

DATASHEET

LONP1 Rabbit Polyclonal Antibody

CAT. NO. APA14362

KEY FEATURES

Target	LONP1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

ATP-dependent serine protease that mediates the selective degradation of misfolded, unassembled or oxidatively damaged polypeptides as well as certain short-lived regulatory proteins in the mitochondrial matrix . Endogenous substrates include mitochondrial steroidogenic acute regulatory (StAR) protein, DELE1, helicase Twinkle (TWNK) and the large ribosomal subunit protein MRPL32/bL32m . MRPL32/bL32m is protected from degradation by LONP1 when it is bound to a nucleic acid (RNA), but TWNK is not . May also have a chaperone function in the assembly of inner membrane protein complexes . Participates in the regulation of mitochondrial gene expression and in the maintenance of the integrity of the mitochondrial genome .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to LONP1
Specificity	Recognizes endogenous levels of LONP1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human LONP1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 85; Observed: 106 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	PRSS15; Lon protease homolog mitochondrial; LONHs; Lon protease-like protein; LONP; Mitochondrial ATP-dependent protease Lon; Serine protease 15
Gene Symbol	LONP1
Entrez Gene	9361(Human); 74142(Mouse); 170916(Rat)
SwissProt	P36776(Human); Q8CGK3(Mouse); Q924S5(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

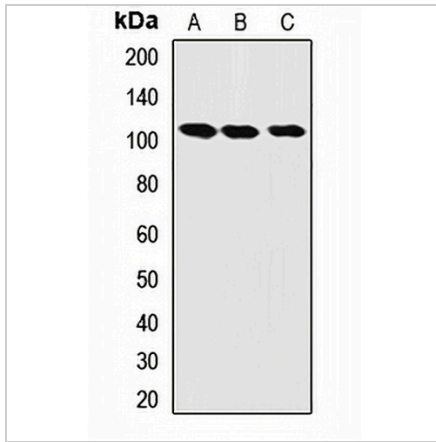
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

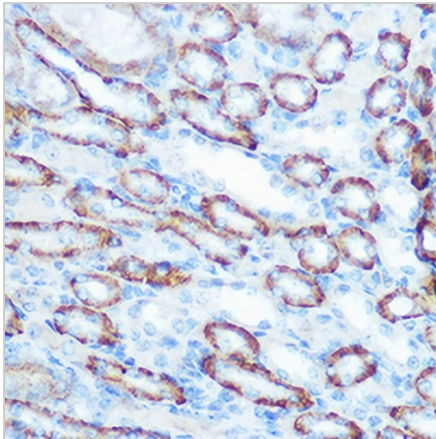
LONP1 Rabbit Polyclonal Antibody

CAT. NO. APA14362

DATA



Western blot analysis of LONP1 expression in A549 (A), mouse heart (B), rat kidney (C) whole cell lysates. (Predicted band size: 85; 100; 106 kD; Observed band size: 106 kD)



Immunohistochemical analysis of LONP1 staining in mouse kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.