For Research Use Only

## Cathepsin D Recombinant antibody, PBS Only

Catalog Number:83743-5-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

240775G2

**Basic Information** 

Catalog Number: 83743-5-PBS

Size: 1 mg/ml

NM\_001909.5 GeneID (NCBI):

GenBank Accession Number:

Source: **UNIPROT ID:** Rabbit P07339 Full Name: Isotype: cathepsin D Calculated MW:

45kDa

Observed MW:

32 kDa, 48 kDa, 52 kDa

**Applications** 

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

human

**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).

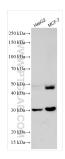
Storage

Store at -80°C.

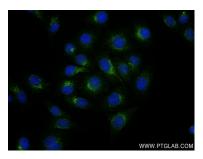
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

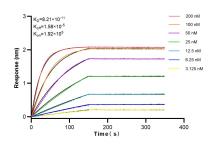
## **Selected Validation Data**



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. This data was developed using the same antibody clone with 83743-5-PBS in a different storage buffer formulation.



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 1gG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83743-5-PBS in a different storage buffer formulation.



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