10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Cathepsin S Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11237

Specification

Cathepsin S Antibody - Product Information

Application	**WB**
Primary Accession	P25774
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**37496**

Cathepsin S Antibody - Additional Information

Gene ID 1520

Positive Control — **Western Blot: Jurkat cell lysate, mouse muscle lysate, recombinant protein**

Application & Usage — **Western blot: 1-4 µg**

Other Names
CTSS

Target/Specificity
Cathepsin S

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Cathepsin S Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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Cathepsin S Antibody - Protein Information

Name CTSS

Function
Thiol protease. Key protease responsible for the removal of the invariant chain from MHC class II molecules and MHC class II antigen presentation (PubMed:30612035). The bond-specificity of this proteinase is in part similar to the specificities of cathepsin L.

Cellular Location
Lysosome. Secreted. Cytoplasmic vesicle, phagosome

Cathepsin S Antibody - 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
- Cell Culture

Cathepsin S Antibody - Images

Cathepsin S Antibody - 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.