

## Product datasheet

### Anti-TIM44 antibody [EPR16821] ab194829

Recombinant **RabMAb**

[5 References](#) [6 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-TIM44 antibody [EPR16821]  |
| <b>Description</b>         | Rabbit monoclonal [EPR16821] to TIM44   |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, ICC/IF, IP, IHC-P  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Human  |
| <b>Immunogen</b>           | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.  |
| <b>Positive control</b>    | A431, HepG2 and K562 cell lysates; Mouse heart lysate; Human endometrial adenocarcinoma tissue; A431 cells.   |
| <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> |

#### 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 long term. Avoid freeze / thaw cycle.  |
| <b>Storage buffer</b>       | <p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p> |
| <b>Purity</b>               | Protein A purified   |
| <b>Clonality</b>            | Monoclonal   |
| <b>Clone number</b>         | EPR16821   |
| <b>Isotype</b>              | IgG  |

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab194829 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          |           | 1/1000 - 1/10000. Detects a band of approximately 45 kDa (predicted molecular weight: 51 kDa).                                   |
| ICC/IF      |           | 1/50.  |
| IP          |           | 1/20.  |
| IHC-P       |           | 1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |

## Target

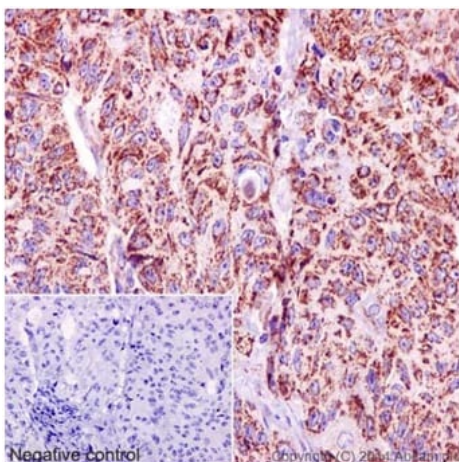
### Relevance

TIM44 is the essential component of the PAM complex, a complex required for the translocation of transit peptide-containing proteins from the inner membrane into the mitochondrial matrix in an ATP-dependent manner. It recruits mitochondrial HSP70 to drive protein translocation into the matrix using ATP as an energy source.

### Cellular localization

Mitochondrion inner membrane.

## Images



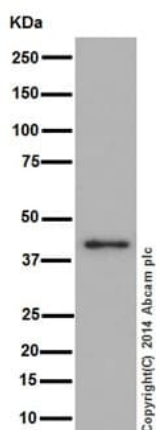
Immunohistochemical analysis of paraffin-embedded Human endometrial adenocarcinoma tissue labeling TIM44 with ab194829 at 1/100 dilution (5µg/ml). A Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution was used as secondary ([ab97051](#)).

Counterstain: Hematoxylin.

Inset image: negative control obtained using PBS instead of ab194829. Cytoplasm staining on human endometrial adenocarcinoma was observed.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIM44 antibody [EPR16821] (ab194829)



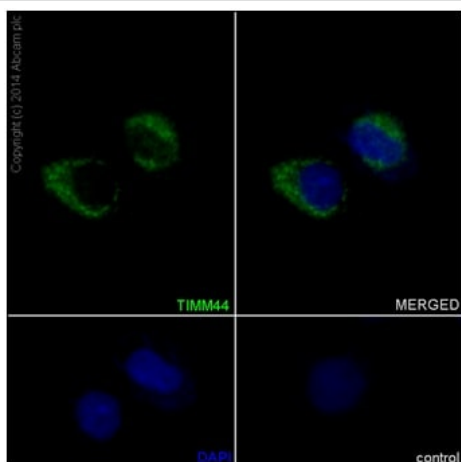
Western blot - Anti-TIM44 antibody [EPR16821]  
(ab194829)

Anti-TIM44 antibody [EPR16821] (ab194829) at 1/1000 dilution +  
Mouse heart tissue lysate at 10 µg

### Secondary

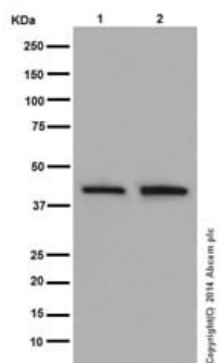
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000  
dilution

**Predicted band size:** 51 kDa



Immunocytochemistry/ Immunofluorescence - Anti-  
TIM44 antibody [EPR16821] (ab194829)

Immunofluorescent analysis of A431 cells labeling TIM44 with  
ab194829 at 1/50 dilution. A Goat anti rabbit IgG (Alexa Fluor488)  
at 1/400 dilution (**ab150077**) was used as secondary antibody.  
Cells were fixed with 4% paraformaldehyde and permeabilized with  
0.1% triton X-100. Counterstain: DAPI. Cytoplasm staining on A431  
cell line was observed.



Western blot - Anti-TIM44 antibody [EPR16821]  
(ab194829)

**All lanes :** Anti-TIM44 antibody [EPR16821] (ab194829) at 1/5000 dilution

**Lane 1 :** A431 cell lysate

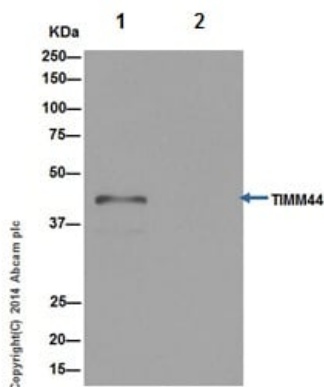
**Lane 2 :** HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 51 kDa



Immunoprecipitation - Anti-TIM44 antibody  
[EPR16821] (ab194829)

Immunoprecipitation analysis of immunoprecipitation pellet from K562 cell lysate immunoprecipitated using **ab194826** at 1/20 dilution (Lane 1). Lane 2: PBS instead of K562 cell lysate. ab194829 at 1/1000 was used for subsequent western blot detection. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 was used as secondary antibody.

### 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-TIM44 antibody [EPR16821] (ab194829)

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