

## Recombinant Human Cathepsin S/CTSS Protein (His Tag)(Active)

Catalog No. PKSH033736

### Description

<b>Synonyms</b>	Cathepsin S;CTSS;CTSS;MGC3886
<b>Species</b>	Human
<b>Expression_host</b>	Human Cells
<b>Sequence</b>	Gln17-Ile331(Pro)&Ser109-Ile331&Gln17-Ser109(Propeptide)
<b>Accession</b>	P25774
<b>Mol_Mass</b>	36.9 & 25 & 11.2 kDa
<b>AP_Mol_Mass</b>	37-40 & 26-28 & 14-16 kDa
<b>Tag</b>	C-His
<b>Bio_activity</b>	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2 The specific activity is 9063.642 pmol/min/μg.

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per μg as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
<b>Formulation</b>	Supplied as a 0.2 μm filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH 5.5.
<b>Reconstitution</b>	Not Applicable

### Background

Cathepsin S is a lysosomal enzyme that belongs to the papain family of cysteine proteases. This protein is expressed by antigen presenting cells including macrophages, B-lymphocytes, dendritic cells and microglia. Moreover, cathepsin S is expressed in some epithelial cells. Compared with the abundant cathepsins B, LandH, cathepsin S shows a restricted tissue distribution, with highest levels in spleen, heart, and lung. In addition, evidences indicated that cathepsin S generates A beta from amyloidogenic fragments of beta APP in the endosomal/lysosomal compartment, and is implicated in the pathogenesis of Alzheimer's disease(AD) and Down Syndrome (DS).

## SDS-PAGE

