

For Research Use Only

LONP1 Recombinant antibody

Catalog Number: 83552-3-RR



Basic Information

Catalog Number: 83552-3-RR	GenBank Accession Number: BC000235	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 9361	CloneNo.: 240460E5
Source: Rabbit	UNIPROT ID: P36776	Recommended Dilutions: IF/ICC 1:200-1:800
Isotype: IgG	Full Name: Lon peptidase 1, mitochondrial	
Immunogen Catalog Number: AG7196	Calculated MW: 106 kDa	

Applications

Tested Applications: IF/ICC, FC (Intra), ELISA	Positive Controls: IF/ICC : HepG2 cells,
Species Specificity: human	

Background Information

LONP1(Lon protease homolog, mitochondrial) is also named as LONP, LONHS, HLON, LON, PRSS15, PIM1, MGC1498 and belongs to the peptidase S16 family. It seems to play a major role in the elimination of oxidatively modified proteins in the mitochondrial matrix(PMID:18021745). LONP1, also a nuclearly encoded and mitochondrially located stress-responsive protease, is involved in heme-mediated ALAS-1 turnover(PMID:21659532). It recognizes specific surface determinants or folds, initiates proteolysis at solvent-accessible sites, and generates unfolded polypeptides that are then progressively degraded(PMID:15870080). LONP1 has some isoforms with the MW of 106 kDa, 100 kDa and 86 kDa.

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

For technical support and original validation data for this product please contact:

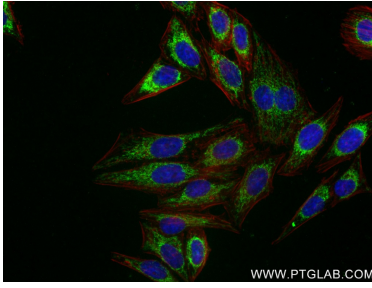
T: 4006900926

E: Proteintech-CN@ptglab.com

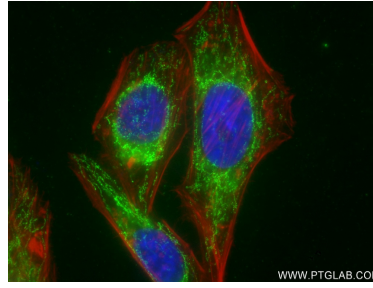
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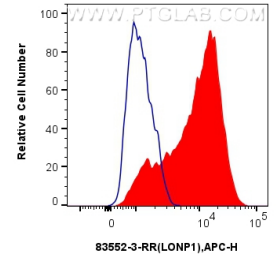
Selected Validation Data



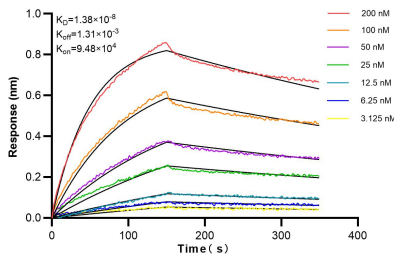
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using LONP1 antibody (83552-3-RR, Clone: 240460E5) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



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1×10^6 HeLa cells were intracellularly stained with 0.25 μ g LONP1 Recombinant antibody (83552-3-RR, Clone:240460E5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83552-3-RR against Human LONP1 were performed. The affinity constant is 1.38 nM.