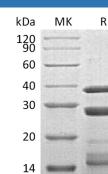
## Recombinant Human Cathepsin S/CTSS Protein (His Tag)

## Catalog Number: PKSH033736

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	HEK293 Cells-derived Human Cathepsin S;CTSS protein Gln17-Ile331, with an C-
	terminal His
Calculated MW	36.9 <b>&amp;</b> 25 <b>&amp;</b> 11.2 kDa
Observed MW	37-40&26-28&14-16 kDa
Accession	AAH02642.1
Bio-activity	Not validated for activity
Properties	
Purity	>90 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel
	packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH
	5.5.
Data	



> 90 % as determined by reducing SDS-PAGE.

## 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).