# abcam

### Product datasheet

## Anti-LONP1/Lon antibody ab103809

## \* ★ ★ ★ ★ ★ 2 Abreviews 24 References 4 Images

#### Overview

Product name Anti-LONP1/Lon antibody

**Description** Rabbit polyclonal to LONP1/Lon

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Human

**Immunogen** Recombinant full length protein corresponding to Human LONP1/Lon aa 1-959.

Positive control Human kidney, Mouse kidney, HepG2, transfected 293T cell line

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**Storage buffer** pH: 7.4

Constituent: PBS

Purity Protein A purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

The Abpromise quarantee Our Abpromise quarantee covers the use of ab103809 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

1

Application	Abreviews	Notes
WB	<b>★★★★☆</b> (2)	Use a concentration of 1 - 5 μg/ml. Predicted molecular weight: 106 kDa.

#### **Target**

**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.

**Tissue specificity** Duodenum, heart, lung and liver, but not thymus.

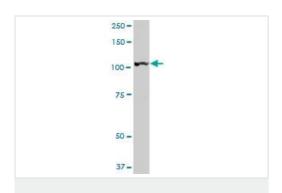
Involvement in disease CODAS syndrome

**Sequence similarities** Belongs to the peptidase S16 family.

Contains 1 Lon domain.

**Cellular localization** Mitochondrion matrix.

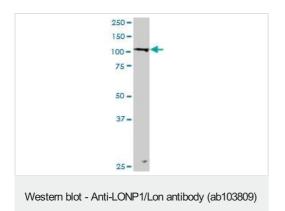
#### **Images**



Western blot - Anti-LONP1/Lon antibody (ab103809)

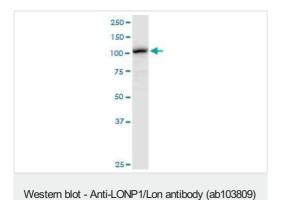
Anti-LONP1/Lon antibody (ab103809) at 5  $\mu$ g/ml + Human kidney tissue lysate at 50  $\mu$ g

Predicted band size: 106 kDa



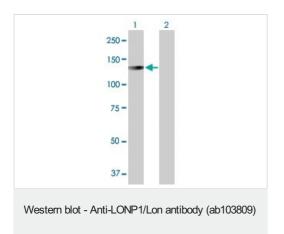
Anti-LONP1/Lon antibody (ab103809) at 5  $\mu g/ml$  + Mouse kidney tissue lysate at 50  $\mu g$ 

Predicted band size: 106 kDa



Anti-LONP1/Lon antibody (ab103809) at 5  $\mu$ g/ml + HepG2 cell lysate at 50  $\mu$ g

Predicted band size: 106 kDa



All lanes: Anti-LONP1/Lon antibody (ab103809) at 5 μg/ml

Lane 1: LONP1 transfected 293T cell lysate
Lane 2: Non-transfected 293T cell lysate

Lysates/proteins at 25 µg per lane.

Predicted band size: 106 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,

please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors