

Resource Summary Report

Generated by [RRID](#) on Sep 9, 2026

Cathepsin B (D1C7Y) XP Rabbit Antibody

RRID:AB_2687580

Type: Antibody

Proper Citation

Cell Signaling Technology Cat# 31718, RRID:AB_2687580

Antibody Information

URL: http://antibodyregistry.org/AB_2687580

Proper Citation: Cell Signaling Technology Cat# 31718, RRID:AB_2687580

Target Antigen: Cathepsin B

Host Organism: rabbit

Clonality: monoclonal

Comments: Applications: W, IHC-P, IF-IC, F

Antibody Name: Cathepsin B (D1C7Y) XP Rabbit Antibody

Description: This monoclonal targets Cathepsin B

Target Organism: rat, mouse, human

Clone ID: D1C7Y

Antibody ID: AB_2687580

Vendor: Cell Signaling Technology

Catalog Number: 31718

Alternative Catalog Numbers: 31718S, 31718T

Record Creation Time: 20231110T034041+0000

Record Last Update: 20260829T214742+0000

Ratings and Alerts

- This report presents a guide to selecting high-quality commercial antibodies against Cathepsin B (CTSB) in western blot using a standardized experimental protocol based on comparing read-outs in knockout cell lines and isogenic controls. This study was funded in part by the Michael J. Fox Foundation (MJFF) for Parkinson's disease. - YCharOS <https://ycharos.com/>

No alerts have been found for Cathepsin B (D1C7Y) XP Rabbit Antibody.

Data and Source Information

Source: [Antibody Registry](#)

Usage and Citation Metrics

We found 43 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#) .

Tao F, et al. (2026) An atom-edged magnetic nanomotor for cancer mechanotherapy. iScience, 29(3), 114994.

Ghoochani A, et al. (2026) Cell-type resolved protein atlas of brain lysosomes identifies SLC45A1-associated disease as a lysosomal disorder. Cell, 189(3), 765.

Ren W, et al. (2025) TCF25 serves as a nutrient sensor to orchestrate metabolic adaptation and cell death by enhancing lysosomal acidification under glucose starvation. Cell reports, 44(9), 116186.

Sprengel C, et al. (2025) Lysosomal activity in response to the incubation of pristine and functionalized carbon nanodots. iScience, 28(1), 111654.

Long Z, et al. (2025) Enhanced autophagic clearance of amyloid- β via histone deacetylase 6-mediated V-ATPase assembly and lysosomal acidification protects against Alzheimer's disease in vitro and in vivo. Neural regeneration research, 20(9), 2633.

Liu R, et al. (2025) Semax peptide targets the μ opioid receptor gene Oprm1 to promote deubiquitination and functional recovery after spinal cord injury in female mice. British journal of pharmacology.

Sprenger HG, et al. (2025) Ergothioneine controls mitochondrial function and exercise performance via direct activation of MPST. Cell metabolism, 37(4), 857.

Huang Y, et al. (2025) Cdk5rap3-mediated regulation of lysosomal and ER membrane proteins is pivotal for the survival and function of pancreatic acinar cells. American journal of physiology. Cell physiology, 329(2), C513.

Iwamoto Y, et al. (2025) Lactoferrin attenuates renal fibrosis and uremic sarcopenia in a mouse model of adenine-induced chronic kidney disease. The Journal of nutritional biochemistry, 146, 110039.

Semba Y, et al. (2025) Ridaifen derivatives function as potent lysosomotropic agents, depending on their basic side chains. *European journal of pharmacology*, 1005, 178082.

Basak B, et al. (2025) Mitochondrial damage triggers the concerted degradation of negative regulators of neuronal autophagy. *Nature communications*, 16(1), 7367.

Lee C, et al. (2025) DMXL1 promotes recruitment of V1-ATPase to lysosomes upon TRPML1 activation. *Nature structural & molecular biology*.

Chen C, et al. (2024) ABCG2 is an itaconate exporter that limits antibacterial innate immunity by alleviating TFEB-dependent lysosomal biogenesis. *Cell metabolism*, 36(3), 498.

Hernandez M, et al. (2024) The Effects of Cathepsin B Inhibition in the Face of Diffuse Traumatic Brain Injury and Secondary Intracranial Pressure Elevation. *Biomedicines*, 12(7).

Zheng D, et al. (2024) Human YKT6 forms priming complex with STX17 and SNAP29 to facilitate autophagosome-lysosome fusion. *Cell reports*, 43(2), 113760.

Abe T, et al. (2024) Lysosomal stress drives the release of pathogenic α -synuclein from macrophage lineage cells via the LRRK2-Rab10 pathway. *iScience*, 27(2), 108893.

Yang S, et al. (2024) Inhibition of cathepsin L ameliorates inflammation through the A20/NF- κ B pathway in endotoxin-induced acute lung injury. *iScience*, 27(11), 111024.

Yu D, et al. (2024) Feedforward cysteine regulation maintains melanoma differentiation state and limits metastatic spread. *Cell reports*, 43(7), 114484.

Zhang D, et al. (2024) P-tau217 correlates with neurodegeneration in Alzheimer's disease, and targeting p-tau217 with immunotherapy ameliorates murine tauopathy. *Neuron*.

Li C, et al. (2024) scRank infers drug-responsive cell types from untreated scRNA-seq data using a target-perturbed gene regulatory network. *Cell reports. Medicine*, 5(6), 101568.