

**Catalogue No.**

AB0043-200  
AB0043-500

**Qty:**

600 µg  
1.5 mg

## Anti-Cathepsin D

**Source:** Goat

**General description:** Goat polyclonal antibody to Cathepsin D. Cathepsin D is a lysosomal aspartic protease of the pepsin family. Acid protease active in intracellular protein breakdown. It is composed of a dimer of disulphide-linked heavy and light chains, both produced from a single protein precursor. It is involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

**Alternative names:** ceroid-lipofuscinosis, CLN10; CPSD, CTSD, lysosomal aspartyl protease, lysosomal aspartyl peptidase, neuronal 10 antibody.

**Form:** Polyclonal antibody supplied as a 200 or 500 µl (3 mg/ml) aliquot in PBS, 20% glycerol and 0.05% sodium azide. This antibody is epitope-affinity purified from goat antiserum.

**Immunogen:** Purified recombinant peptide derived from within residues 275 aa to the C-terminus of human Cathepsin D produced in E. coli.

**Specificity:** This antibody gives a positive signal in the following human (Jurkat, HT1080, HUH, MDA-MB-231, ARPE19, SH-SY5Y), canine (MDCK) and monkey (COS-7) whole cell lysates.

**Reactivity:** Reacts with Human, Rat, Mouse, Monkey and Canine proteins

Sample	WB	IHC (F)	IHC (P)	IF	ELISA	IEM
Human	+++	+++	+++	+++	ND	+++
Rat	+++	+++	+++	+++	ND	+++
Mouse	+++	+++	+++	+++	ND	+++
Canine	+++	+++	+++	+++	ND	+++
Monkey	+++	+++	+++	+++	ND	+++

+++ excellent, ++ good, + poor, ND not determined

**Usage:**

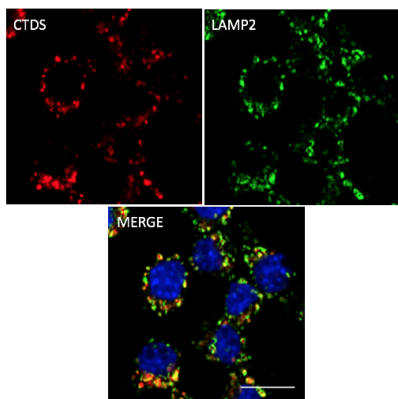
WB: 1:250-1:1,000  
IF: 1:50-1:200  
IHC (P): 1:200-1:1,000  
IHC (F): 1:200-1:1,000  
IEM: 1:50-1:200

**Storage:** For continuous use, store at 2-8 C for one-two days. For extended storage, store in -20 C freezer. Working dilution samples should be discarded if not used within 12 hours.

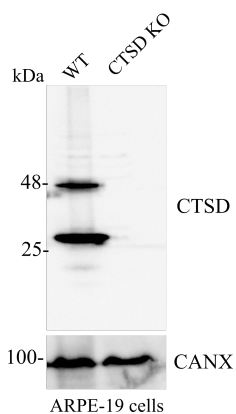
**Special instructions:** The antibody solution should be gently mixed before use. Avoid freeze/thaw cycles..

## References:

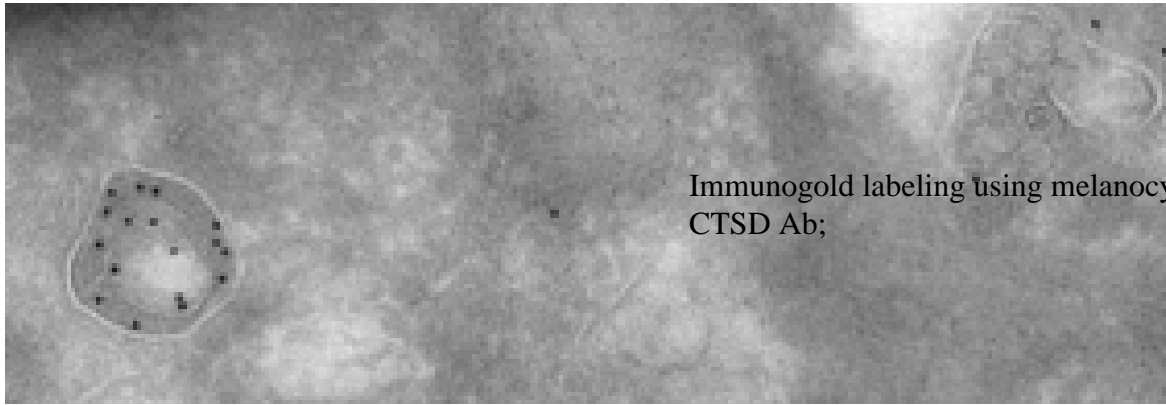
1. Romagnoli M, Bresson L, Di-Cicco A, et al. Development 2020 Jan. PMID: 31988184
2. Pelkonen L, Sato K, Reinisalo M, et al. Mol Pharm 2017 Mar. PMID: 28112518
3. Alves LS, Marques ARA, Padrao N, et al. J Cell Sci 2021 Sep PMID: 34528688



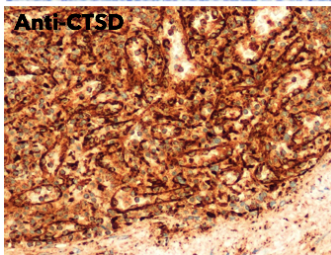
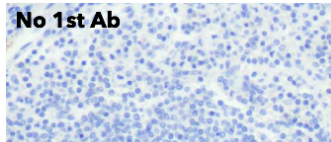
Immunofluorescence – anti-CTSD Ab at 1/100 dilution in RAW264.7 cells; cells were fixed with PFA and permeabilized with 0.05% saponin;



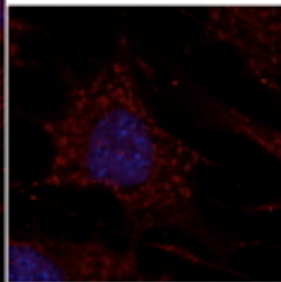
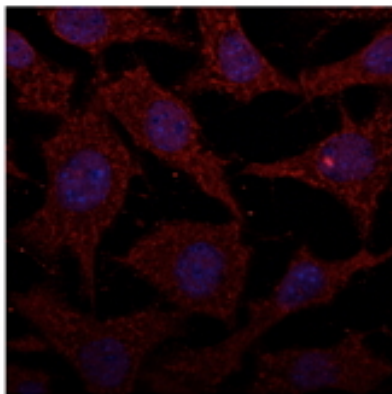
Anti-CTSD Ab at 1/500 dilution; endogenous CTSD (50 µg per lane); rabbit polyclonal to goat IgG (HRP) at 1/10,000 dilution;



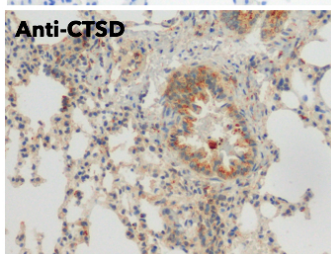
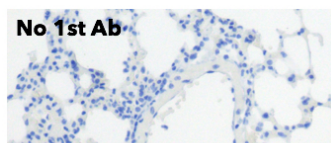
Immunogold labeling using melanocytes and anti-CTSD Ab;



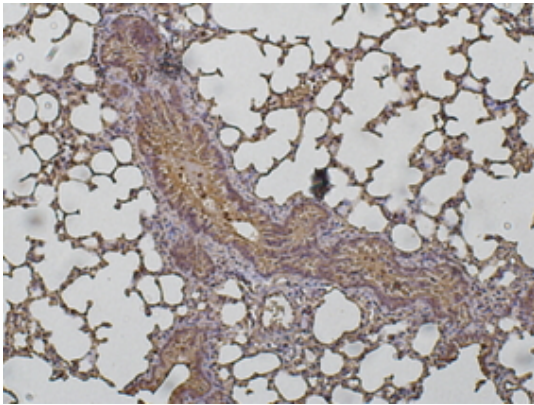
IHC of mouse spleen using anti-CTSD antibody and FFPE tissue after heat-induced antigen retrieval. Anti-CTSD Ab at 1:500/DAB detection;



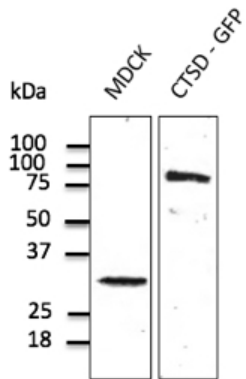
Immunofluorescence – anti-CTSD Ab at 1/100 dilution in NHI/3T3 cells; cells were fixed with methanol and permeabilized with 0.1% saponin;



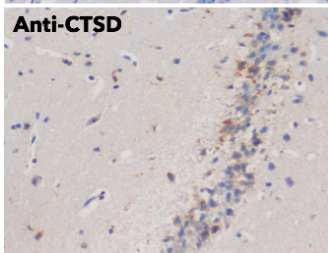
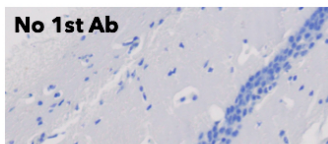
IHC of mouse lung using anti-CTSD antibody and FFPE tissue after heat-induced antigen retrieval. Anti-CTSD Ab at 1:500/DAB detection;



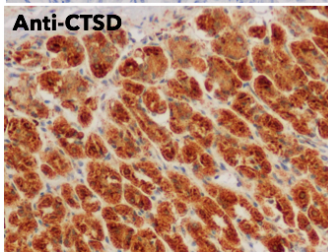
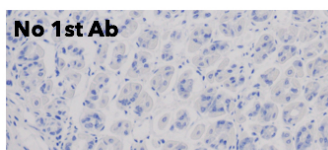
Immunoperoxidase of polyclonal antibody to CTSD (1/200) on paraformaldehyde-fixed paraffin-embedded mouse lung;



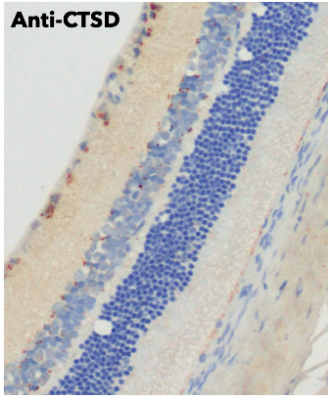
Anti-CTSD Ab at 1/500 dilution; endogenous CTSD (100 µg per lane) and transfected 293FT cell lysate (at 30 µg per lane); rabbit polyclonal to goat IgG (HRP) at 1/10,000 dilution;



IHC of mouse brain using anti-CTSD antibody and FFPE tissue after heat-induced antigen retrieval. Anti-CTSD Ab at 1:500/DAB detection;



IHC of mouse stomach using anti-CTSD antibody and FFPE tissue after heat-induced antigen retrieval. Anti-CTSD Ab at 1:500/DAB detection;



IHC of mouse eye using anti-CTSD antibody and FFPE tissue after heat-induced antigen retrieval. Anti-CTSD Ab at 1:500/DAB detection;

For research use only, not for diagnostic use

#### **SICGEN's Proprietary Immunogen Policy**

In order to produce high specific antibodies SICGEN has invested a lot of time and effort into selecting immunogen sequences. SICGEN has decided to protect this information by not publishing it on the website. However, these sequences are available on request.