

Mouse Cathepsin D Monoclonal Antibody | anti-CTSD antibody

Cathepsin D (Tumor Marker)

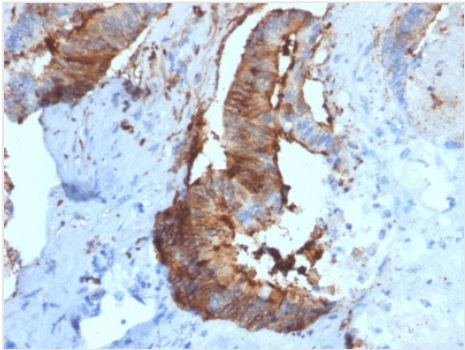
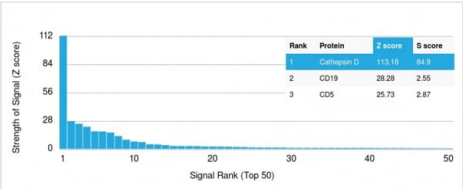
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA214730	Mouse	Human. Others not known	Immunohistochemistry

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. Others not known
Clonality	Monoclonal
Isotype	IgG1
Clone Number	CTSD/2781
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)
Immunogen	Recombinant fragment of human Cathepsin D protein (around aa 104-250) (exact sequence is proprietary)
Positive Control	K-562, A431 or SK-BR3 Cells. Kidney, Liver, Lung or Breast
Cellular Localization	Cytoplasmic
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.



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Cathepsin D Mouse Monoclonal Antibody (CTSD/2781).

Application Data
Analysis of Protein Array containing more than 19,000 full-length human proteins using Cathepsin D Mouse Monoclonal Antibody (CTSD/2781). 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.

ADDITIONAL INFORMATION

References	Nomura T, Katunuma N. Involvement of cathepsins in the invasion, metastasis and proliferation of cancer cells. 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 #	NM_001909.4
UniProt Accession #	P07339; Q6IB57
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

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.