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Active Cathepsin S, human recombinant protein

CTSS
Catalog # PBV11138r

Specification

Active Cathepsin S, human recombinant protein - Product info

Primary Accession	P25774
Calculated MW	23.9 kDa (115-331 aa) KDa

Active Cathepsin S, human recombinant protein - Additional Info

Gene ID	1520
Gene Symbol	CTSS
Other Names	
CTSS	
Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥90%
Assay2&Purity2	N/A;
Recombinant	Yes
Results	>2000 mU/mg (1 U = Digestion of 1 µmole/min) of Ac-VVR-AFC substrate (K144-100).

Target/Specificity
Cathepsin S

Application Notes
Reconstitute in 50 mM sodium acetate, 100 mM NaCl (pH 5.5) to 0.1-1 mg/ml

Format
Lyophilized

Storage
-80°C; Lyophilized from proprietary buffer.

Active Cathepsin S, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

Active Cathepsin S, human recombinant protein - Background

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 indicate that cathepsin S generates amyloid beta-peptide from amyloidogenic fragments of amyloid precursor protein (APP) in the endosomal/lysosomal compartment, and is implicated in the pathogenesis of Alzheimer's disease and Down Syndrome.

Active Cathepsin S, human recombinant protein - References

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