

Product datasheet for **SC319622**

Cathepsin K (CTSK) (NM_000396) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin K (CTSK) (NM_000396) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cathepsin K
Synonyms:	CTS02; CTSO; CTSO1; CTSO2; PKND; PYCD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_000396.2
 GATCACTGGAGCTGACTCCGCAATCCCGATGGAATAAATCTAGCACCCCTGATGGTGTG
 CCCACACTTTGCTGCCGAAACGAAGCCAGACAACAGATTTCCATCAGCAGGATGTGGGG
 CTCAAGTTTCTGCTGCTACCTGTGGTGAGCTTTGCTCTGTACCCTGAGGAGATACTGGAC
 ACCCACTGGGAGCTATGGAAGAAGCCACAGGAAGCAATATAACAACAAGGTGGATGAA
 ATCTCTCGGCGTTAATTTGGGAAAAAACCTGAAGTATATTTCCATCCATAACCTTGAG
 GCTTCTTTGGTGTCCATACATATGAACCTGACTGACTGAAAGTACCCCTGTCTCATTCCCGCAGTAAT
 GAAGAGGTGGTTTCAAGATGACTGGACTCAAAGTACCCCTGTCTCATTCCCGCAGTAAT
 GACACCCTTTATATCCCAAGATGGGAAGGTAGAGCCCCAGACTCTGTGACTATCGAAAG
 AAAGGATATGTTACTCTGTCAAAAATCAGGGTCAGTGTGGTTCCTGTTGGGCTTTTAGC
 TCTGTGGGTGCCCTGGAGGGCAACTCAAGAAGAAAAGTGGCAAACCTTAAATCTGAGT
 CCCCAGAACCTAGTGGATTGTGTCTGAGAATGATGGCTGTGGAGGGGGCTACATGACC
 AATGCCTTCCAATATGTGCAGAAGAACCAGGGTATTGACTCTGAAGATGCCTACCCATAT
 GTGGGACAGGAAGAGAGTTGTATGTACAACCCACAGGCAAGGCAGCTAAATGCAGAGGG
 TACAGAGAGATCCCCGAGGGGAATGAGAAAGCCCTGAAGAGGGCAGTGGCCCGAGTGGGA
 CCTGTCTCTGTGGCCATTGATGCAAGCCTGACCTCCTTCCAGTTTTACAGCAAAGGTGTG
 TATTATGATGAAAGCTGCAATAGCGATAATCTGAACCATGCGGTTTTGGCAGTGGGATAT
 GGAATCCAGAAGGGAAACAAGCACTGGATAATTAACAAACAGCTGGGGAGAAAAGTGGGGA
 AACAAAGGATATATCCTCATGGCTCGAAATAAGAACAACGCTGTGGCATTGCCAACCTG
 GCCAGCTTCCCCAAGATGTGACTCCAGCCAGCCAAATCCATCCTGCTCTTCCATTTCTTC
 CACGATGGTGCAGTGAACGATGCATTTGGAAGGGAGTTGGTGTGCTATTTTTGAAGCA
 GATGTGGTGATACTGAGATTGTCTGTTCAGTTTCCCCATTTGTTGTGCTCAAATGATC
 TTCTCTACTTTGCTTCTCTCCACCCATGACCTTTTCACTGTGGCCATCAGGACTTTCCC
 TGACAGCTGTGTACTCTTAGGCTAAGAGATGTGACTACAGCCTGCCCTGACTGTGTTGT
 CCCAGGGCTGATGCTGTACAGGTACAGGCTGGAGATTTTACATAGGTTAGATTCTCATT
 CACGGGACTAGTTAGCTTTAAGCACCCCTAGAGGACTAGGGTAATCTGACTTCTCACTTCC
 TAAGTTCCCTTCTATATCCTCAAGGTAGAAATGTCTATGTTTTCTACTCCAATTCATAAA
 TCTATTATAAGTCTTTGGTACAAGTTTACATGATAAAAAGAAATGTGATTTGCTTCCC
 TTCTTTGCACTTTGAAATAAAGTATTTATCTCCTGTCTACAGTTTAATAAATAAAAAA
 AAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_000396

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<ol style="list-style-type: none">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_000396.2 , NP_000387.1
RefSeq Size:	1702 bp
RefSeq ORF:	990 bp
Locus ID:	1513
UniProt ID:	P43235
Cytogenetics:	1q21.3
Domains:	Pept_C1
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Lysosome
Gene Summary:	<p>The protein encoded by this gene is a lysosomal cysteine proteinase involved in bone remodeling and resorption. This protein, which is a member of the peptidase C1 protein family, is predominantly expressed in osteoclasts. However, the encoded protein is also expressed in a significant fraction of human breast cancers, where it could contribute to tumor invasiveness. Mutations in this gene are the cause of pycnodysostosis, an autosomal recessive disease characterized by osteosclerosis and short stature. [provided by RefSeq, Apr 2013]</p>