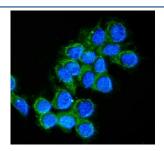


Cathepsin D Antibody / CTSD (R31904)

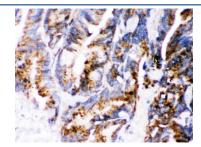
Catalog No.	Formulation	Size
R31904	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

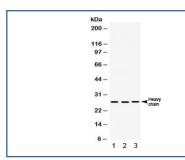
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P07339
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunofluorescence (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Cathepsin D antibody is available for research use only.



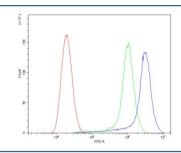
Immunofluorescent staining of FFPE human MCF7 cells with Cathepsin D antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC testing of FFPE human intestinal cancer with Cathepsin D antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Western blot testing of human 1) HepG2, 2) A549 and 3) PANC cell lysate with Cathepsin D antibody. Expected molecular weight: 43-46 kDa, 28 kDa (heavy chain), 15 kDa (light chain).



Flow cytometry testing of human SiHa cells with Cathepsin D antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Cathepsin D antibody.

Description

Cathepsin D is a protein that in humans is encoded by the CTSD gene. This proteinase is a member of the peptidase C1 family, having a specificity similar to but narrower than that of pepsin A. It is mapped to 11p15.5. The cDNA encodes a 412-amino acid protein with 20 and 44 amino acids in a pre- and prosegment, respectively. Cathepsin D is one of the lysosomal proteinases. It is ubiquitously expressed and is involved in proteolytic degradation, cell invasion, and apoptosis. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease and it has been considered as a breast cancer tumor marker.

Application Notes

Optimal dilution of the Cathepsin D antibody should be determined by the researcher.

Immunogen

Amino acids 201-412 of human Cathepsin D were used as the immunogen for the Cathepsin D antibody.

Storage

After reconstitution, the Cathepsin D antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.