

For Research Use Only

LONP1 Recombinant antibody, PBS Only (Capture)

Catalog Number: 83552-2-PBS



Basic Information

Catalog Number: 83552-2-PBS	GenBank Accession Number: BC000235	Purification Method: Protein A purification
Size: 1 mg/ml	GeneID (NCBI): 9361	CloneNo.: 240460G10
Source: Rabbit	UNIPROT ID: P36776	
Isotype: IgG	Full Name: lon peptidase 1, mitochondrial	
Immunogen Catalog Number: AG7196	Calculated MW: 106 kDa	
	Observed MW: 100 kDa	

Applications

Tested Applications:
WB, IHC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

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

Storage Buffer:
PBS Only

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

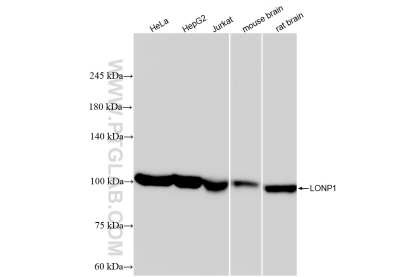
T: 4006900926

E: Proteintech-CN@ptglab.com

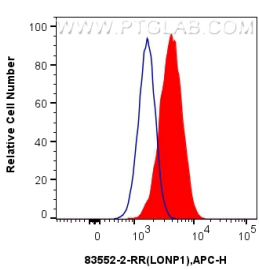
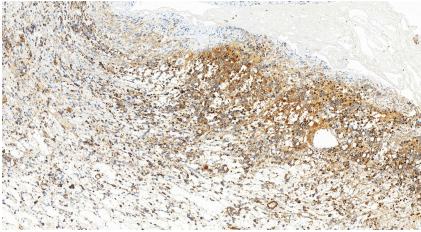
W: ptgcn.com

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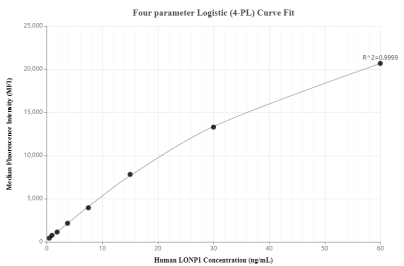
Selected Validation Data



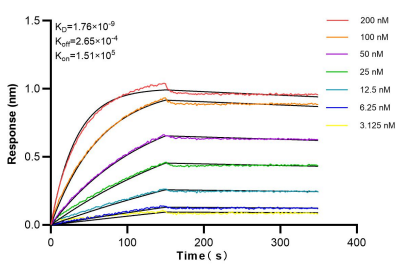
Various lysates were subjected to SDS PAGE followed by western blot with 83552-2-RR (LONP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83552-2-PBS in a different storage buffer formulation.



1x10⁶ U-251 cells were intracellularly stained with 0.25 ug LONP1 Recombinant antibody (83552-2-RR, Clone:240460G10) and APC-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). This data was developed using the same antibody clone with 83552-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00531-1, LONP1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83552-2-PBS. Detection antibody: 83552-1-PBS. Standard: Ag7196. Range: 0.469-60 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83552-2-RR against Human LONP1 were performed. The affinity constant is 1.76 nM.