

36-2143: Anti-Cathepsin D (Tumor Marker) Monoclonal Antibody(Clone: CTSD/2781)

Clonality :	Monoclonal
Clone Name :	CTSD/2781
Application :	WB,IHC
Reactivity :	Human
Gene :	CTSD
Gene ID :	1509
Uniprot ID :	P07339
Alternative Name :	CatD; Cathepsin D; Ceroid lipofuscinosis neuronal 10; CLN10; CPSD; Epididymis secretory sperm binding protein Li 130P; Lysosomal aspartyl peptidase; Lysosomal aspartyl protease
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant fragment of human Cathepsin D protein (around aa 104-250) (exact sequence is proprietary)

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 Alzheimer's disease.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/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.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

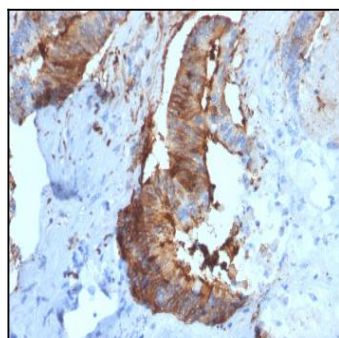


Fig. 1: Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Cathepsin D Mouse Monoclonal Antibody (CTSD/2781).

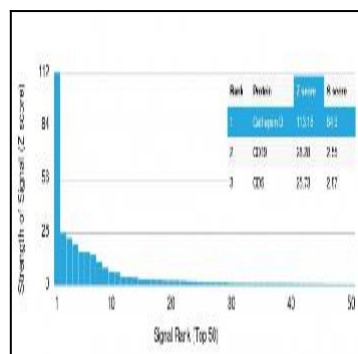


Fig. 2: Analysis of Protein Array containing more than 19,000 full-length human proteins using Cathepsin D Mouse Monoclonal Antibody (CTSD/2781) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged 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 Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody 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 Monoclonal Antibody to protein X is equal to 29.