

Mouse anti-Human Cathepsin D Monoclonal Antibody | anti-CTSD antibody

Cathepsin D (Tumor Marker)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA214911	Mouse	Human	Immunohistochemistry

PRODUCT SYNONYMS

Cathepsin D; Monoclonal Antibody; Cathepsin D (Tumor Marker); CatD; Ceroid lipofuscinosis neuronal 10; CLN10; CPSD; Epididymis secretory sperm binding protein Li 130P; Lysosomal aspartyl peptidase; Lysosomal aspartyl protease; anti-CTSD antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	CTSD/3083
Specificity	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 Alzheimer's disease.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	412
Applicable Applications for anti-CTSD antibody	IHC (Immunohistochemistry)
Positive Control	K-562, A431 or SK-BR3 cells. Kidney, liver, lung or breast.
Immunogen	Recombinant fragment of human Cathepsin D protein (around aa 104-250) (exact sequence is proprietary)
Cellular Localization	Cytoplasmic
Hu-chromosome Location	11p15.5
Preparation and Storage	Antibody with azide: store at 2 to 8 degree C. Antibody without azide: store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using Cathepsin D Mouse Monoclonal Antibody (CTSD/3083) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE

SDS-PAGE Analysis Purified Cathepsin D Mouse Monoclonal Antibody (CTSD/3083). Confirmation of Purity and Integrity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Liver stained with Cathepsin D Mouse Monoclonal Antibody (CTSD/3083).



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Formalin-fixed, paraffin-embedded human Liver stained with Cathepsin D Mouse Monoclonal Antibody (CTSD/3083).

ADDITIONAL INFORMATION

References	Nomura T, et al. J Med Invest. 2005 Feb;52(1-2):1-9.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4503143
NCBI GeneID	1509
NCBI Accession #	NP_001900.1
NCBI GenBank Nucleotide #	NP_001900.1
UniProt Accession #	P07339
Molecular Weight	46kDa (Procathepsin D); 28kDa (Cathepsin D)
NCBI Official Full Name	cathepsin D preproprotein
NCBI Official Synonym Full Names	cathepsin D
NCBI Official Symbol	CTSD
NCBI Official Synonym Symbols	CPSD; CLN10; HEL-S-130P
NCBI Protein Information	cathepsin D
UniProt Protein Name	Cathepsin D
UniProt Gene Name	CTSD
UniProt Synonym Gene Names	CPSD
UniProt Entry Name	CATD_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

