

# Recombinant Human Cathepsin K

Cat. No. CTSK-1659H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant human CTSK is a 35.1 kDa homodimeric protein consisting of 99 amino acid polypeptide domain.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	CTSK is a member of the papain cysteine proteinase family and has been identified as the predominant proteinase responsible for the resorption of the bone matrix. The enzyme cleaves proteins such as collagen type I, collagen type II and osteonectin and therefore plays a role in bone remodeling and resorption in diseases such as osteoporosis, osteolytic bone metastasis and rheumatoid arthritis.
<b>Molecular Weight</b>	35.1 kDa
<b>Form</b>	Liquid (25 mM Tris pH 8.0, 500 mM NaCl).
<b>Appearance</b>	Liquid
<b>Purity</b>	≥95% by SDS-PAGE
<b>Storage</b>	Procathepsin K can be aliquoted and stored at -80°C. Repeated freeze-thaw cycles must be avoided.

## GENE INFORMATION

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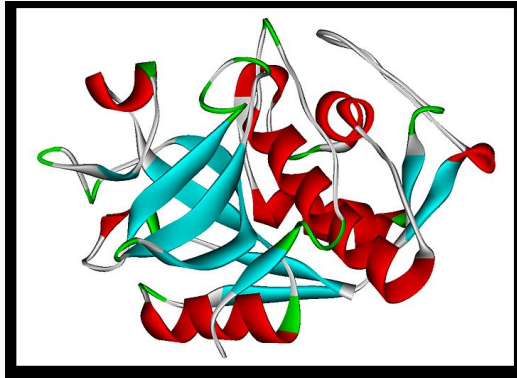
<b>Gene Name</b>	CTSK cathepsin K [ Homo sapiens ]
<b>Official Symbol</b>	CTSK
<b>Synonyms</b>	CTSK; cathepsin K; CTSO; PKND; PYCD; CTSO2; CTSO1; CTSO2; MGC23107; cathepsin K; cathepsin O; cathepsin X; cathepsin O1; cathepsin O2; OTTHUMP00000032938
<b>Gene ID</b>	1513
<b>mRNA Refseq</b>	NM_000396
<b>Protein Refseq</b>	NP_000387
<b>MIM</b>	601105
<b>UniProt ID</b>	P43235
<b>Chromosome Location</b>	1q21
<b>Pathway</b>	Lysosome; Osteoclast Signaling; Osteoclast differentiation; Rheumatoid arthritis; Toll-like receptor signaling pathway
<b>Function</b>	cysteine-type endopeptidase activity; cysteine-type peptidase activity; peptidase activity

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Ribbon diagram of  
cathepsin K, colored  
by  
secondarystructure.  
From PDB 1TU6.



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