

## Product datasheet

# Anti-GRIM19 antibody [EPR4471(2)] ab109017

**KO VALIDATED** Recombinant RabMAb

4 Images

### Overview

<b>Product name</b>	Anti-GRIM19 antibody [EPR4471(2)]
<b>Description</b>	Rabbit monoclonal [EPR4471(2)] to GRIM19
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HeLa, Ramos, Jurkat, and 293T cell lysates. IHC-P: Human kidney tissue.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p><b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b></p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4471(2)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab109017 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

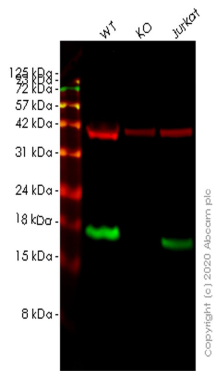
Application	Abreviews	Notes
<b>WB</b>		1/1000 - 1/10000. Predicted molecular weight: 17 kDa.
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt or IP.

## Target

<b>Function</b>	Accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), that is believed not to be involved in catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. Involved in the interferon/all-trans-retinoic acid (IFN/RA) induced cell death. This apoptotic activity is inhibited by interaction with viral IRF1. Prevents the transactivation of STAT3 target genes. May play a role in CARD15-mediated innate mucosal responses and serve to regulate intestinal epithelial cell responses to microbes.
<b>Tissue specificity</b>	Widely expressed, with highest expression in heart, skeletal muscle, liver, kidney and placenta. In intestinal mucosa, down-regulated in areas involved in Crohn disease and ulcerative colitis.
<b>Involvement in disease</b>	Defects in NDUFA13 may be a cause of susceptibility to Hurthle cell thyroid carcinoma (HCTC) [MIM:607464]. Hurthle cell thyroid carcinoma accounts for approximately 3% of all thyroid cancers. Although they are classified as variants of follicular neoplasms, they are more often multifocal and somewhat more aggressive and are less likely to take up iodine than are other follicular neoplasms.
<b>Sequence similarities</b>	Belongs to the complex I NDUFA13 subunit family.
<b>Developmental stage</b>	Expressed in numerous fetal tissues.
<b>Cellular localization</b>	Mitochondrion inner membrane. Nucleus. May be translocated into the nucleus upon IFN/RA treatment.

## Images



Western blot - Anti-GRIM19 antibody [EPR4471(2)] (ab109017)

**All lanes** : Anti-GRIM19 antibody [EPR4471(2)] (ab109017) at 1/1000 dilution

**Lane 1** : Wild-type HeLa cell lysate

**Lane 2** : NDUFA13 knockout HeLa cell lysate

**Lane 3** : Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

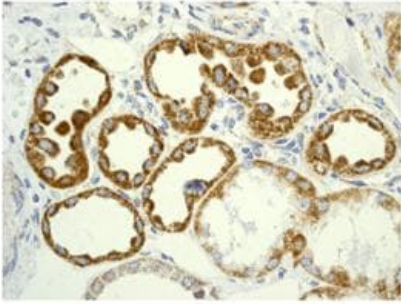
**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

**Predicted band size:** 17 kDa

**Observed band size:** 17 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab109017 observed at 17 kDa. Red - loading control ab8245 observed at 36 kDa.

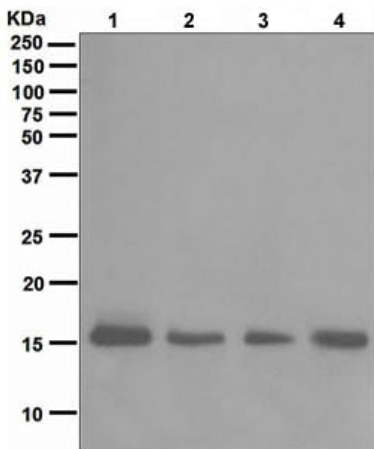
ab109017 Anti-GRIM19 antibody [EPR4471(2)] was shown to specifically react with GRIM19 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265863 (knockout cell lysate ab257136) was used. Wild-type and GRIM19 knockout samples were subjected to SDS-PAGE. ab109017 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GRIM19 antibody [EPR4471(2)] (ab109017)

Immunohistochemical analysis of GRIM19 in paraffin-embedded Human kidney tissue using ab109017 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-GRIM19 antibody [EPR4471(2)] (ab109017)

**All lanes** : Anti-GRIM19 antibody [EPR4471(2)] (ab109017) at 1/1000 dilution

**Lane 1** : HeLa cell lysate

**Lane 2** : Ramos cell lysate

**Lane 3** : Jurkat cell lysate

**Lane 4** : 293T cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 17 kDa

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-GRIM19 antibody [EPR4471(2)] (ab109017)

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

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