

Product datasheet

Anti-TIM44 antibody [EPR16821-26] ab201453

Recombinant RabMAb

★★★★☆ **1 Abreviews** [8 Images](#)

Overview

Product name	Anti-TIM44 antibody [EPR16821-26]
Description	Rabbit monoclonal [EPR16821-26] to TIM44
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF, IP
Species reactivity	Reacts with: Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: K562, Daudi, HepG2, PC-12 and C6 cell lysates; Human fetal liver lysate. ICC/IF: K562 and HepG2 cells. IP: K562 whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16821-26
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab201453 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
Flow Cyt (Intra)		1/500.
WB	★★★★★ (1)	1/2000. Detects a band of approximately 45 kDa (predicted molecular weight: 51 kDa).
ICC/IF		1/500.
IP		1/120.

Target

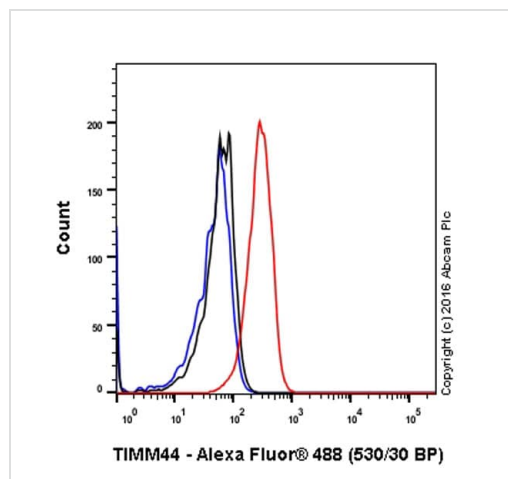
Relevance

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

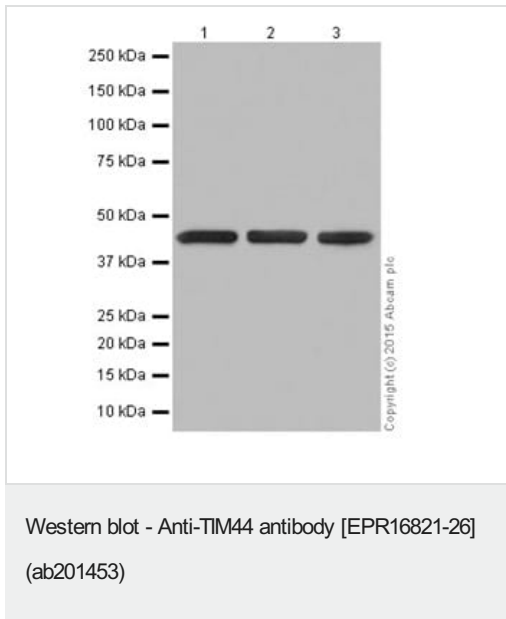
Mitochondrion inner membrane.

Images



Intracellular Flow Cytometry analysis of HepG2 (human hepatocellular carcinoma) labelling TIM44 with purified ab201453 at 1/500 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Alexa Fluor[®] 488 goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

Flow Cytometry (Intracellular) - Anti-TIM44 antibody
[EPR16821-26] (ab201453)



All lanes : Anti-TIM44 antibody [EPR16821-26] (ab201453) at 1/2000 dilution

Lane 1 : K562 (Human chronic myelogenous leukemia cells from bone marrow) cell lysate

Lane 2 : HepG2 (Human liver hepatocellular carcinoma) cell lysate

Lane 3 : Daudi (Human Burkitt's lymphoma cell line) cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

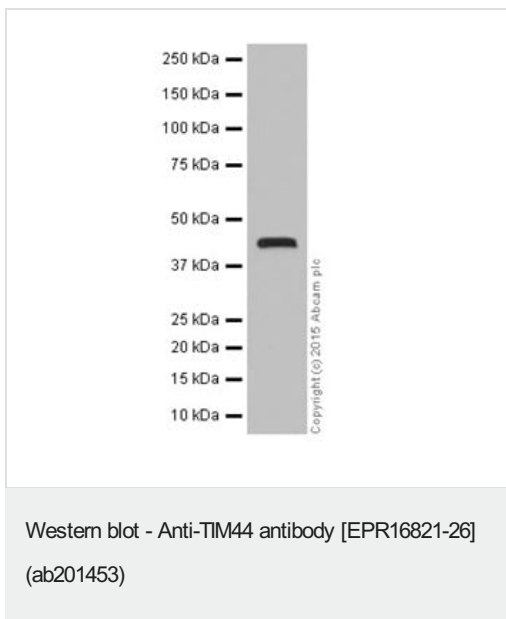
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 51 kDa

Observed band size: 45 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



Anti-TIM44 antibody [EPR16821-26] (ab201453) at 1/10000 dilution + Human fetal liver lysate at 10 µg

Secondary

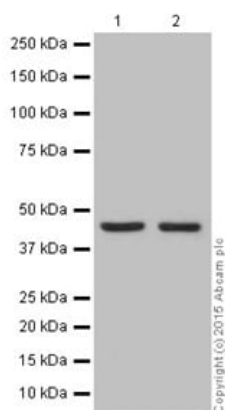
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 51 kDa

Observed band size: 45 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-TIM44 antibody [EPR16821-26] (ab201453)

All lanes : Anti-TIM44 antibody [EPR16821-26] (ab201453) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cells) cell lysate

Lane 2 : PC-12 (Rat adrenal gland pheochromocytoma) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

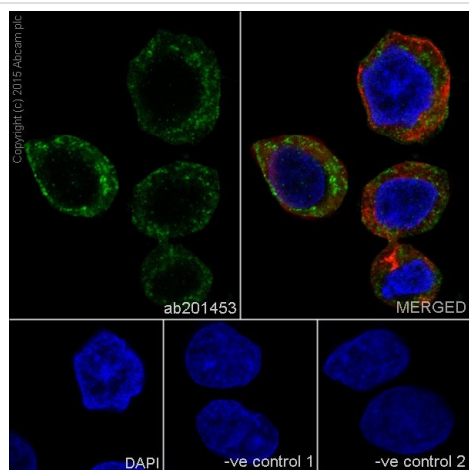
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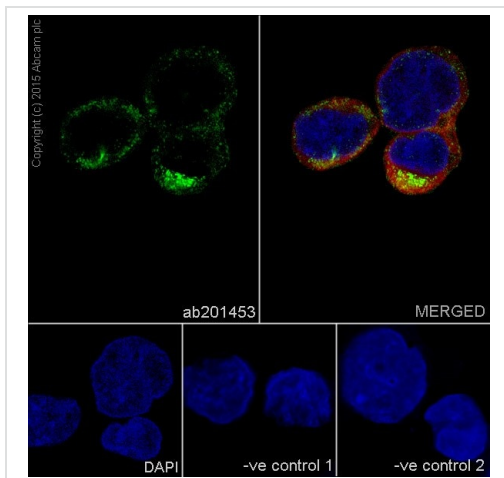
Immunocytochemistry/ Immunofluorescence - Anti-TIM44 antibody [EPR16821-26] (ab201453)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling TIM44 with ab201453 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasm staining on HepG2 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab201453 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



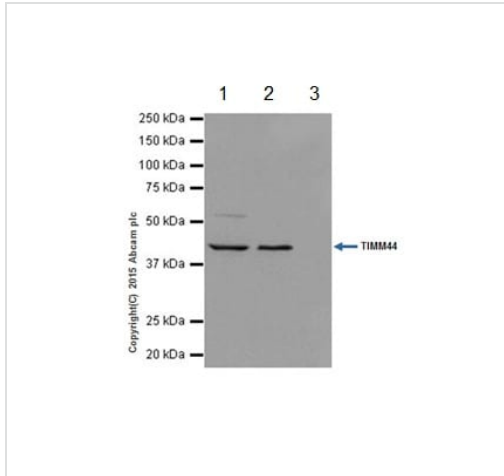
Immunocytochemistry/ Immunofluorescence - Anti-TIM44 antibody [EPR16821-26] (ab201453)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling TIM44 with ab201453 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasm staining on K562 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

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Immunoprecipitation - Anti-TIM44 antibody [EPR16821-26] (ab201453)





TIM44 was immunoprecipitated from 1mg of K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate with ab201453 at 1/120 dilution. Western blot was performed from the immunoprecipitate using ab201453 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1500 dilution.

Lane 1: K562 whole cell lysate 10 µg (Input). Lane 2: ab201453 IP in K562 whole cell lysate. Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab201453 in K562 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-TIM44 antibody [EPR16821-26] (ab201453)

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

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