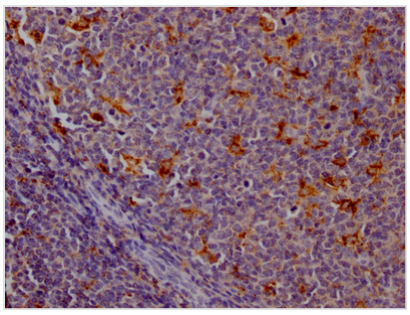
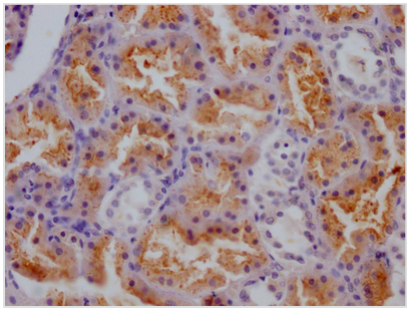
CTSS Antibody

Product Code	CSB-RA788455A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P25774
Immunogen	A synthesized peptide derived from human Cathepsin S
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Thiol protease. Key protease responsible for the removal of the invariant chain from MHC class II molecules. The bond-specificity of this proteinase is in part similar to the specificities of cathepsin L and cathepsin N.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cell biology; Tags & Cell Markers; Immunology
Gene Names	CTSS
Accession NO.	9B10

Image



IHC image of CSB-RA788455A0HU diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA788455A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

CTSS is an important lysosomal cysteine protease. Antigen presentation, cytokine production, and angiogenesis are all important functions of this protein. CTSS is an essential cysteine protease that plays a role in the pathogenesis of autoimmune illnesses, allergic inflammation, asthma, diabetes, obesity, cardiovascular and pulmonary diseases, and cancer by enhancing tumor invasiveness or acting as a biomarker for cardiovascular disease evaluation. CTSS activates the PI3K/Akt and MAPK pathways, which enhance tumor cell growth. CTSS can also stimulate the proliferation of human periodontal ligament cells.

The first step in the preparation of recombinant CTSS antibody is to obtain the CTSS antibody gene. The heavy and light chain genes of the antibody were constructed into a plasma vector and then transfected into suspended mammalian cells transiently. After expression verification, cell supernatant was collected in expanded culture and purified recombinant CTSS antibody was obtained using Affinity-chromatography. This recombinant CTSS antibody has been validated for the detection of CTSS protein from Human in the ELISA, IHC.