# abcam

## Product datasheet

## Anti-mtTFA antibody - Mitochondrial Marker ab47517

★★★★★ 5 Abreviews 22 References 4 图像

概述

产**品名称** Anti-mtTFA抗体- Mitochondrial Marker

描述 兔多克隆抗体to mtTFA - Mitochondrial Marker

**宿主** Rabbit

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide corresponding to Human mtTFA aa 150 to the C-terminus conjugated to

keyhole limpet haemocyanin. (Peptide available as <u>ab47516</u>)

常规说明

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.

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&As

性能

形式 Liquid

存放说明 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.

**存储溶液** 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.

纯**度** Immunogen affinity purified

克隆 多克隆

**同种型** lgG

1

### The Abpromise guarantee Abpromis

#### Abpromise™承诺保证使用ab47517于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	*** <u>*</u> (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 25 kDa (predicted molecular weight: 29 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

#### 靶标

#### 功能

Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation. Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase. Promotes transcription initiation from the HSP1 and the light strand promoter by binding immediately upstream of transcriptional start sites. Is able to unwind and bend DNA. Required for maintenance of normal levels of mitochondrial DNA. May play a role in organizing and compacting mitochondrial DNA. target DNA. Interacts with TFB1M and TFB2M.

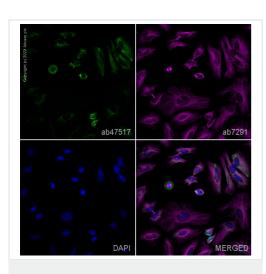
## 序列相似性

Contains 2 HMG box DNA-binding domains.

#### 细胞定位

Mitochondrion.

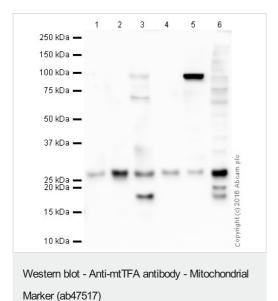
#### 图片



Immunocytochemistry/ Immunofluorescence - AntimtTFA antibody - Mitochondrial Marker (ab47517)

ab47517 staining mtTFA in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab47517 at 5µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



**All lanes :** Anti-mtTFA antibody - Mitochondrial Marker (ab47517) at 1 µg/ml

**Lane 1 :** Skeletal Muscle (Human) Tissue Lysate - adult normal tissue

Lane 2: Human heart tissue lysate - total protein (ab29431)

Lane 3: Brown adipose (Mouse) Tissue Lysate

Lane 4: Brown adipose (Rat) Tissue Lysate

Lane 5 : Heart (Mouse) Tissue Lysate

Lane 6 : Heart (Rat) Tissue Lysate

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

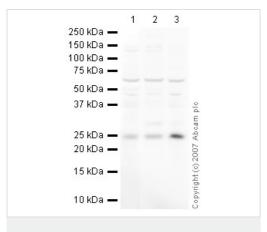
**Predicted band size:** 29 kDa **Observed band size:** 29 kDa

Additional bands at: 100 kDa, 18 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 8 minutes

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 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 ab47517 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution ab133406.



Western blot - Anti-mtTFA antibody - Mitochondrial Marker (ab47517)

**All lanes :** Anti-mtTFA antibody - Mitochondrial Marker (ab47517) at 1 μg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 3 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

## **Secondary**

**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 29 kDa **Observed band size:** 25 kDa

Additional bands at: 60 kDa. We are unsure as to the identity of

these extra bands.



Western blot - Anti-mtTFA antibody - Mitochondrial Marker (ab47517)

**All lanes :** Anti-mtTFA antibody - Mitochondrial Marker (ab47517) at 2  $\mu$ g/ml

Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 2 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate with Human mtTFA peptide (<u>ab47516</u>) at 2 µg/ml

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

**Predicted band size:** 29 kDa **Observed band size:** 24,26 kDa

Additional bands at: 50 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 10 minutes

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

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- Extensive multi-media technical resources to help you
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