


## Product datasheet

### Anti-OMA1 antibody ab154949

★★★★★ [2 Abreviews](#) [3 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-OMA1 antibody
<b>Description</b>	Rabbit polyclonal to OMA1
<b>Host species</b>	Rabbit
<b>Specificity</b>	From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Sheep, Rabbit, Cow, Pig, Chimpanzee, Macaque monkey, Gorilla, Chinese hamster, Orangutan 
<b>Immunogen</b>	Synthetic peptide within Human OMA1 aa 400-500 conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: <a href="#">Q96E52</a>
<b>Positive control</b>	This antibody gave a positive signal in Human, Mouse and Rat Heart tissue lysates. This antibody gave a positive result in IHC in the following FFPE tissue: Human normal kidney.
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

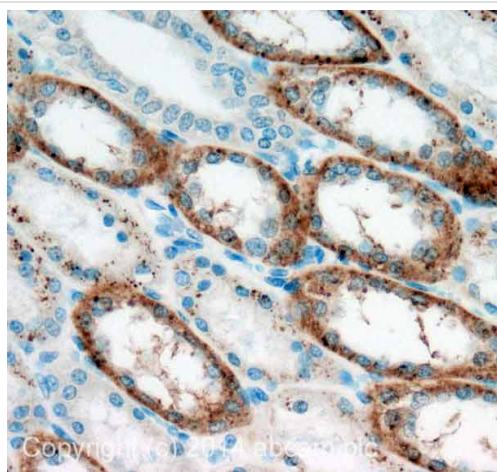
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab154949 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 58 kDa (predicted molecular weight: 60 kDa).
<b>IHC-P</b>		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Mitochondrial protease.
<b>Tissue specificity</b>	Widely expressed, with strong expression in the heart, skeletal muscle, kidney and liver.
<b>Sequence similarities</b>	Belongs to the peptidase M48 family.
<b>Cellular localization</b>	Mitochondrion membrane.

## Images

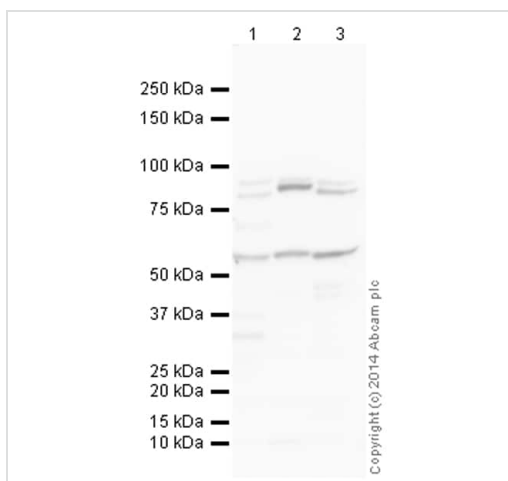


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OMA1 antibody (ab154949)

IHC image of OMA1 staining in human normal kidney formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab154949, 5µg/ml, for 15 mins 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.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - Anti-OMA1 antibody (ab154949)

**All lanes :** Anti-OMA1 antibody (ab154949) at 1 µg/ml

**Lane 1 :** Human heart tissue lysate - total protein ([ab29431](#))

**Lane 2 :** Heart (Mouse) Tissue Lysate

**Lane 3 :** Heart (Rat) Tissue Lysate

Lysates/proteins at 25 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 60 kDa

**Observed band size:** 58 kDa

**Additional bands at:** 82 kDa (possible non-specific binding)

**Exposure time:** 90 seconds

The band observed at 58 kDa could potentially be a cleaved form of OMA1 due to the presence of a 13 amino acid transit peptide.

This blot was produced using a 4-12% Bis-tris gel under the MOPS

buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab154949 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**

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

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