abcam

ab203517

Anti-BTF3 antibody [EPR16495]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR16495
Purification technique	Affinity purification Protein A
Concentration	1.176 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	1/70
Notes	-

Expected

Species	Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/250
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/250
Notes	-

Species	Rat
Dilution info	1/250
Notes	-

Species	Human
Dilution info	1/250
Notes	-

Target data

See full target information BTF3

Function When associated with NACA, prevents inappropriate targeting of non-secretory polypeptides to the endoplasmic reticulum (ER). Binds to nascent polypeptide chains as they emerge from the ribosome and blocks their interaction with the signal recognition particle (SRP), which normally targets nascent secretory peptides to the ER. BTF3 is also a general transcription factor that can form a stable complex with RNA polymerase II. Required for the initiation of transcription.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	BTF3 also known as Basic Transcription Factor 3 is an important transcription factor weighing around 21 kDa. It plays a mechanical role in initiating and regulating transcription by binding to RNA polymerase II facilitating gene expression. BTF3 is ubiquitously expressed in various tissues serving as an essential component in cellular processes. Its activity is not confined to specific cell types making it an important element across the organism.
Biological function summary	BTF3 contributes significantly to the regulation of transcription and is part of the transcriptional preinitiation complex. This complex is necessary for the transcription of class II genes influencing cell cycle and growth. Through its interaction within this complex BTF3 assists in recruiting RNA polymerase II to

	specific gene promoters. It plays a role in maintaining gene expression stability affecting how cells respond to different stimuli.
Pathways	BTF3 is integrally involved in the transcriptional regulation pathways. It directly participates in the transcription initiation process working with proteins such as TFIIB and TFIID within the transcriptional machinery. This interaction places BTF3 as a critical link in the gene expression regulatory network impacting the overall cellular response to environmental and physiological signals.
Associated diseases and disorders	BTF3 has associations with several conditions including cancer and neurodegenerative diseases. In cancer the overexpression of BTF3 leads to unchecked cell proliferation linking it with tumorigenesis. It interacts with proteins such as MYC which is vital in cell cycle regulation and apoptosis. In neurodegenerative conditions the disruption of BTF3's normal function may contribute to pathological progress showing its broad relevance in both health and disease.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

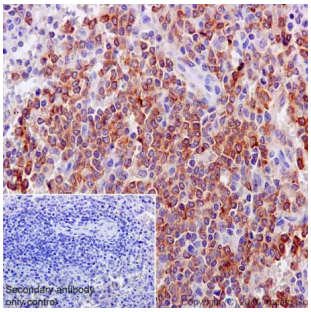
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

14 product images



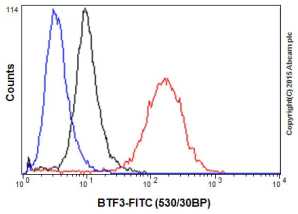
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BTF3 antibody [EPR16495] (ab203517)

Immunohistochemical analysis of paraffin-embedded Human spleen labeling BTF3 with ab203517 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on Human spleen tissue is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

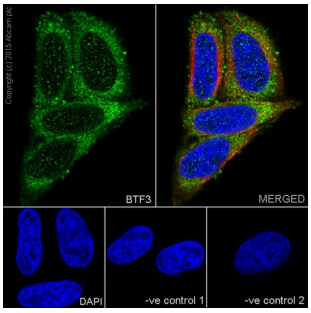
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 Flow Cytometry (Intracellular) staining using rabbit Anti-BTF3 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling BTF3 with ab203517 at 1/250 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-BTF3 antibody

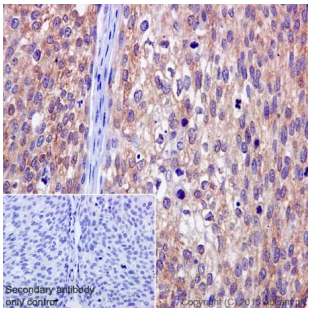
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling BTF3 with ab203517 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal imaging showing cytoplasmic and weakly nuclear staining on HeLa cell line.

The nuclear counterstain 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 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab203517 at 1/250 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 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 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BTF3 antibody [EPR16495] (ab203517)

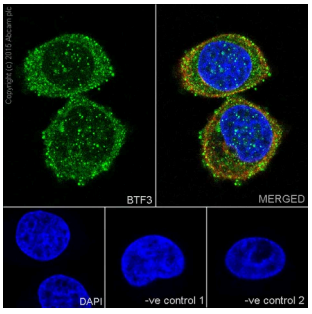
BTF3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-BTF3 antibody

Immunohistochemical analysis of paraffin-embedded Human cervix carcinoma labeling BTF3 with ab203517 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Cytoplasmic staining on Human cervix carcinoma tissue is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-BTF3 antibody

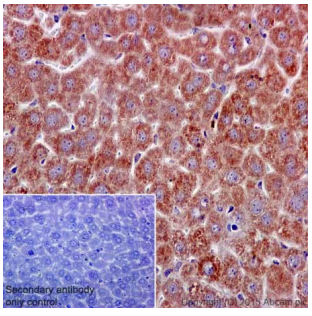
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SK-BR-3 (Human mammary gland adenocarcinoma cell line) cells labeling BTF3 with ab203517 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal imaging showing cytoplasmic and weakly nuclear staining on SK-BR-3 cell line.

The nuclear counterstain 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 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab203517 at 1/250 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BTF3 antibody [EPR16495] (ab203517)

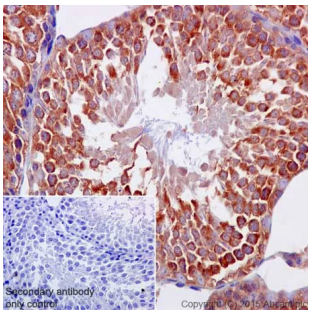
BTF3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-BTF3 antibody

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling BTF3 with ab203517 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Cytoplasmic staining on mouse liver tissue is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BTF3 antibody [EPR16495] (ab203517)

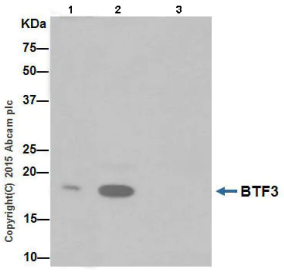
BTF3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-BTF3 antibody

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling BTF3 with ab203517 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Cytoplasmic staining on rat testis tissue is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 was immunoprecipitated from 1mg of NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysate with ab203517 at 1/70 dilution.
Western blot was performed from the immunoprecipitate using ab203517 at 1/1000 dilution.

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: NIH/3T3 whole cell lysate 10ug (Input).

Lane 2: ab203517 IP in NIH/3T3 whole cell lysate.

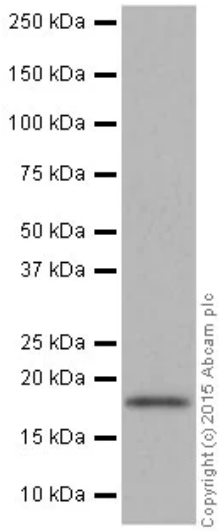
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab203517 in NIH/3T3 whole cell lysate.

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

Exposure time: 10 seconds.

All lanes:
Immunoprecipitation - Anti-BTF3 antibody [EPR16495] (ab203517)

Predicted band size: 22 kDa



Western blot - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 Western blot staining of Human lymph node lysate using rabbit Anti-BTF3 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BTF3 antibody [EPR16495] (ab203517) at 1/1000 dilution

All lanes:
Human lymph node lysate at 10 µg

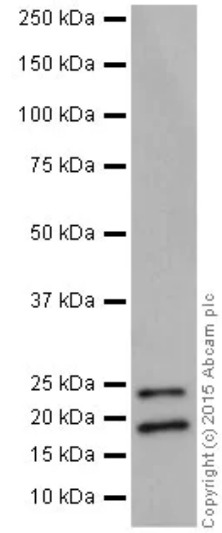
Secondary

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

Predicted band size: 22 kDa

Observed band size: 18 kDa

Exposure time: 30s



Western blot - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 Western blot staining of Human fetal kidney lysate using rabbit Anti-BTF3 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BTF3 antibody [EPR16495] (ab203517) at 1/1000 dilution

All lanes:
Human fetal kidney lysate at 10 µg

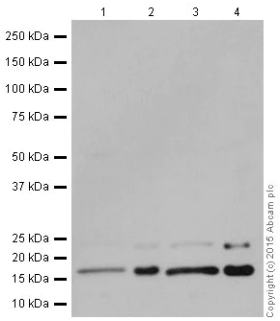
Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 22 kDa

Observed band size: 18 kDa, 22 kDa

Exposure time: 3min



Western blot - Anti-BTF3 antibody [EPR16495] (ab203517)

BTF3 Western blot staining using rabbit Anti-BTF3 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BTF3 antibody [EPR16495] (ab203517) at 1/2000 dilution

Lane 1:
MCF7 (Human breast adenocarcinoma cell line) cell lysate at 20 µg

Lane 2:
SK-BR-3 (Human mammary gland adenocarcinoma cell line) cell lysate at 20 µg

Lane 3:
HeLa (Human epithelial cells from cervix adenocarcinoma) cell lysate at 20 µg

Lane 4:
Jurkat (Human T cell leukemia cells from peripheral blood) cell lysate at 20 µg

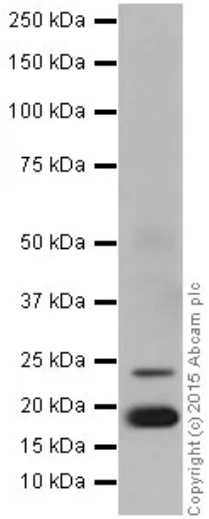
Secondary

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

Predicted band size: 22 kDa

Observed band size: 18 kDa, 22 kDa

Exposure time: 3min



Western blot - Anti-BTF3 antibody [EPR16495] (ab203517)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BTF3 antibody [EPR16495] (ab203517) at 1/1000 dilution

All lanes:
C6 (Rat glial tumor cells) cell lysate at 10 µg

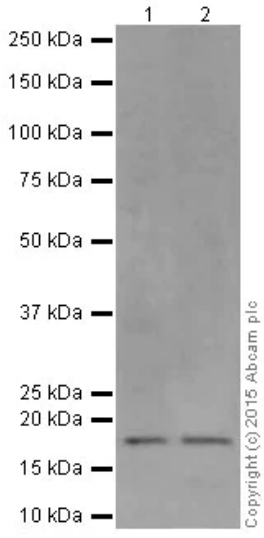
Secondary

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

Predicted band size: 22 kDa

Observed band size: 18 kDa, 22 kDa

Exposure time: 3min



Western blot - Anti-BTF3 antibody [EPR16495] (ab203517)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BTF3 antibody [EPR16495] (ab203517) at 1/1000 dilution

Lane 1:
Mouse heart lysate at 10 µg

Lane 2:
Mouse spleen lysate at 10 µg

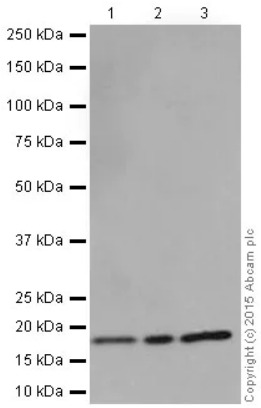
Secondary

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

Predicted band size: 22 kDa

Observed band size: 18 kDa

Exposure time: 1min



Western blot - Anti-BTF3 antibody [EPR16495] (ab203517)

All lanes:
Western blot - Anti-BTF3 antibody [EPR16495] (ab203517) at 1/1000 dilution

Lane 1:
RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) cell lysate at 10 µg

Lane 2:
PC-12 (Rat adrenal gland pheochromocytoma) cell lysate at 10 µg

Lane 3:
NIH/3T3 (Mouse embyro fibroblast cells) cell lysate at 10 µg

Secondary

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

Predicted band size: 22 kDa

Observed band size: 18 kDa

Exposure time: 1min

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.