

For Research Use Only

LONP1 Recombinant monoclonal antibody

Catalog Number: 83552-2-RR

Featured Product



Basic Information

Catalog Number:

83552-2-RR

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

Recommended Dilutions:

WB: 1:2000-1:10000

IHC: 1:500-1:2000

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, FC (Intra), ELISA

Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, Jurkat cells, HepG2 cells, mouse brain tissue, rat brain tissue

IHC : human ovary cancer tissue,

FC (Intra) : U-251 cells,

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

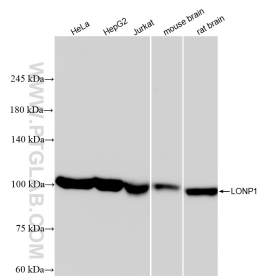
T: 4006900926

E: Proteintech-CN@ptglab.com

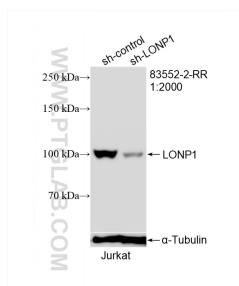
W: ptgcn.com

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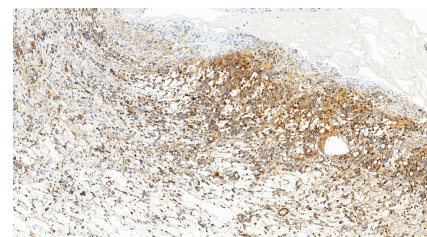
Selected Validation Data



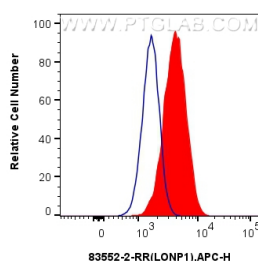
Various lysates were subjected to SDS PAGE followed by western blot with 83552-2-RR (LONP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



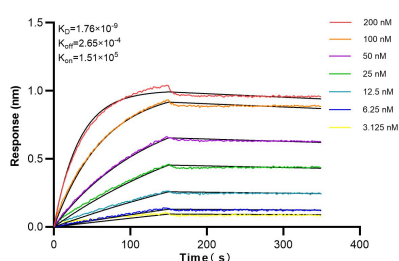
WB result of LONP1 antibody (83552-2-RR; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-LONP1 transfected Jurkat cells.



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).



1×10^6 U-251 cells were intracellularly stained with 0.25 μ g LONP1 Recombinant antibody (83552-2-RR, Clone:240460G10) 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.



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