

Product datasheet

Anti-mtTFA antibody [18G102B2E11] - Mitochondrial Marker ab119684

★★★★★ 1 Abreviews 17 References 4 Images

Overview

Product name	Anti-mtTFA antibody [18G102B2E11] - Mitochondrial Marker
Description	Mouse monoclonal [18G102B2E11] to mtTFA - Mitochondrial Marker
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB, In-Cell ELISA, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Human Does not react with: Mouse, Rat
Immunogen	This information is considered to be commercially sensitive.
Positive control	IHC-P: human liver FFPE tissue sections
General notes	This antibody clone is manufactured by Abcam. Product was previously marketed under the MitoSciences sub-brand. If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact orders@abcam.com or you can find further information here .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
Purity	Ammonium Sulphate Precipitation
Purification notes	Purity is near homogeneity as judged by SDS-PAGE. ab119684 was produced in vitro using hybridomas grown in serum-free medium, and then concentrated by ammonium sulfate precipitation.
Clonality	Monoclonal
Clone number	18G102B2E11
Isotype	IgG2b
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab119684** 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
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★★	Use a concentration of 1 µg/ml. Predicted molecular weight: 29 kDa.
In-Cell ELISA		Use a concentration of 1 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 1 µg/ml.

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.

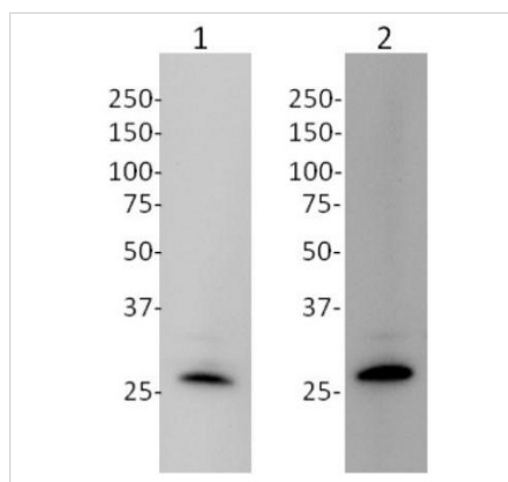
Sequence similarities

Contains 2 HMG box DNA-binding domains.

Cellular localization

Mitochondrion.

Images



Western blot - Anti-mtTFA antibody [18G102B2E11]
- Mitochondrial Marker (ab119684)

All lanes : Anti-mtTFA antibody [18G102B2E11] - Mitochondrial Marker (ab119684) at 1 µg/ml

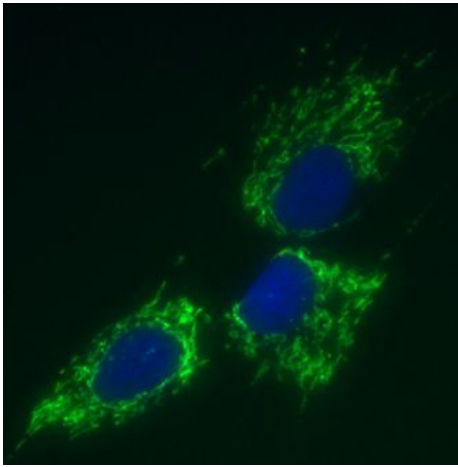
Lane 1 : recombinant mtTFA ([ab103784](#)) at 0.025 µg

Lane 2 : HeLa whole cell lysate at 30 µg

Secondary

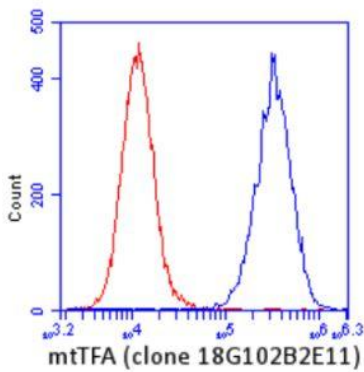
All lanes : HRP-conjugated Goat polyclonal to mouse IgG at 1/5000 dilution

Predicted band size: 29 kDa



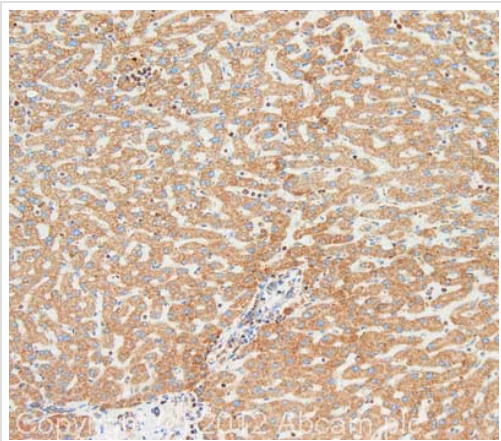
Immunocytochemistry/ Immunofluorescence - Anti-mtTFA antibody [18G102B2E11] - Mitochondrial Marker (ab119684)

Immunocytochemistry image of ab119684 stained human HDFn cells. The cells were paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15min). The cells were incubated with the antibody (18G102B2E11, 1 µg/ml) for 2h at room temperature. The secondary antibody was (green) 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. 10% Goat serum was used as the blocking agent for all blocking steps. DAPI was used to stain the cell nuclei (blue). mtTFA localizes to the mitochondria.



Flow Cytometry - Anti-mtTFA antibody [18G102B2E11] - Mitochondrial Marker (ab119684)

HeLa cells were stained with 2 µg/mL mtTFA antibody (ab119684) (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-mtTFA antibody [18G102B2E11] - Mitochondrial Marker (ab119684)

IHC image of mtTFA staining in human liver HCC formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab119684, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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