

# Recombinant Human Cathepsin S

**Cat. No.** CTSS-750H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant, human cathepsin S was expressed in <i>E. coli</i> without a tag or fusion protein. MW = 24.5 kDa.
<b>Species</b>	Human
<b>Source</b>	<i>E. coli</i>
<b>Description</b>	A major lysosomal cysteine proteinase that is preferentially expressed in macrophages and microglia. Shown to be involved in the processing of antigenic peptides for presentation by MHC Class II molecules on the surface of antigen-presenting cells by mediating invariant (Ii) chain degradation. Inhibition of cathepsin S results in impaired antigen-presentation.
<b>Purity</b>	≥90% by SDS-PAGE.
<b>Form</b>	Liquid. In 35 mM potassium phosphate, 35 mM Sodium acetate, 2 mM DTT, 2 mM EDTA, 50% ethylene glycol, pH 6.5.
<b>Specific Activity</b>	≥30,000 mU/mg protein.
<b>Unit Definition</b>	One unit is defined as the amount of enzyme that will hydrolyze 1.0 μmol Z-VVR-AMC per min at 37°C, pH 6.5. Note: 1 mU = 1 milliunit.
<b>Toxicity</b>	Harmful (MSDS available upon request).

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**Storage** ≤ -70°C. Avoid freeze/thaw. Following initial thaw, aliquot and freeze (-70°C).

## GENE INFORMATION

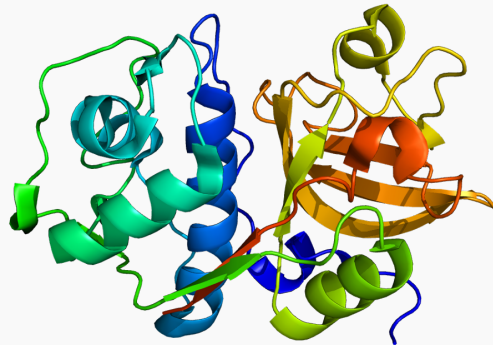
<b>Gene Name</b>	CTSS cathepsin S [ Homo sapiens ]
<b>Synonyms</b>	CTSS; cathepsin S; MGC3886; Cathepsin S; EC 3.4.22.27; OTTHUMP00000032942
<b>Gene ID</b>	1520
<b>mRNA Refseq</b>	NM_004079
<b>Protein Refseq</b>	NP_004070
<b>MIM</b>	116845
<b>UniProt ID</b>	P25774
<b>Chromosome Location</b>	1q21
<b>Pathway</b>	Antigen processing and presentation; Lysosome
<b>Function</b>	cysteine-type endopeptidase activity; peptidase activity

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