abcam

Product datasheet

Anti-mtTFA antibody [EPR12285] - BSA and Azide free ab240958

Recombinant RabMAb

8 Images

Overview

Product name	Anti-mtTFA antibody [EPR12285] - BSA and Azide free
Description	Rabbit monoclonal [EPR12285] to mtTFA - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, ICC/IF, IHC-P, WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP:HeLa, A431, MCF7 and 293T cell lysates. IHC-P: Human kidney and prostate tissues ICC/IF: MCF7 cells.
General notes	ab240958 is the carrier-free version of **ab176558**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR12285
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab240958 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.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 29 kDa.

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.

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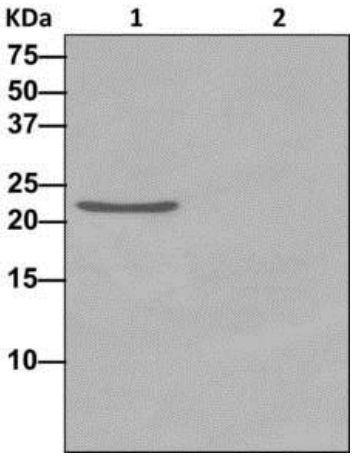
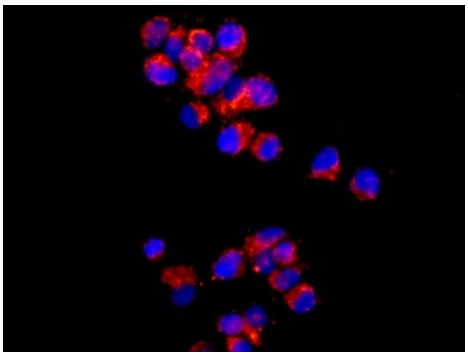
Images



Immunoprecipitation - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

Western blot analysis on Immunoprecipitation pellet from either 1) 293T cell lysate, or 2) 1xPBS (negative control), showing mtTFA, using unpurified **ab176558** at 1/10 dilution and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

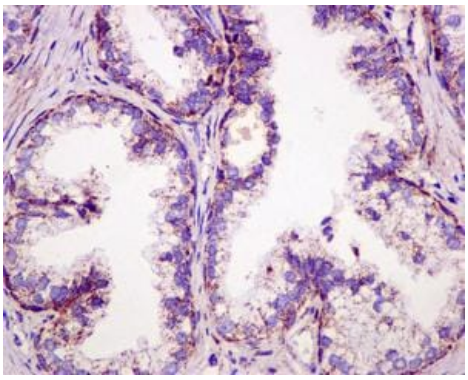
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**).



Immunocytochemistry/ Immunofluorescence - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

Immunofluorescence analysis of MCF7 cells, labeling mtTFA using unpurified **ab176558** at a 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**).

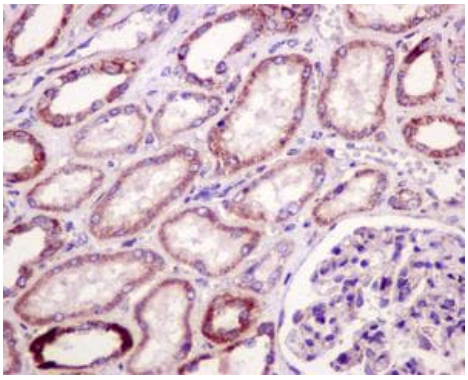


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human prostate tissue, labeling mtTFA using unpurified **ab176558** at a 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**).

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

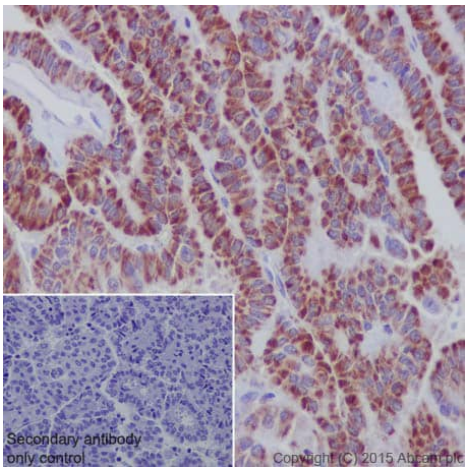


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human kidney tissue, labeling mtTFA using unpurified **ab176558** at a 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**).

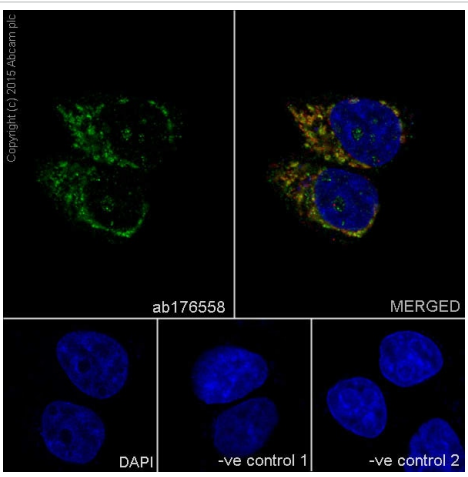
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

Immunohistochemical staining of paraffin embedded human thyroid carcinoma with purified **ab176558** at a working dilution of 1/300. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**).



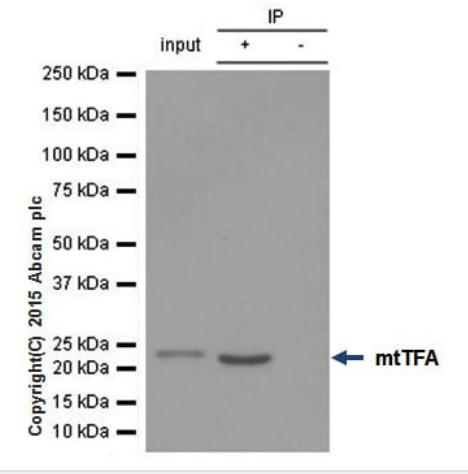
Immunocytochemistry/ Immunofluorescence - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

Immunofluorescence staining of MCF7 cells with purified **ab176558** at a working dilution of 1/250, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100.

The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified **ab176558** was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500.

For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**).



Immunoprecipitation - Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

ab176558 (purified) at 1/40 immunoprecipitating mtTFA in 10 ?g HEK293 (Lanes 1 and 2, observed at 24 kDa). Lane 3 - PBS. For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution. Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBSTThis data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab176558**)

Anti-mtTFA antibody [EPR12285] - BSA and Azide free (ab240958)

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