

For Research Use Only

LONP1 Monoclonal antibody

Catalog Number: 66043-1-Ig

Featured Product

11 Publications



Basic Information

Catalog Number: 66043-1-Ig	GenBank Accession Number: BC000235	Purification Method: Protein G purification
Size: 150ul, Concentration: 2000 ug/ml by Nanodrop and 1560 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 9361	CloneNo.: 1C6C12
Source: Mouse	UNIPROT ID: P36776	Recommended Dilutions: WB 1:1000-1:5000 IHC 1:400-1:1600 IF/ICC 1:50-1:500
Isotype: IgG1	Full Name: lon peptidase 1, mitochondrial	
Immunogen Catalog Number: AG7306	Calculated MW: 106 kDa	
	Observed MW: 100 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

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 : ROS1728 cells, HEK-293 cells, HSC-T6 cells, human heart tissue, human liver tissue, Jurkat cells, L02 cells, RAW 264.7 cells, NIH/3T3 cells

IHC : human lung cancer tissue, human heart tissue, human liver tissue

IF/ICC : C6 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 processively degraded (PMID:15870080).

Notable Publications

Author	Pubmed ID	Journal	Application
Xiang Peng	39731912	Dev Cell	
Weiwei Zhu	38625722	Biomol Biomed	WB
Congxiao Zhang	39261902	J Cell Mol Med	WB, IHC

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

*** 20ul sizes contain 0.1% BSA

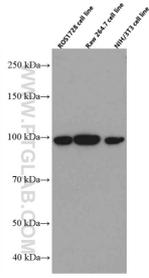
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

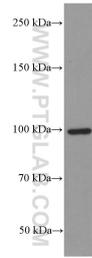
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

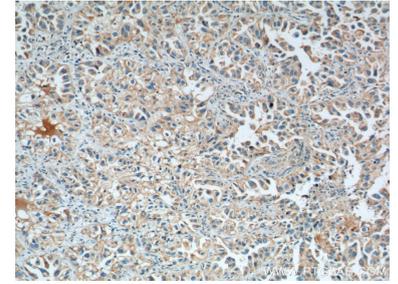
Selected Validation Data



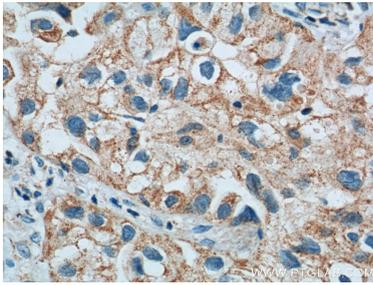
Various lysates were subjected to SDS PAGE followed by western blot with 66043-1-Ig (LONP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



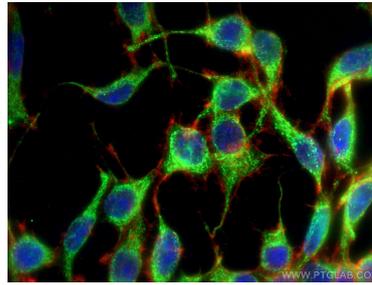
Jurkat cells were subjected to SDS PAGE followed by western blot with 66043-1-Ig (LONP1 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



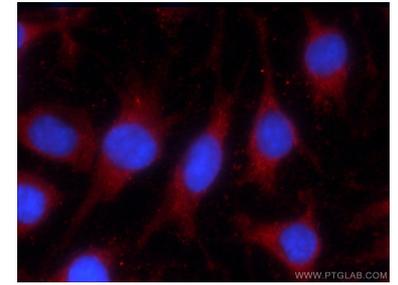
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66043-1-Ig (LONP1 Antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66043-1-Ig (LONP1 Antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed C6 cells using LONP1 antibody (66043-1-Ig, Clone: 1C6C12) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of C6 cells using 66043-1-Ig (LONP1 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Mouse IgG.