# Cathepsin D (Tumor Marker) Antibody

Mouse Monoclonal Antibody [Clone CTSD/3275]

| Catalog No | Format | Size |
|---|---|---|
| 1509-MSM5-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 1509-MSM5-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 1509-MSM5-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

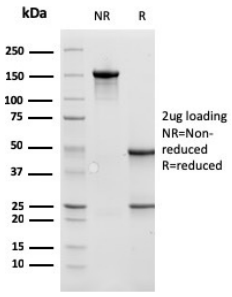
| Applications | Tested Dillution | Note |
|---|---|---|
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB) | 2-4ug/ml | |

## Product Details

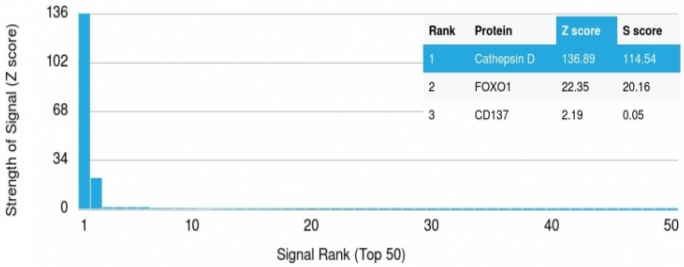
| | |
|---|---|
| **Clone** | CTSD/3275 |
| **Gene Name** | CTSD |
| **Immunogen** | Recombinant fragment of human Cathepsin D protein (around aa 104-250) (exact sequence is proprietary) |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG1 / Kappa |
| **Mol. Weight of Antigen** | 48kDa (Procathepsin D); 34kDa (Cathepsin D); 14kDa (Cathepsin D) |
| **Cellular Localization** | Extracellular space, Lysosome, Melanosome, Secreted |
| **Species Reactivity** | Human |
| **Positive Control** | K-562 or SK-BR3 cells. Human kidney, Liver, lung or breast tissues., MCF-7 |

**Optimal dilution for a specific application should be determined.*

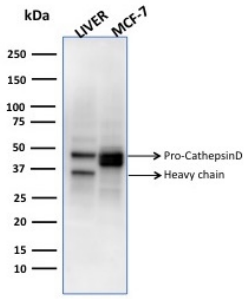
## Product Images for Cathepsin D (Tumor Marker) Antibody



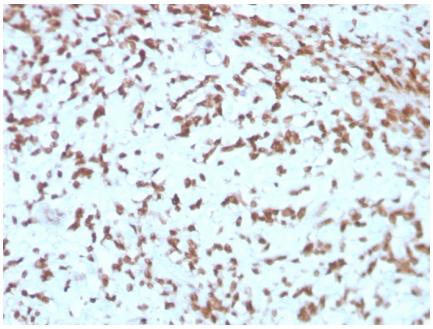

SDS-PAGE Analysis of Purified Cathepsin D Mouse Monoclonal Antibody (CTSD/3275). Confirmation of Integrity and Purity of Antibody




Analysis of Protein Array containing more than 19,000 full-length human proteinsusing Cathepsin D Mouse Monoclonal Antibody (CTSD/3275) 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 HuProtTM 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 HuProtTM 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.




Western Blot Analysis of human liver tissue and MCF-7 cell lysates using Cathepsin D Mouse Monoclonal Antibody (CTSD/3275).



Formalin-fixed, paraffin-embedded human Liver stained with Cathepsin D Mouse Monoclonal Antibody (CTSD/3275).

## Specificity & Comments

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.

## Supplied As

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.

## Storage and Stability

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. No MSDS required.

## Research Areas

Apoptosis, Autophagy, Cardiovascular, Immunology, Signal Transduction

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.