For Research Use Only

LONP1 Recombinant antibody, PBS Only (Capture)

Catalog Number:83552-2-PBS

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Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
83552-2-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG7196

GenBank Accession Number:
BC000235

GeneID (NCBI):
9361

UNIPROT ID:
P36776

Full Name:
lon peptidase 1, mitochondrial

Calculated MW:
106 kDa

Observed MW:
100 kDa

Purification Method:
Protein A purification

CloneNo.:
240460G10

Applications

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

Species Specificity:
human, mouse, rat

Product Information

83552-2-PBS targets LONP1 as part of a matched antibody pair:

MP00531-1: 83552-2-PBS capture and 83552-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

Background Information

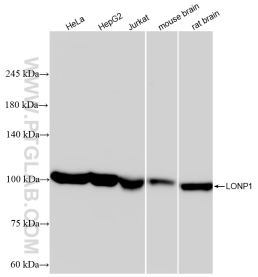
LONP1(Lon protease homolog, mitochondrial) is also named as LONP, LONHS, HLON, LON, PRSS15, PIM1, MGC1498 and belongs to the peptidase S16 family. It seems to play a major role in the elimination of oxidatively modified proteins in the mitochondrial matrix(PMID:18021745). LONP1, also a nuclearly encoded 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

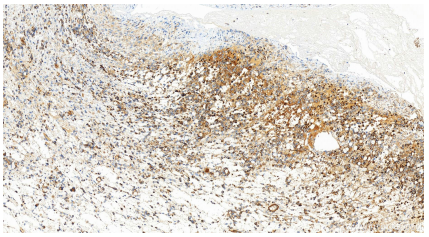
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

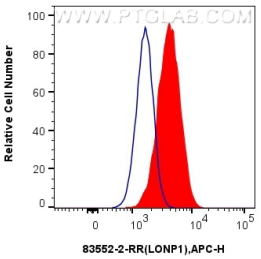
Selected Validation Data



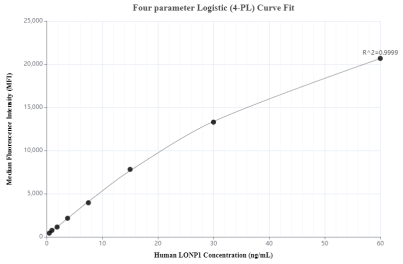
Various lysates were subjected to SDS PAGE followed by western blot with 83552-2-RR (LONP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83552-2-PBS in a different storage buffer formulation.



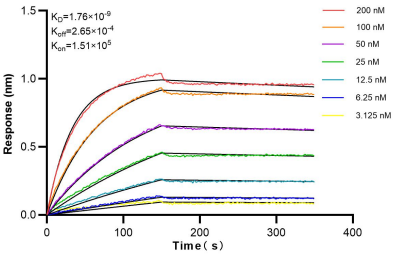
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83552-2-RR (LONP1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83552-2-PBS in a different storage buffer formulation.



1x10^6 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.