For Research Use Only

Cathepsin D Recombinant antibody

Catalog Number:83743-5-RR



Basic Information

Catalog Number: 83743-5-RR

Size: 1000 ug/ml Source: Rabbit

Isotype: IgG GenBank Accession Number:

NM_001909.5 GeneID (NCBI): 1509 UNIPROT ID: P07339 Full Name:

cathepsin D Calculated MW: 45kDa

Observed MW: 32 kDa, 48 kDa, 52 kDa Purification Method:

Protein A purfication CloneNo.:

240775G2

Recommended Dilutions: WB 1:2000-1:12000 IF/ICC 1:125-1:500

Applications

Tested Applications: WB, IF/ICC, ELISA Species Specificity:

human

Positive Controls:

WB: HepG2 cells, MCF-7 cells

IF/ICC: 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:

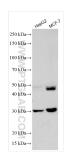
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

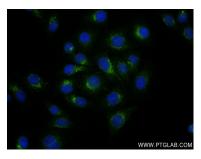
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

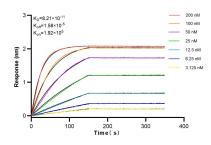
Selected Validation Data



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