For Research Use Only

LONP1 Recombinant antibody

Catalog Number:83552-2-RR



Basic Information

Catalog Number: GenBank Accession Number: 83552-2-RR BC000235

83552-2-RR BC000235 Size: GeneID (NCBI): 1000 μg/ml 9361

Source: UNIPROT ID:
Rabbit P36776
Isotype: Full Name:

IgG lon peptidase 1, mitochondrial

Immunogen Catalog Number: Calculated MW: 106 kDa
Observed MW:

Observed N 100 kDa

Applications

Tested Applications: WB, FC (Intra), ELISA Species Specificity:

human, mouse, rat

Positive Controls:

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

Purification Method:

Protein A purification

Recommended Dilutions:

WB 1:2000-1:10000

CloneNo.:

240460G10

tissue, rat brain tissue

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:

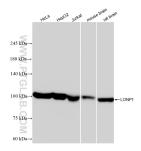
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

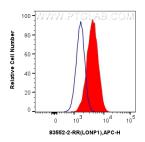
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

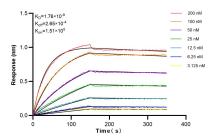
Selected Validation Data



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.



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).



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