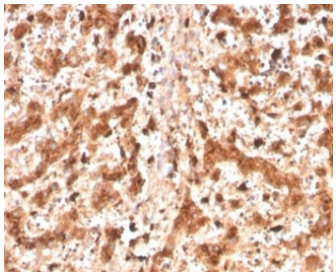
CTSD Antibody / Cathepsin D [clone CTSD/4497] (V9530)

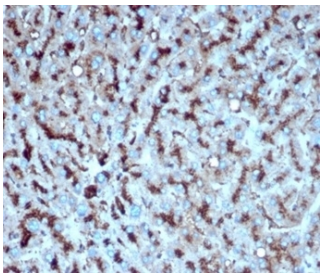
Catalog No.	Formulation	Size
V9530-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9530-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9530SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

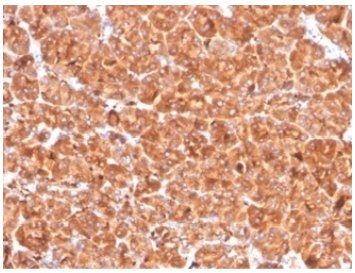
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CTSD/4497
Purity	Protein A/G affinity
UniProt	P07339
Localization	Cytoplasm
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This CTSD antibody is available for research use only.



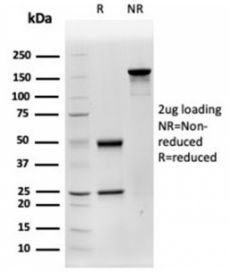
Cathepsin D Antibody Liver Tissue IHC. Immunohistochemistry analysis of FFPE human liver tissue using CTSD antibody (clone CTSD/4497) shows diffuse granular cytoplasmic staining in hepatocytes, consistent with CTSD / Cathepsin D localization in lysosomal compartments. The punctate staining pattern reflects lysosomal protease distribution associated with intracellular protein processing and turnover. Hepatic architecture is preserved, and surrounding non-parenchymal 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.



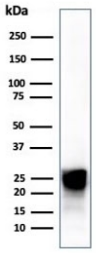
Cathepsin D Antibody Liver Metastasis in Colon IHC. Immunohistochemistry analysis of FFPE human liver carcinoma metastatic to colon tissue using CTSD antibody (clone CTSD/4497) shows strong granular cytoplasmic staining in tumor cells, consistent with CTSD / Cathepsin D localization in lysosomal compartments. The punctate staining pattern reflects elevated lysosomal protease activity associated with tumor progression and metastatic behavior. Tumor cell clusters are well defined, while surrounding stromal and non-tumor 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.



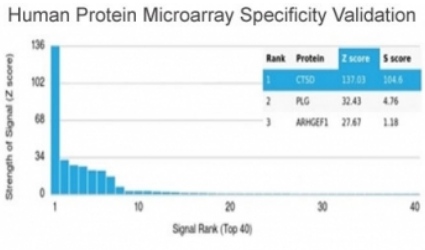
Cathepsin D Antibody Pancreas Tissue IHC. Immunohistochemistry analysis of FFPE human pancreas tissue using Cathepsin D antibody (clone CTSD/4497) shows diffuse granular cytoplasmic staining in pancreatic cells, consistent with CTSD / Cathepsin D localization in lysosomal compartments. The punctate staining pattern reflects lysosomal protease distribution associated with intracellular protein processing and turnover. Tissue architecture is 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 CTSD antibody (clone CTSD/4497) as confirmation of integrity and purity.



CTSD Antibody Human Liver Immunoblot. Western blot testing of human liver tissue lysate using CTSD antibody (clone CTSD/4497).



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CTSD antibody (clone CTSD/4497). These results demonstrate the foremost specificity of the CTSD/4497 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Cathepsin D is a ubiquitously expressed lysosomal aspartyl protease involved in the normal degradation of proteins. It is synthesized as an inactive 43kDa preprocathepsin D that is cleaved and glycosylated to form a 46kDa procathepsin D and then further cleaved to produce 28kDa and 15kDa 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 Alzheimers 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 CTSD antibody should be determined by the researcher.

Immunogen

Purified His-tagged CTSD protein was used as the immunogen for the CTSD antibody.

Storage

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

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