Datasheet for ABIN7534173

Cathepsin S Protein (CTSS) (His tag)

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Overview

Quantity:	50 µg
Target:	Cathepsin S (CTSS)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Cathepsin S protein is labelled with His tag.

Product Details

Purpose:	Active Recombinant Human Cathepsin S Protein
Sequence:	QLHKDPTLDH HWHLWKKTYG KQYKEKNEEA VRRLIWEKNL KFVMLHNLEH SMGMHSYDLG MNHLGDMTSE EVMSLMSSLR VPSQWQRNIT YKSNPNRILP DSVDWREKGC VTEVKYQGSC GACWAFSAVG ALEAQLKLKT GKLVSLSAQN LVDCSTEKYG NKGCNGGFMT TAFQYIIDNK GIDSDASYPY KAMDQKCQYD SKYRAATCSK YTELPYGRED VLKEAVANKG PVSVGVDARH PSFFLYRSGV YYEPSCTQNV NHGVLVVGYG DLNGKEYWLV KNSWGHNFGE EGYIRMARNK GNHCGIASFP SYPEI
Specificity:	Gln17-Ile331
Purity:	> 95 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	< 0.1 EU/µg of the protein by LAL method.
Biological Activity Comment:	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-

Product Details

	WRK(Dnp)-NH2. The specific activity is >1390 pmol/min/µg.

Target Details

Target:	Cathepsin S (CTSS)
Alternative Name:	Cathepsin S (CTSS Products)
Background:	Description: Cathepsin S (CTSS), one of the lysosomal proteinases, has many important physiological functions in the nervous system, especially in process of extracellular matrix degradation and endocellular antigen presentation. Cathepsin S is expressed in the lysosome of antigen presenting cells, primarily dendritic cells, B-cells and macrophages. Cathepsin S is most well known for its critical function in the proteolytic digestion of the invariant chain chaperone molecules, thus controlling antigen presentation to CD4+ T-cells by major histocompatibility complex (MHC) class II molecules or to NK1.1+ T-cells via CD1 Molecules. Cathepsin S also appears to participate in direct processing of exogenous antigens for presentation by MHC class II to CD4+ T-cells, or in cross-presentation by MHC class I molecules to CD8+ T-cells. In addition, it has been implicated in the pathogenesis of several diseases such as Alzheimer's disease and degenerative disorders associated with the cells of the mononuclear phagocytic system. Name: CTSS
Gene ID:	1520
UniProt:	P25774
Pathways:	Activation of Innate immune Response, Toll-Like Receptors Cascades

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Buffer:	Lyophilized from a 0.22 µm filtered solution of 50 mM MES,100 mM NaCl, pH 6.5.

Handling

Storage:	-20 °C,-80 °C
Storage Comment:	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.