

Product datasheet

Anti-mtTFA antibody [EPR23548-120] ab252432

Recombinant RabMAb

2 References 8 Images

Overview

Product name	Anti-mtTFA antibody [EPR23548-120]
Description	Rabbit monoclonal [EPR23548-120] to mtTFA
Host species	Rabbit
Tested applications	Suitable for: IP, Flow Cyt (Intra), WB, ICC/IF Unsuitable for: IHC-P
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: C2C12, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; Mouse cerebellum, heart and kidney tissue lysates;, Rat cerebellum and heart tissue lysates. ICC/IF: C2C12 and PC-12 cells. Flow Cyt (intra): C2C12 cells. IP: C2C12 and PC-12 cell lysate
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23548-120

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab252432 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
IP		Use at an assay dependent concentration.
Flow Cyt (Intra)		1/600.
WB		1/1000. Detects a band of approximately 25 kDa (predicted molecular weight: 28 kDa).
ICC/IF		1/500.

Application notes

Is unsuitable for IHC-P.

Target

Function

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.

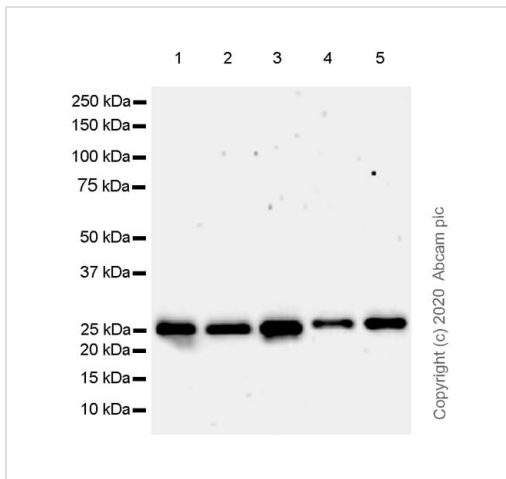
Sequence similarities

Contains 2 HMG box DNA-binding domains.

Cellular localization

Mitochondrion.

Images



Western blot - Anti-mtTFA antibody [EPR23548-120] (ab252432)

All lanes : Anti-mtTFA antibody [EPR23548-120] (ab252432) at 1/1000 dilution

Lane 1 : Mouse cerebellum tissue lysate

Lane 2 : Mouse heart tissue lysate

Lane 3 : Mouse kidney tissue lysate

Lane 4 : Rat cerebellum tissue lysate

Lane 5 : Rat heart tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

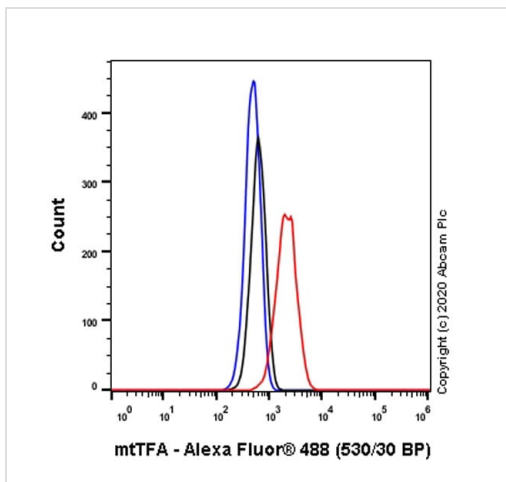
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 28 kDa

Observed band size: 25 kDa

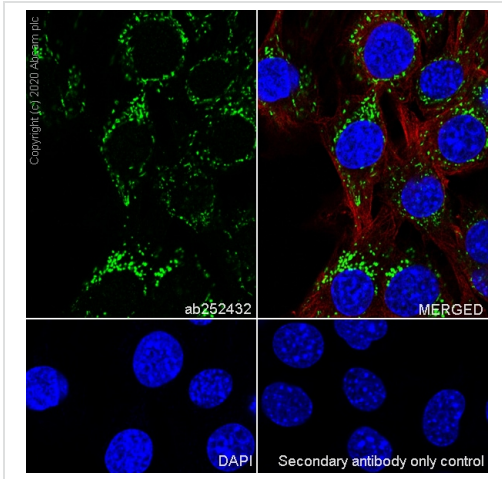
Blocking and diluting buffer and concentration: 5% NFDm/TBST.

Exposure time: 3 minutes.



Flow Cytometry (Intracellular) - Anti-mtTFA antibody [EPR23548-120] (ab252432)

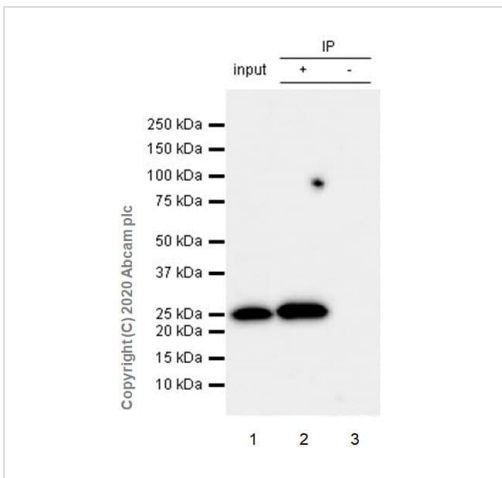
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized C2C12 (Mouse myoblasts myoblast) cells labelling mtTFA with ab252432 at 1/600 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-mtTFA antibody [EPR23548-120] (ab252432)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized C2C12 cells labelling mtTFA with ab252432 at 1/500 dilution, followed by [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in C2C12 cell line is observed. [ab195889](#) Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 2 ug/ml dilution.



Immunoprecipitation - Anti-mtTFA antibody [EPR23548-120] (ab252432)

mtTFA was immunoprecipitated from 0.35 mg C2C12 (mouse myoblasts myoblast) whole cell lysate using ab252432 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab252432 at 1/500 dilution, followed by VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) at 1/1000 dilution.

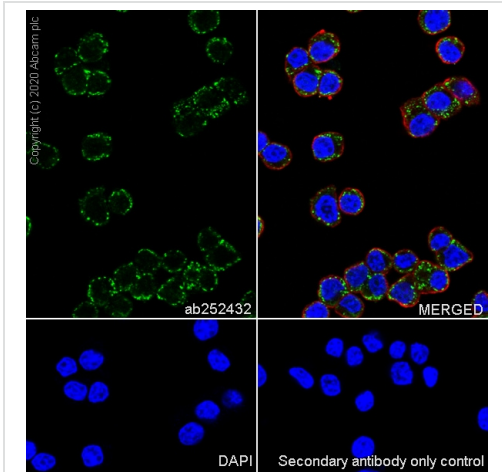
Lane 1: C2C12 whole cell lysate (Input)

Lane 2: ab252432 IP in C2C12 cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab252432 in C2C12 whole cell lysate

Blocking /Diluting buffer and concentration: 5% NFDm/TBST

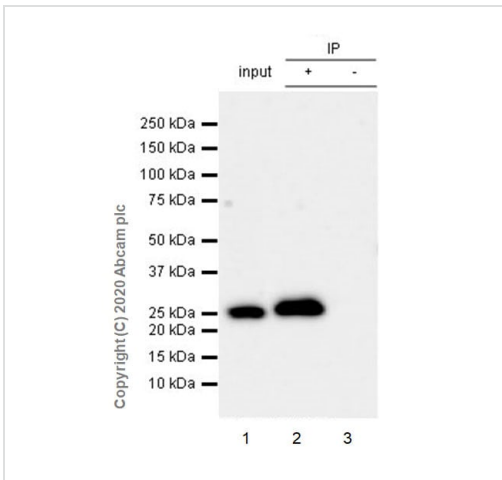
Exposure time: 32 seconds



Immunocytochemistry/ Immunofluorescence - Anti-mtTFA antibody [EPR23548-120] (ab252432)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized PC-12 cells labelling mtTFA with ab252432 at 1/500 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in PC-12 cell line is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 2 ug/ml dilution.



Immunoprecipitation - Anti-mtTFA antibody [EPR23548-120] (ab252432)

mtTFA was immunoprecipitated from 0.35 mg PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate using ab252432 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab252432 at 1/500 dilution, followed by VeriBlot for IP Detection Reagent (HRP)(ab131366) at 1/1000 dilution.

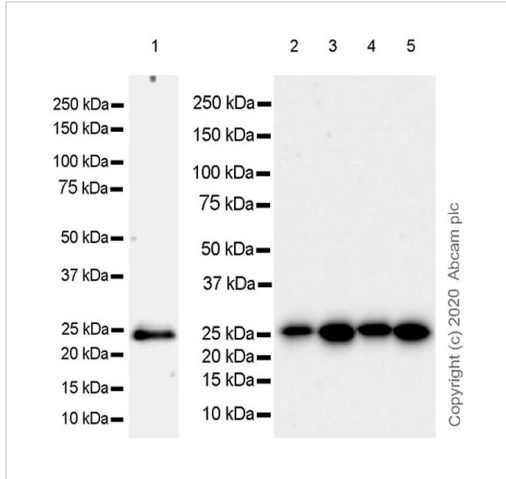
Lane 1: PC-12 whole cell lysate (Input)

Lane 2: ab252432 IP in PC-12 cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab252432 in PC-12 whole cell lysate

Blocking /Diluting buffer and concentration: 5% NFD/MTBST

Exposure time: 32 seconds



Western blot - Anti-mtTFA antibody [EPR23548-120] (ab252432)

All lanes : Anti-mtTFA antibody [EPR23548-120] (ab252432) at 1/1000 dilution

Lane 1 : C2C12 (mouse myoblasts myoblast) whole cell lysate

Lane 2 : C6 (rat glial tumor glial cell) whole cell lysate

Lane 3 : RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lane 4 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lane 5 : NIH/3T3 (mouse embryonic fibroblast) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 28 kDa

Observed band size: 25 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 25375380)

Exposure times: Lane 1: 3 minutes; Lanes 2-5: 70 seconds.

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-mtTFA antibody [EPR23548-120] (ab252432)

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