

ARG40308 anti-LONP1 / Lon antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes LONP1 / Lon
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	LONP1 / Lon
Species	Human
Immunogen	Synthetic peptide of Human LONP1 / Lon.
Conjugation	Un-conjugated
Alternate Names	LONHs; Lon protease homolog, mitochondrial; Serine protease 15; PIM1; Mitochondrial ATP-dependent protease Lon; PRSS15; LON; hLON; EC 3.4.21.-; LonHS; LONP; CODASS; Lon protease-like protein

Application Instructions

Application table	Application	Dilution
	IHC-P	1:25 - 1:100
	WB	1:250 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	IHC-P: Human breast cancer and Human esophagus cancer. WB: A431, HeLa, HepG2, Mouse liver and NIH/3T3.	
Observed Size	~ 105 kDa	

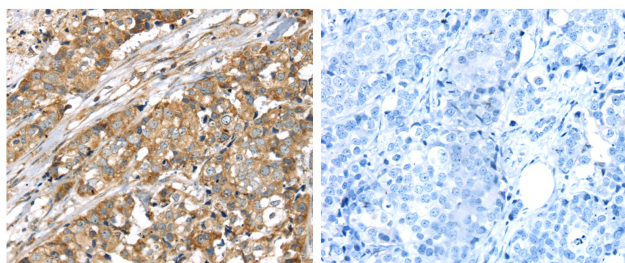
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 40% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	40% Glycerol
Concentration	1.6 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

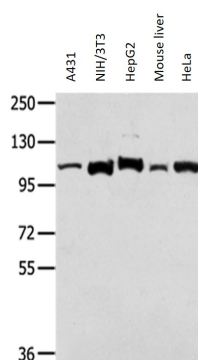
Gene Symbol	LONP1
Gene Full Name	lon peptidase 1, mitochondrial
Background	This gene encodes a mitochondrial matrix protein that belongs to the Lon family of ATP-dependent proteases. This protein mediates the selective degradation of misfolded, unassembled or oxidatively damaged polypeptides in the mitochondrial matrix. It may also have a chaperone function in the assembly of inner membrane protein complexes, and participate in the regulation of mitochondrial gene expression and maintenance of the integrity of the mitochondrial genome. Decreased expression of this gene has been noted in a patient with hereditary spastic paraplegia (PMID:18378094). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Feb 2013]
Function	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. 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. Binds to mitochondrial promoters and RNA in a single-stranded, site-specific, and strand-specific manner. May regulate mitochondrial DNA replication and/or gene expression using site-specific, single-stranded DNA binding to target the degradation of regulatory proteins binding to adjacent sites in mitochondrial promoters. Endogenous substrates include mitochondrial steroidogenic acute regulatory (StAR) protein. [UniProt]
Calculated Mw	106 kDa
Cellular Localization	Mitochondrion matrix. [UniProt]

Images



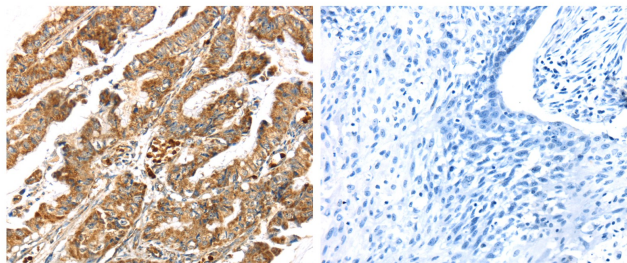
ARG40308 anti-LONP1 / Lon antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast cancer tissue stained with ARG40308 anti-LONP1 / Lon antibody (left) at 1:25 dilution, or the same antibody pre-incubated with antigen (right). (Original magnification: X200)



ARG40308 anti-LONP1 / Lon antibody WB image

Western blot: 40 µg of A431, NIH/3T3, HepG2, Mouse liver and HeLa cell lysates stained with ARG40308 anti-LONP1 / Lon antibody at 1:250 dilution.



ARG40308 anti-LONP1 / Lon antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human esophagus cancer tissue stained with ARG40308 anti-LONP1 / Lon antibody (left) at 1:25 dilution, or the same antibody pre-incubated with antigen (right). (Original magnification: X200)