For Research Use Only

Cathepsin D Recombinant antibody

Catalog Number:83743-2-RR



Purification Method:

CloneNo.:

240775E7

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000

IF/ICC 1:250-1:1000

Basic Information

Catalog Number: GenBank Accession Number:

83743-2-RR NM_001909.5 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 1509 Nanodrop: **UNIPROT ID:** Source: P07339 Rabbit Full Name: Isotype: cathepsin D IgG Calculated MW:

> 45kDa Observed MW: 32 kDa, 48 kDa, 52 kDa

Applications

Tested Applications: WB, IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB: A431 cells, MCF-7 cells, SH-SY5Y cells

IF/ICC: MCF-7 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

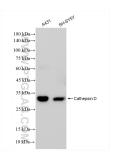
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

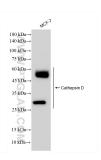
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

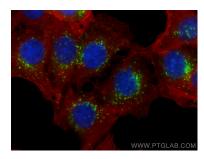
Selected Validation Data



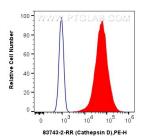
Various lysates were subjected to SDS PAGE followed by western blot with 83743-2-RR (Cathepsin D antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



MCF-7 cells were subjected to SDS PAGE followed by western blot with 83743-2-RR (Cathepsin D antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using Cathepsin D antibody (83743-2-RR, Clone: 240775E7) at dilution of 1:500 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), FLNA antibody (67133-1-Ig, Clone: 1G4H3, red).



1x10^6 MCF-7 cells were intracellularly stained with 0.25 ug Cathepsin D Recombinant antibody (83743-2-RR, Clone:240775E7) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).