

Rabbit Anti-Cathepsin I (heavy chain)antibody

SL10523R

Product Name Cathepsin L(heavy chain)

Chinese Name 组织蛋白酶 L 抗体

Alias Cathepsin L; Major Excreted Protein; Cathepsin L1; EC 3.4.22.15; CTSL1; MEP; EC 3.4.22; CATL; CATL1_MOUSE;

Research Area Tumour Cell biology immunology Kinases and Phosphatases Synthesis and Degradation

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, (predicted: Rat,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 19/37kDa

Cellular localization cytoplasmic

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from mouse Cathepsin L: 101-200/334

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

The protein encoded by this gene is a lysosomal cysteine proteinase that plays a major role in intracellular protein catabolism. Its substrates include collagen and elastin, as well as alpha-1 protease inhibitor, a major controlling element of neutrophil elastase activity. The encoded protein has been implicated in several pathologic processes, including myofibril necrosis in myopathies and in myocardial ischemia, and in the renal tubular response to proteinuria. This protein, which is a member of the peptidase C1 family, is a dimer composed of disulfide-linked heavy and light chains, both produced from a single protein precursor. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Apr 2012]

Function:

Important for the overall degradation of proteins in lysosomes.

Subunit:

Dimer of a heavy and a light chain linked by disulfide bonds.

Subcellular Location:

Lysosome.

Similarity:

Belongs to the peptidase C1 family.

**Product
Detail**

SWISS:

P06797

Gene ID:

13039

Database links:

[Entrez Gene: 13039](#) Mouse

[Entrez Gene: 25697](#) Rat

[SwissProt: P06797](#) Mouse

[SwissProt: P07154](#) Rat

[Unigene: 930](#) Mouse

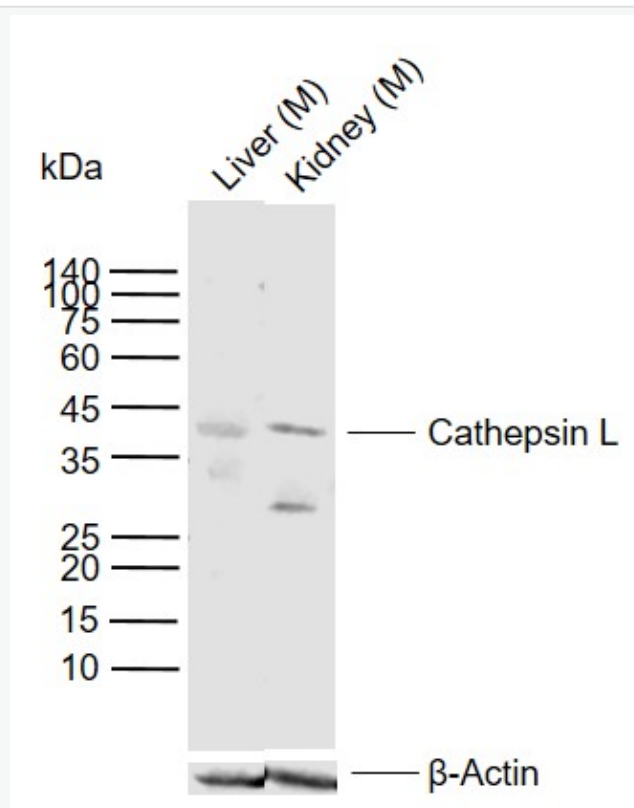
[Unigene: 1294](#) Rat

Synthesis and Degradation (Synthesis and Degradation)

组织蛋白酶 L(Cathepsin L CL)属于木瓜蛋白酶家族中的半胱氨酸蛋白水解酶,以酶原的形式贮存于溶酶体中. 参与许多特殊的生理过程, 如激素原的激活、抗原呈递、组织器官的发育等。

在病理状态下, 因各种原因所致的细胞损伤(如病原微生物、炎症因子、氧化应激等)可降解细胞成分或细胞间质基质成分, 包括层粘素、IV 型胶原纤维及纤维连接素等, 与人类许多疾病如 Tumour 的浸润与转移、关节炎、骨质疏松、阿尔茨海姆病、多发性硬化症及其他慢性炎症性疾病有关。

**Product
Picture**



Sample:

Lane 1: Mouse Liver tissue lysates

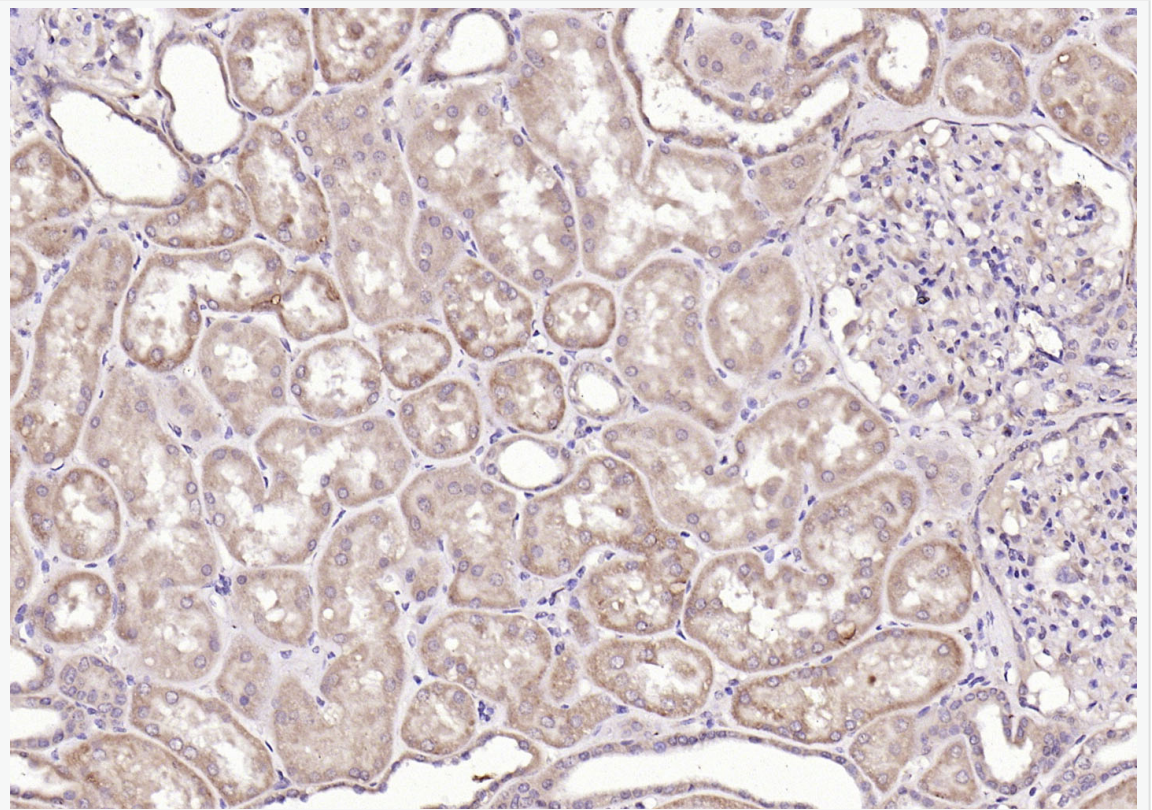
Lane 2: Mouse Kidney tissue lysates

Primary: Anti-Cathepsin L(heavy chain) (SL10523R) at 1/1000 dilution

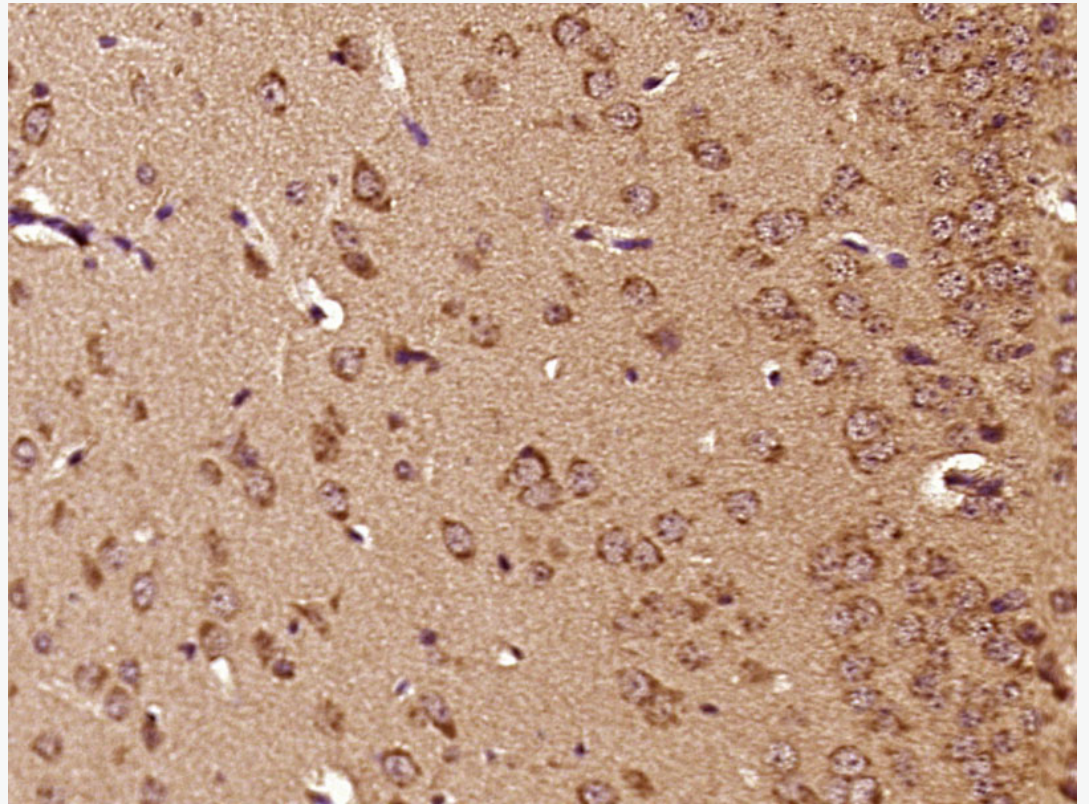
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 19/37 kDa

Observed band size: 40 kDa



Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cathepsin L(heavy chain)) Polyclonal Antibody, Unconjugated (SL10523R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cathepsin L) Polyclonal Antibody, Unconjugated (SL10523R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.