abcam

ab134916

Anti-TAF15 antibody [EPR9197(B)]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 50% Tissue culture supernatant, 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	EPR9197(B)
Purity	Tissue culture supernatant

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250 - 1/550
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human

Dilution info	1/100 - 1/10000
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information TAF15

Function	RNA and ssDNA-binding protein that may play specific roles during transcription initiation at distinct promoters. Binds to ssRNA containing the consensus sequence 5'-AGGUAA-3' (PubMed:21256132). Can enter the preinitiation complex together with the RNA polymerase II (Pol II).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

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	TAF15 also known as TATA-binding protein-associated factor 15 is a RNA polymerase II-associated factor with approximate mass of 56 kDa. It belongs to the FET family of proteins which include FUS and EWS. This protein expresses widely in various tissues including the brain and immune cells. Mechanically TAF15 participates in transcription by mediating interactions between transcription factors and the RNA polymerase II complex.
Biological function summary	The protein helps regulate transcription initiation and elongation. TAF15 operates as a part of the transcription pre-initiation complex working closely with other transcription-associated factors to control gene expression. Its role extends beyond the nucleus as it may participate in RNA processing and transport due to its ability to bind RNA.
Pathways	TAF15 plays a role in the regulation of transcription from RNA polymerase II promoters. It interacts with numerous other proteins such as TFIID and RNA polymerase II subunits facilitating transcriptional regulation. TAF15 also associates with pathways related to stress response and cellular growth emphasizing its role in maintaining cellular integrity and function.
Associated diseases and disorders	TAF15 links to certain forms of cancer and neurodegenerative diseases. Its misregulation or mutation associates with some sarcomas indicating a role in tumorigenesis possibly through interactions with oncogenic proteins like EWS. In neurodegenerative disorders such as amyotrophic lateral sclerosis (ALS) TAF15 might be implicated potentially through pathways shared with proteins like TDP-43 that are involved in RNA metabolism dysfunction.

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

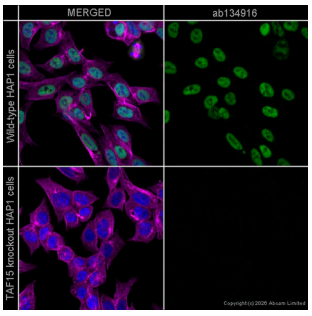
We do not recommend this combination. It is not covered by our product promise.

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.

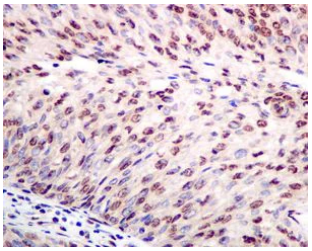
9 product images



Immunocytochemistry/ Immunofluorescence - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TAF15 antibody

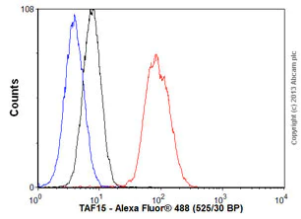
ab134916 staining TAF15 in HAP1 (positive) and HAP1- TAF15 KO (negative) cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated for 2 hours at room temperature with ab134916 at 0.2 µg/mL (shown in green) and ab7291 Anti-alpha Tubulin antibody [DM1A] - Loading Control (shown in pseudocolour magenta). Cells were then incubated with ab150081, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution and ab150120, Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution for 1 hour at room temperature. Nuclear DNA was labeled with DAPI (shown in blue). Also suitable in cells fixed with 10% methanol (5 min). Image was acquired with a high-content analyser (Operetta CLS, Revvity) and a maximum intensity projection of confocal sections is shown.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TAF15 antibody

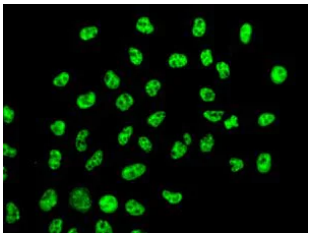
Immunohistochemical analysis of TAF15 in paraffin embedded Human urinary bladder carcinoma tissue, using ab134916 at a 1/100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Flow Cytometry (Intracellular) staining using rabbit Anti-TAF15 antibody

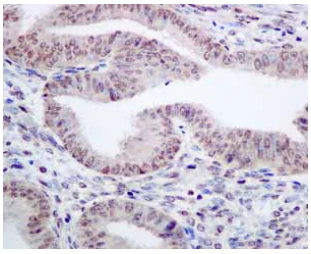
Overlay histogram showing HeLa cells stained with ab134916 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab134916, 1/10000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TAF15 antibody

Immunofluorescent analysis of TAF15 in HeLa cells, using ab134916 at a 1/250 dilution.

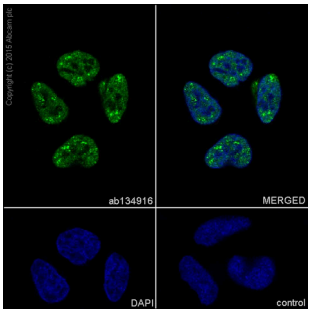


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TAF15 antibody

Immunohistochemical analysis using ab134916 showing positive staining in Normal human uterus tissue.

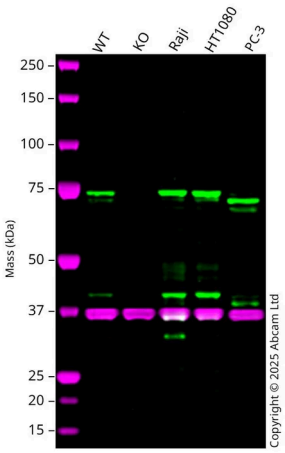
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TAF15 antibody

ab134916 staining TAF15 in HeLa (human cervix adenocarcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000. DAPI was used as a nuclear counterstain.
Negative control 1: PBS only.



Western blot - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Western blot staining using rabbit Anti-TAF15 antibody

Western blot: Anti-TAF15 antibody [EPR9197(B)] ab134916 staining at 1/10000 dilution, shown in green; Mouse anti GAPDH ab8245 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 74 kDa in Wild-type U-87 MG cell lysates with no signal observed at this size in TAF15 knockout U-87 MG cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3pc Milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit 800CW and Goat anti-Mouse 680RD at 1/20,000 dilution.
All lanes:
Western blot - Anti-TAF15 antibody [EPR9197(B)] (ab134916) at 1/10000 dilution

Lane 1:
Wild-type U-87 MG whole cell lysate at 20 µg

Lane 2:
TAF15 knockout U-87 MG whole cell lysate at 20 µg

Lane 3:
Raji whole cell lysate at 20 µg

Lane 4:
HT1080 whole cell lysate at 20 µg

Lane 5:
PC-3 whole cell lysate at 20 µg

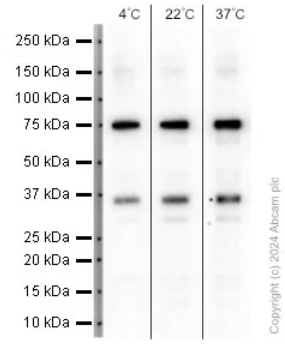
Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 62 kDa

Observed band size: 74 kDa



Western blot - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

TAF15 Western blot staining of Caco-2 whole cell lysate using rabbit Anti-TAF15 antibody

This blot was produced using 4-20% SDS-PAGE containing 15 µg of Caco-2 whole cell lysate per lane at 150V for 1hr before being transferred onto a 0.45 µm PVDF membrane at 75V for 1hr. The membrane was then blocked for 1hr using 5% NFDM/TBST, then incubated with ab134916 (1/10,000) at room temperature for 1hr. After being washed three times in TBST, the membrane was incubated with Peroxidase conjugated goat anti-rabbit IgG (H+L) (ab97051) at 1/20,000 dilution for 1hr at room temperature. The membrane was washed three times again. Then the signal was developed using the ECL technique.

ab134916 was stored at a range of temperatures (+4°C, +22°C, +37°C) for 1 week before being tested in WB. The image shows the band intensity remains relatively constant across all storage temperatures, demonstrating that antibody activity is not affected under these conditions. This data was generated as part of a structured antibody stability study supporting Abcam’ s transition from cold⊠chain to ambient shipping.

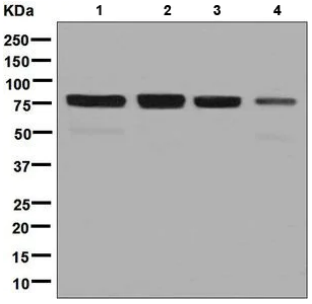
All lanes:
Western blot - Anti-TAF15 antibody [EPR9197(B)] (ab134916) at 1/10000 dilution

All lanes:
Caco-2 whole cell lysate at 15 µg with NDFM/TBST

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Exposure time: 80s



Western blot - Anti-TAF15 antibody [EPR9197(B)] (ab134916)

All lanes:
Western blot - Anti-TAF15 antibody [EPR9197(B)] (ab134916) at 1/10000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
293T cell lysate at 10 µg

Lane 3:
Caco 2 cell lysate at 10 µg

Lane 4:
Human fetal kidney lysate at 10 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 62 kDa

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