

For Research Use Only

# Cathepsin D Recombinant antibody

Catalog Number:83743-5-RR



## Basic Information

<b>Catalog Number:</b> 83743-5-RR	<b>GenBank Accession Number:</b> NM_001909.5	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1509	<b>CloneNo.:</b> 240775G2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P07339	<b>Recommended Dilutions:</b> WB 1:2000-1:12000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> cathepsin D	
	<b>Calculated MW:</b> 45kDa	
	<b>Observed MW:</b> 32 kDa, 48 kDa, 52 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HepG2 cells, MCF-7 cells
<b>Species Specificity:</b> human	<b>IF/ICC :</b> HepG2 cells,

## Background Information

CTSD (Cathepsin D) also named CPSD, belongs to the peptidase A1 family. It is ubiquitously expressed and is involved in proteolytic degradation, cell invasion, and apoptosis. Human CTSD is synthesized as a 52-kDa precursor that is converted into an active 48-kDa single-chain intermediate in the endosomes, and then into a fully active mature form, composed of a 34-kDa heavy chain and a 14-kDa light chain, in the lysosomes. It is a lysosomal acid protease found in neutrophils and monocytes and involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease (PMID: 27114232, PMID: 30717773, PMID: 30051532).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

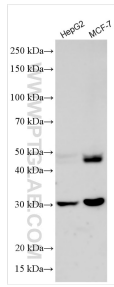
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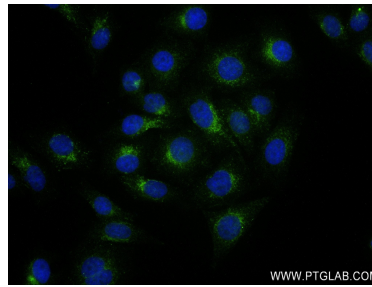
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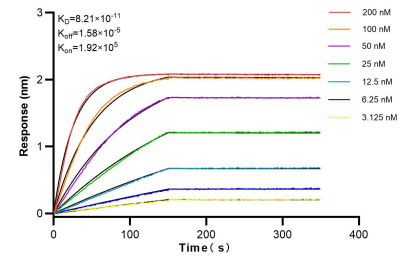
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83743-5-RR (Cathepsin D antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Cathepsin D antibody (83743-5-RR, Clone: 240775G2 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 83743-5-RR against Human Cathepsin D were performed. The affinity constant is 0.821 nM.