

## Product datasheet

### Anti-MDA5 antibody ab79055

★★★★★ [1 Abreviews](#) [6 References](#) [6 Images](#)

#### Overview

<b>Product name</b>	Anti-MDA5 antibody
<b>Description</b>	Rabbit polyclonal to MDA5
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	16 amino acid peptide from near the carboxy terminus of human MDA5.
<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). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

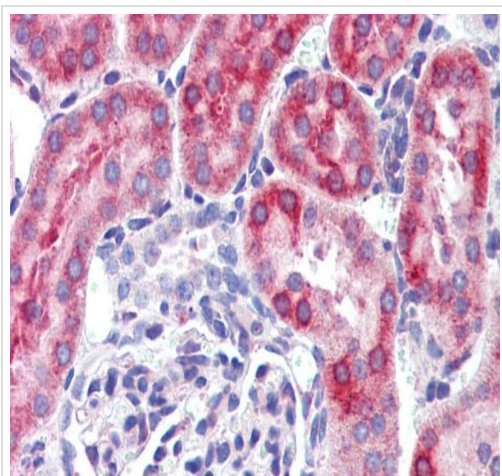
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab79055 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 - 4 µg/ml. Predicted molecular weight: 117 kDa.
IHC-P		Use a concentration of 5 µg/ml.
ICC/IF		Use a concentration of 1 µg/ml.

## Target

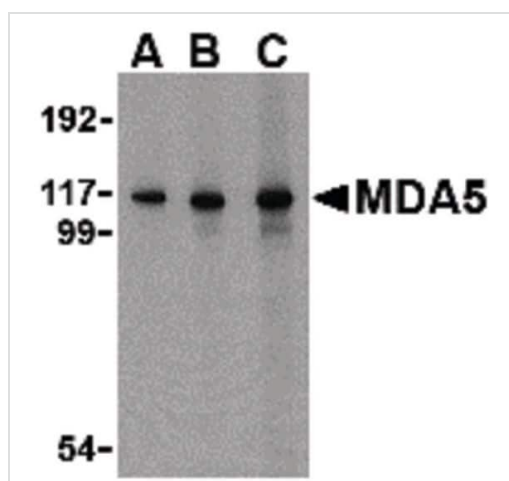
<b>Function</b>	<p>RNA helicase that, through its ATP-dependent unwinding of RNA, may function to promote message degradation by specific RNases. Seems to have growth suppressive properties. Involved in innate immune defense against viruses. Upon interaction with intracellular dsRNA produced during viral replication, triggers a transduction cascade involving MAVS/IPS1, which results in the activation of NF-kappa-B, IRF3 and IRF7 and the induction of the expression of antiviral cytokines such as IFN-beta and RANTES (CCL5). ATPase activity is specifically induced by dsRNA. Essential for the production of interferons in response to picornaviruses.</p>
<b>Tissue specificity</b>	<p>Widely expressed, at a low level. Expression is detected at slightly highest levels in placenta, pancreas and spleen and at barely levels in detectable brain, testis and lung.</p>
<b>Involvement in disease</b>	<p>Genetic variation in IFIH1 is associated with diabetes mellitus insulin-dependent type 19 (IDDM19) [MIM:610155]. A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical fetaures are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.</p> <p>Note=IFIH1 is the CADM-140 autoantigen, involved in clinically amyopathic dermatomyositis (CADM). This is a chronic inflammatory disorder that shows typical skin manifestations of dermatomyositis but has no or little evidence of clinical myositis. Anti-CADM-140 antibodies appear to be specific to dermatomyositis, especially CADM. Patients with anti-CADM-140 antibodies frequently develop life-threatening acute progressive interstitial lung disease (ILD).</p>
<b>Sequence similarities</b>	<p>Belongs to the helicase family.</p> <p>Contains 2 CARD domains.</p> <p>Contains 1 helicase ATP-binding domain.</p> <p>Contains 1 helicase C-terminal domain.</p>
<b>Post-translational modifications</b>	<p>During apoptosis, processed into 3 cleavage products. The helicase-containing fragment, once liberated from the CARD domains, translocate from the cytoplasm to the nucleus. The processed protein significantly sensitizes cells to DNA degradation.</p>
<b>Cellular localization</b>	<p>Cytoplasm. Nucleus. May be found in the nucleus, during apoptosis.</p>

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MDA5 antibody (ab79055)

Immunohistochemical analysis of MDA5 expression in paraffin embedded, formalin fixed mouse kidney using 5 µg/ml ab79055



Western blot - Anti-MDA5 antibody (ab79055)

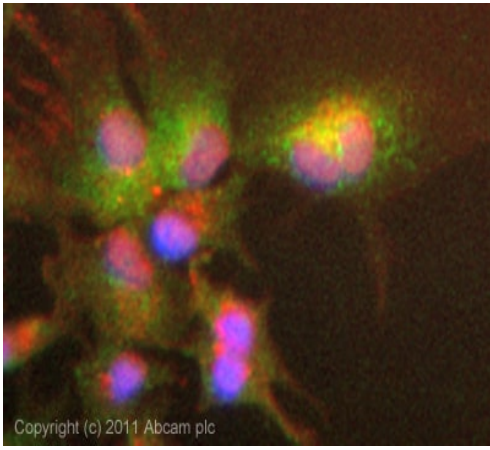
**Lane 1 :** Anti-MDA5 antibody (ab79055) at 1 µg/ml

**Lane 2 :** Anti-MDA5 antibody (ab79055) at 2 µg/ml

**Lane 3 :** Anti-MDA5 antibody (ab79055) at 4 µg/ml

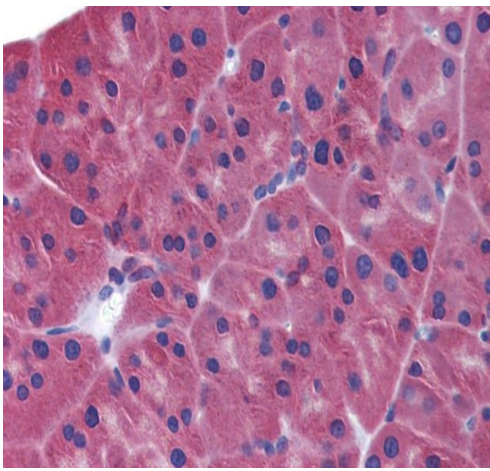
**All lanes :** Daudi cell lysate

**Predicted band size:** 117 kDa



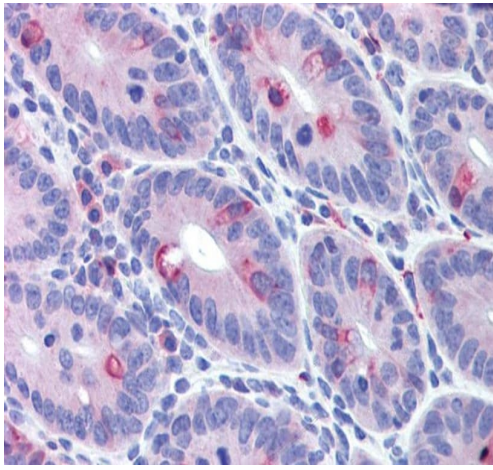
Immunocytochemistry/ Immunofluorescence - Anti-MDA5 antibody (ab79055)

ICC/IF image of ab79055 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab79055, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



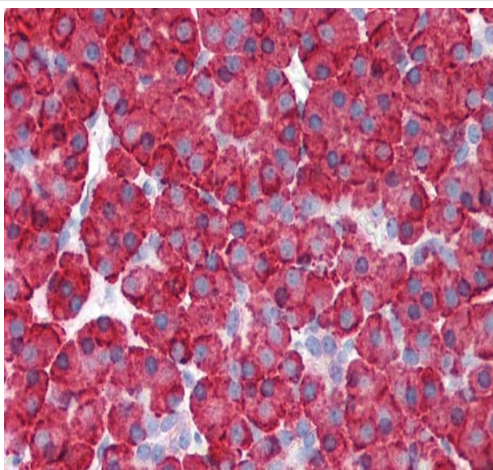
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MDA5 antibody (ab79055)

Immunohistochemical analysis of MDA5 expression in paraffin embedded, formalin fixed mouse pancreas using 5 µg/ml ab79055



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MDA5 antibody (ab79055)

Immunohistochemical analysis of MDA5 expression in paraffin embedded, formalin fixed mouse small intestine using 5 µg/ml ab79055



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MDA5 antibody (ab79055)

Immunohistochemical analysis of MDA5 expression in paraffin embedded, formalin fixed human pancreas using 5 µg/ml ab79055

**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 <https://www.abcam.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

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