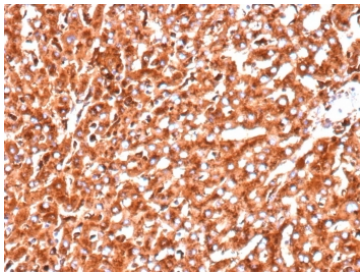
Cathepsin D Antibody / CTSD [clone CTSD/9613R] (V5441)

Catalog No.	Formulation	Size
V5441-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5441-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5441SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

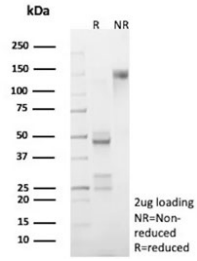
Recombinant RABBIT MONOCLONAL

Bulk quote request

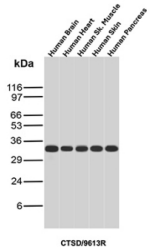
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CTSD/9613R
Purity	Protein A/G affinity
UniProt	P07339
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This Cathepsin D antibody is available for research use only.



Cathepsin D Antibody Pancreatic Tissue IHC. Immunohistochemistry analysis of FFPE human pancreas tissue using recombinant Cathepsin D antibody (clone CTSD/9613R) shows strong granular cytoplasmic staining throughout pancreatic cells, consistent with CTSD / Cathepsin D localization in lysosomal compartments. The punctate staining pattern reflects lysosomal protease distribution associated with intracellular protein processing and turnover. Tissue architecture is well preserved, and surrounding stromal regions display comparatively lower staining. Hematoxylin counterstain provides nuclear contrast and structural context. HIER: boil FFPE tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant Cathepsin D antibody (clone CTSD/9613R) as confirmation of integrity and purity.



Cathepsin D Antibody Human Tissue Panel WB. Western blot analysis of human 1) brain, 2) heart, 3) skeletal muscle, 4) skin, and 5) pancreas tissue lysates using Cathepsin D Antibody (clone CTSD/9613R) detects a consistent band at approximately 30-35 kDa across all samples, corresponding to the processed mature form of Cathepsin D (CTSD). Cathepsin D is synthesized as a larger precursor that undergoes proteolytic cleavage to generate active heavy and light chain fragments, with the observed band reflecting the predominant mature species. The uniform banding pattern across tissues supports reliable detection of CTSD and is consistent with its widespread lysosomal expression.

Description

Cathepsin D is a ubiquitously expressed lysosomal aspartyl protease involved in the normal degradation of proteins. It is synthesized as an inactive 52kDa preprocathepsin D that is cleaved and glycosylated to form a 48kDa procathepsin D and then further cleaved to produce 34kDa and 14kDa subunits (heavy and light chains, respectively). Cathepsin D exhibits pepsin-like activity and plays a role in protein turnover and in the proteolytic activation of hormones and growth factors. Mutations in this gene play a causal role in neuronal ceroid lipofuscinosis-10 and may be involved in the pathogenesis of several other diseases, including breast cancer and possibly Alzheimer's disease.

This antibody can be compared with our Cathepsin D Antibody / CTSD Antibody (clone CTSD/3276) as a central reference for consistent CTSD detection across multiple assay formats.

Application Notes

Optimal dilution of the Cathepsin D antibody should be determined by the researcher.

Immunogen

A His-tagged CTSD protein was used as the immunogen for the recombinant Cathepsin D antibody.

Storage

Aliquot the Cathepsin D antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
Copyright © NSJ Bioreagents. All rights reserved.