGAGAAGCAAATCATGCAGTTCTCATACTGGGTTTGATAAAACAGGA
AGCACTCCATATTGGATTGTGCGGAATTCCTGGGGAAGTTCTTGGGGAGTAGATGGTTATGCCCATGTCA
AAATGGGAAGTAATGTTTGGTATTGCAGATTCGGTTTCTTCTATTTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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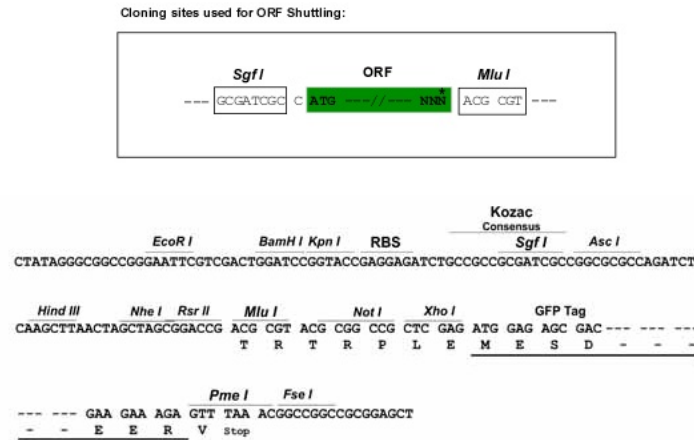
Protein Sequence: >RG208268 representing NM_001334
 Red=Cloning site Green=Tags(s)

MDVRLPWLPLLWLLCRGGDADSRAPFTPTWPRSREERAAAFRESLNRHRYLNSLFPSENSTAFYGIN
 QFSYLFPEEFKAIYLRSKPSKFPARYSAEVHMSIPNVSLPLRFDWRDKQVVTQVRNQMCGGCWAFSVVGA
 VESAYAIGKPLEDL SVQQVIDCSYNNYGCNGGSTLNALNWLNMVQVQLVKDSEYPFKAQNLCHYFSGS
 HSGFSIKGYSAYDFSDQEDEMAKALLTFGPLVVI VDAVSWQDYLGGIIQHHCSSGEANHAVLITGFDKTG
 STPYWIVRNSWGSWSGVDGYAHVKMGSNVCGIADSVSSIFV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001334

ORF Size: 963 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_001334.3](#)

RefSeq Size: 2943 bp

RefSeq ORF: 966 bp

Locus ID: 1519

UniProt ID: [P43234](#)

Cytogenetics: 4q32.1

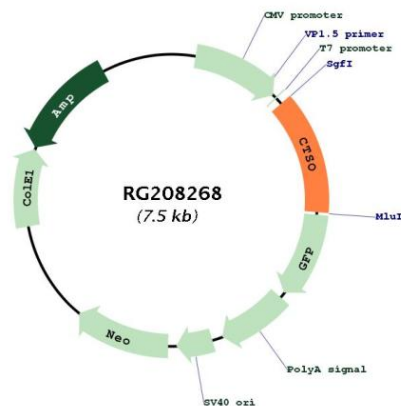
Domains: Pept_C1

Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome

Gene Summary: The protein encoded by the gene is a cysteine proteinase and a member of the papain superfamily. This proteolytic enzyme is involved in cellular protein degradation and turnover. The recombinant form of this enzyme was shown to degrade synthetic peptides typically used as substrates for cysteine proteinases and its proteolytic activity was abolished by an inhibitor of cyteine proteinase. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208268