

## Product datasheet for SC119312

### Cathepsin O (CTSO) (NM\_001334) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin O (CTSO) (NM_001334) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cathepsin O
Synonyms:	CTSO1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119312 sequence for NM_001334 edited (data generated by NextGen Sequencing)

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ATGGACGTGCGGGCGCTGCCGTGGCTGCCGTGGCTGCTGTGGCTGCTGTGCCGGGGCGGC
GGCGATGCGGACTCCCGGCCCCCTTCACCCGACCTGGCCGCGAGCCGCGAGCGTGAA
GCCGCCGCTTCCGGGAAAGTCTTAATAGACATCGATACTTGAATTCTTTATTTCCAGT
GAAAACCCACCGCCTTCTATGGAATAAATCAGTTTTCTATTTGTTTCTGAAGAGTTT
AAAGCCATTTATTTAAGAAGCAAACCTTCCAAGTTTCCAGATACTCAGCAGAAGTACAT
ATGTCCATCCCAATGTGTCTTTGCCGTTAAGATTTGACTGGAGGGACAAGCAGTTGTG
ACACAAGTGAGAAACCAGCAGATGTGTGGAGGATGCTGGGCCTCAGCGTGGTGGGGCA
GTGGAATCTGCTTATGCAATAAAGGGGAAGCCCCTGGAAGACCTAAGTGTCCAGCAGGTC
ATTGACTGTTCTGATAATAATTATGGCTGCAATGGAGGCTCTACTCTCAATGCTTTGAAC
TGGTTAAACAAGATGCAAGTAAACTGGTAAAGATTCAGAATATCCTTTTAAAGCACAA
AATGGTCTGTGCCATTACTTTTCTGTTTCACTTCTGGATTTTCAATCAAAGTTATTCT
GCATATGACTTCAGTGACCAAGAAGATGAAATGGCAAAGCACTTCTTACCTTTGGCCCT
TTGGTAGTCATAGTAGATGCAAGTGGCAAGATTATCTGGGAGGCATTATACAGCAT
CACTGCTCTAGTGGAGAAGCAAATCATGCAGTTCTCATAACTGGGTTTGATAAAACAGGA
AGCACTCCATATTGGATTGTGCGGAATCCTGGGGAAGTTCTTGGGGAGTAGATGGTTAT
GCCCATGTCAAAATGGGAAGTAATGTTTGTGGTATTGCAGATTCCGTTTCTTCTATATTT
GTGTGA

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Clone variation with respect to NM\_001334.2



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_001334 unedited  
 CCCATCGCACTCGCCGCAATGGACGTGCGGGCGCTGCCGTGGCTGCCGTGGCTGTGG  
 CTGCTGTGCCGGGGCGGGCGCATGCGGACTCCCGCGCCCTTACCCCGACCTGGCCG  
 CGGAGCCGCGAGCGTGAAGCCGCCCTTCCGGGAAAGTCTTAATAGACATCTTGACTGG  
 AATTCTTTATTTCCAGTGAAAACCTCCACCGCCTTCTATGGAATAAATCAGTTTTCTAT  
 TTGTTTCTGAAGAGTTTAAAGCCATTTATTTAAGAAGCAAACCTCCAAGTTTCCGAGA  
 TACTCAGCAGAAGTACATATGTCCATCCCAATGTGTCTTTGCCGTTAAGATTTGACTGG  
 AGGGACAAGCAGTTGTGACACAAGTGAGAAACCAGCAGATGTGTGGAGGATGCTGGGCC  
 TTCAGCGTGGTGGGGCAGTGAATCTGCTTATGCAATAAAGGGGAAGCCCTGGAAGAC  
 CTAAGTGTCCAGCAGGTCAATGACTGTTTCGTATAATAATTATGGCTGCAATGGAGGCTCT  
 ACTCTCAATGCTTTGAACTGGTTAAACAAGATGCAAGTAAAACCTGGTAAAAGATTGAGAA  
 TATCCTTTTAAAGCACAATGGTCTGTGCCATTACTTTTCTGGGTACATTCTGGATTTT  
 CAATCAAAGGGTATTCTGCATATGACTTCGGTGACCAAGAAAAGAAATGGCAAAGCACT  
 TTTTACCTTGGCCCTTTGGTAGGCATAGTAGATGCAAGGAGCCGGCAAGATTATCTGG  
 GAAGGCATTATCCACATCCCTGGTTCTGTGGGAGAGACAATCAGCCCGTTTCATAACAG  
 GGGTTGAAAACCGGGAGCACTCCTTTTGAATGGGCCGAAATCCGGGGAAATCTTGGG  
 GAATAAATGGTTTCN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_001334 unedited  
 TAGCTCTGAACCCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGTAGAT  
 CATATACATTAGNAAAAGAAATGATACATTTTTAGAGAAGAAATATGTACATACATAGTAT  
 CAGAAATAATTTTCTTGTATTGATTCATTTAATATGGTTGTGCTTATATTCAATCAGAAG  
 GTCAACTCCTTTGCTCTAAGGTTCTTACTGCTAACAAGAAATGGCTTTTTTCTGTTG  
 CAGGTCATGAGCAGCACACAGTGCCTTTCTAGGCACATAGGATCATCGATCACTGTGTG  
 GACGCAGGCTAATCAGAATTGCACCTGAAATCACTTGTGCAATTAGTGATGCAAGAGTGA  
 TCACAGGAATCAAGACTGGGAGCCAAGAGAAAGAAACAAGAGGTGCACAAAGAAGCAGTTC  
 GGTGGGAGACCAGGAAAGCTGAGGGGAAAACCTGGGAAACAGATTCTGGAAAACCTCACAG  
 TTTGTTTGATACCCAGGGTTAAGAGATGGGACTTTGATAGGAGTGGTGTATGAATTA  
 GGGAGGAAGAAAGAGGTGAGATCCTAATGTTGGTAAAGGTACAGAGACAAAGGGAGCCAA  
 CCAAGTGGTAAGAAAATAGAAAATGAAAAGTAAAAATGAGACTTAATTCTTTAGTCAGGGA  
 AGCCAAGCCACCAGGAAAACCTGGGTAGAGTAAGAGAAAGAGGAGAAAATATGAGATAA  
 TATTTGGGATTTTGATATACTANAGAACAATATTATTCTATTGTATAAAAAGAACAAG  
 TAGCATATGACCTATGGATTCTATTCAACAAGAAAATATCAACATAATTTGCCTCTTAGC  
 ATGCTCCAAAATTAATCAATTAATGCCTATGGCCATTAATTCAATTAACCGAACGATTTG  
 CCCTTCTTCTTACGGGCACTCGCGTCAAGGGTAGAA

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_001334

**Insert Size:**

2290 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001334.2</a> , <a href="#">NP_001325.1</a>
<b>RefSeq Size:</b>	2943 bp
<b>RefSeq ORF:</b>	966 bp
<b>Locus ID:</b>	1519
<b>UniProt ID:</b>	<a href="#">P43234</a>
<b>Cytogenetics:</b>	4q32.1
<b>Domains:</b>	Pept_C1
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Lysosome
<b>Gene Summary:</b>	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]