

Human CellExp™, Cathepsin S Human Recombinant

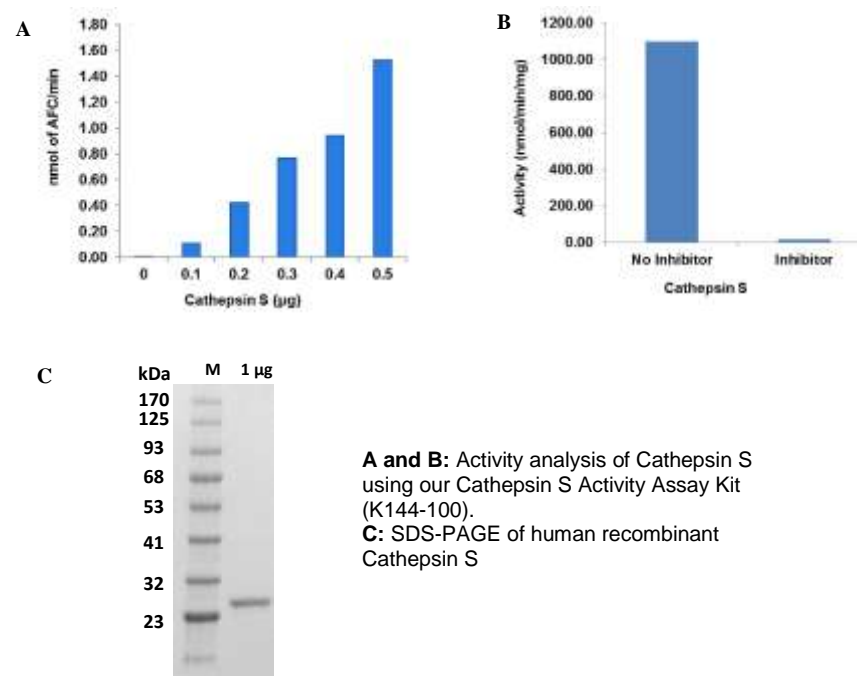
CATALOG #:	7277-10	10 µg
	7277-50	50 µg
	7277-250	250 µg
ALTERNATE NAMES:	Cathepsin S, CTSS	
SOURCE:	HEK 293 cells	
PURITY:	≥ 95% by SEC-HPLC and reducing SDS-PAGE	
MOL. WEIGHT:	~ 37 kDa	
ENDOTOXIN LEVEL:	<1 EU/µg by LAL method	
FORM:	Liquid	
FORMULATION:	A 0.2 µM filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH 5.5.	
STORAGE CONDITIONS:	Aliquot and store at -80°C. Avoid repeated freezing and thawing cycles.	

DESCRIPTION: Cathepsin S (CTSS) is a lysosomal cysteine protease of the papain family and may participate in the degradation of antigenic proteins to peptides for presentation on MHC class II molecules. CTSS is synthesized as inactive precursor of 331 amino acids consisting of a 15-aa signal peptide, a propeptide of 99 aa, and a mature polypeptide of 217 aa. It is activated in the lysosomes by a proteolytic cleavage of the propeptide. The deduced amino acid sequence contains only one potential N-glycosylation site located in the propeptide. Compared with the abundant cathepsins B, L and H, 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).

BIOLOGICAL ACTIVITY: >1000 mU (1U = 1 µmole/min/mg) as determined by Cathepsin S Activity Assay Kit (K144-100).

AMINO ACID SEQUENCE:

QLHKDPTLDHHWHLWKKTYGKQYKEKNEEAVRRLIWEKNLKFVMLHNLHSMGMHSDYDLG
MNLHGDMTSEEVMSSLRVPSQWQRNITYKSNPNWILPDSVDWREKGCVTEVKYQGSC
GACWAFSAVGALEAQLKLTGKLVSLSAQNLVDCSTEKYGNGKCGNGFMTTAFQYIIDNKG
DSDASYPYKAMDQKCQYDSKYRAATCSKYTELPGREDVLKEAVANKGPVSVGVDARHPS
FFLYRSGVYYEPSCTQNVNHGVLVVGYGDLNGKEYWLVKNSWGHNFGEEGYIRMARNKGN
HCGIASFSPYPEIVDHHHHHHH



A and B: Activity analysis of Cathepsin S using our Cathepsin S Activity Assay Kit (K144-100).
C: SDS-PAGE of human recombinant Cathepsin S

RELATED PRODUCTS:

- Procathepsin K, human recombinant (**Cat. No. 1026-10, -50, -1000**)
- Procathepsin K, mouse recombinant (**Cat. No. 1027-10, -50, -1000**)
- Procathepsin K, rat recombinant (**Cat. No. 1029-10, -50, -1000**)
- Cathepsin B (active, human) (**Cat. No. 1021-5**)
- Cathepsin D (active, human) (**Cat. No. 1022-5**)
- Cathepsin H (active, human) (**Cat. No. 1023-5**)
- Cathepsin L, human recombinant (**Cat. No. 1135-5, 100, 1000**)

FOR RESEARCH USE ONLY! Not to be used in humans.