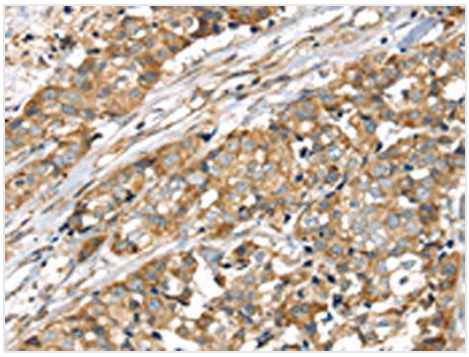
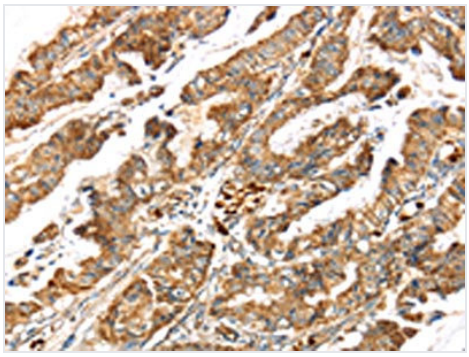
LONP1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

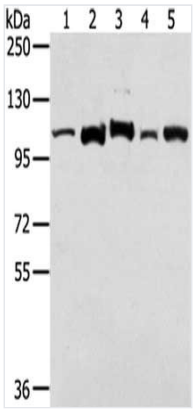
Product Name	LONP1, Polyclonal Antibody
Full Product Name	LONP1 Antibody
Product Gene Name	anti-LONP1 antibody
Product Synonym Names	lon peptidase 1; mitochondrial
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Liquid; In Phosphate Buffered Saline, pH 7.4, 0.05% NaN3, and 40% Glycerol
Purity/Purification	Antigen Affinity Purification
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.
Molecular Weight	959
OMIM	605490
3D Structure	ModBase 3D Structure for P36776
Immunogen	Synthetic peptide of human LONP1
Immunogen Species	Human
Conjugate	Non-conjugated
Product Categories/Family for anti-LONP1 antibody	Epigenetics and Nuclear Signaling
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-LONP1 antibody	ELISA (EIA), Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-LONP1 antibody	ELISA: 1:2000-1:5000 WB: 1:500-1:2000 IHC: 1:25-1:100
Related Product Information for anti-LONP1 antibody	MBS7129232 is an antibody targeting LONP1. Also known as LONP1 Antibody. Reactive in Human, Mouse. Host: Rabbit.
Other Notes	Small volumes of anti-LONP1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Immunohistochemistry (IHC)-Paraffin of anti-LONP1 antibody
The image on the left is immunohistochemistry of paraffin-embedded Human breast cancer tissue using MBS7129232(LONP1 Antibody) at dilution 1/25, on the right is treated with synthetic peptide. (Original magnification: ×200)



Immunohistochemistry (IHC)-Paraffin of anti-LONP1 antibody
The image on the left is immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using MBS7129232(LONP1 Antibody) at dilution 1/25, on the right is treated with synthetic peptide. (Original magnification: ×200)



SDS-Page of anti-LONP1 antibody
Gel: 6%SDS-PAGE,Lysate: 40 ug,Lane 1-5: A431 cells, NIH/3T3 cells, HepG2 cells, Mouse liver tissue, Hela cells,Primary antibody: MBS7129232(LONP1 Antibody) at dilution 1/250 dilution,Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution,Exposure time: 30 seconds

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for LONP1. It may not necessarily be applicable to this product.

NCBI GI #	12644239
NCBI GeneID	9361
NCBI Accession #	P36776.2
UniProt Primary Accession #	P36776
UniProt Secondary Accession #	P36777; Q8N8K8; Q9UQ95; B3KPH8; D6W635; E5KMH8; F5GZ27
UniProt Related Accession #	P36776
NCBI Official Full Name	Lon protease homolog, mitochondrial
NCBI Official Synonym Full Names	lon peptidase 1, mitochondrial
NCBI Official Symbol	LONP1
NCBI Official Synonym Symbols	LON; LONP; PIM1; hLON; LonHS; PRSS15
UniProt Protein Name	Lon protease homolog, mitochondrial
UniProt Synonym Protein Names	LONHsLon protease-like protein; Mitochondrial ATP-dependent protease Lon; Serine protease 15
UniProt Gene Name	LONP1
UniProt Entry Name	LONM_HUMAN

NCBI Protein Information	lon protease homolog, mitochondrial; LONP; LONP1; serine protease 15; lon protease-like protein; hLON ATP-dependent protease; mitochondrial lon protease-like protein; mitochondrial ATP-dependent protease Lon
NCBI Summary for LONP1	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]
UniProt Comments for LONP1	PRSS15: 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. Belongs to the peptidase S16 family. Protein type: RNA-binding; DNA-binding; Mitochondrial; EC 3.4.21.-; Protease Chromosomal Location of Human Ortholog: 19p13.2 Cellular Component: mitochondrion; membrane; mitochondrial matrix; cytoplasm Molecular Function: G-quadruplex DNA binding; protein binding; single-stranded RNA binding; sequence-specific DNA binding; ATP-dependent peptidase activity; serine-type endopeptidase activity; ADP binding; ATP binding; single-stranded DNA binding Biological Process: mitochondrion organization and biogenesis; mitochondrial genome maintenance; proteolysis involved in cellular protein catabolic process; misfolded or incompletely synthesized protein catabolic process; response to hypoxia; response to hormone stimulus; chaperone-mediated protein complex assembly; mitochondrial DNA metabolic process; protein homooligomerization; response to aluminum ion; aging Disease: Codas Syndrome
Research Articles on LONP1	**1.** Lonp1 has a protective role against ochratoxin a induced cytotoxicity in kidney cells.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/lonp1/7129232