abcam

Product datasheet

Anti-TDP43 antibody [EPR5810] - BSA and Azide free ab185133

KO 評価済 リコンビナント RabMAb

画像数 14

製品の概要

製品名	Anti-TDP43 antibody [EPR5810] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR5810] to TDP43 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** IHC-Fr, WB, IHC-P, Flow Cyt (Intra), ICC/IF **適用なし:** IP
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HAP1, HeLa, Jurkat, 293T, K562, and A431 cell lysates, Mouse and Rat brain lysates; IHC-Fr: Mouse cerebrum tissue, Human prostate carcinoma IHC-P: Human papillary carcinoma and glioma tissue, Mouse and Rat cerebrum tissues; ICC/IF: HAP1-TARDBP, Hek293 and HeLa cells; Flow Cyt (intra): K562 cells.
特記事項	ab185133 is the carrier-free version of **ab109535**. 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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR5810
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab185133の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

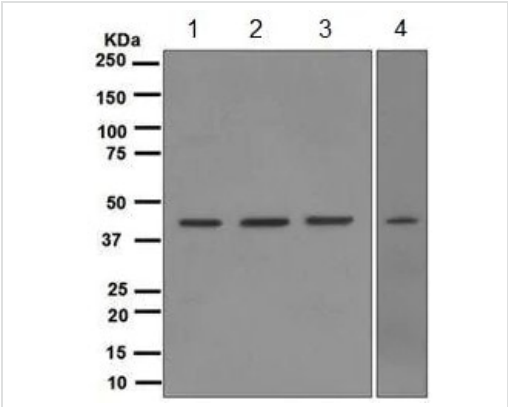
アプリケーション	Abreviews	特記事項
IHC-Fr		Use at an assay dependent concentration. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
WB		Use at an assay dependent concentration. Predicted molecular weight: 45 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration. This antibody is suitable to detect TDP43 using MeOH fixation in ICC. We have compared methanol and paraformaldehyde (PFA) fixation methods with this product and recommend to use methanol only.

追加情報 Is unsuitable for IP.

ターゲット情報

機能	DNA and RNA-binding protein which regulates transcription and splicing. Involved in the regulation of CFTR splicing. It promotes CFTR exon 9 skipping by binding to the UG repeated motifs in the polymorphic region near the 3'-splice site of this exon. The resulting aberrant splicing is associated with pathological features typical of cystic fibrosis. May also be involved in microRNA biogenesis, apoptosis and cell division. Can repress HIV-1 transcription by binding to the HIV-1 long terminal repeat. Stabilizes the low molecular weight neurofilament (NFL) mRNA through a direct interaction with the 3' UTR.
組織特異性	Ubiquitously expressed. In particular, expression is high in pancreas, placenta, lung, genital tract and spleen.
関連疾患	Defects in TARDBP are the cause of amyotrophic lateral sclerosis type 10 (ALS10) [MIM:612069]. ALS is a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of ALS is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of the cases.
配列類似性	Contains 2 RRM (RNA recognition motif) domains.
ドメイン	The RRM domains can bind to both DNA and RNA.
翻訳後修飾	Hyperphosphorylated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU. Ubiquitinated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU. Cleaved to generate C-terminal fragments in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.
細胞内局在	Nucleus. In patients with frontotemporal lobar degeneration and amyotrophic lateral sclerosis, it is absent from the nucleus of affected neurons but it is the primary component of cytoplasmic ubiquitin-positive inclusion bodies.

画像



Western blot - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

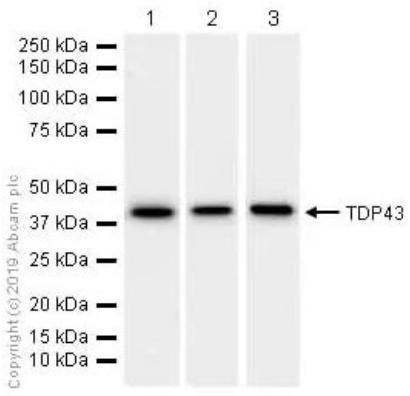
All lanes : Anti-TDP43 antibody [EPR5810] (**ab109535**) at 1/1000 dilution

Lane 1 : HeLa cell lysate
Lane 2 : 293T cell lysate
Lane 3 : K562 cell lysate
Lane 4 : A431 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP-labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 45 kDa



Western blot - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

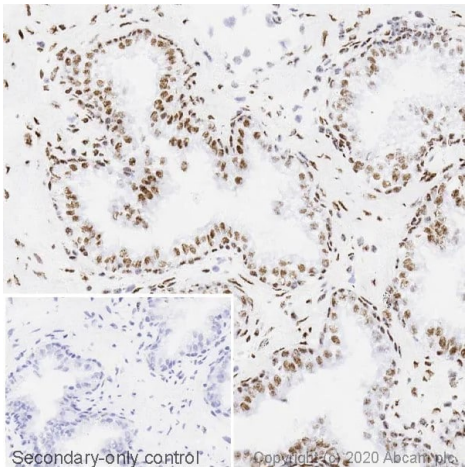
All lanes : Anti-TDP43 antibody [EPR5810] (**ab109535**) at 1/5000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2 : Mouse brain lysates
Lane 3 : Rat brain lysates

Lysates/proteins at 15 µg per lane.

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

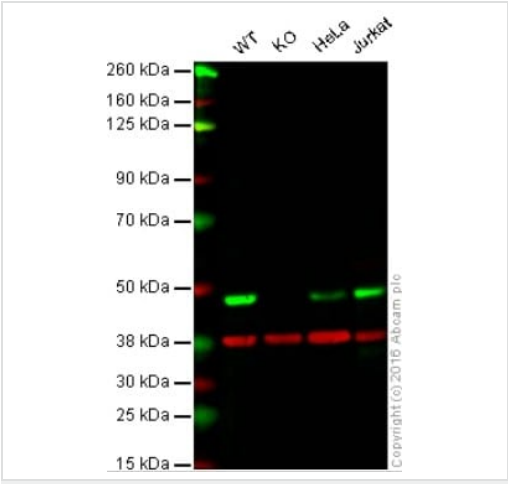
Predicted band size: 45 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

IHC image of TDP43 staining in a section of frozen human prostate carcinoma performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab109535**, 1/100 dilution, 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. The inset secondary-only control image is taken from an identical assay without primary antibody.

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.

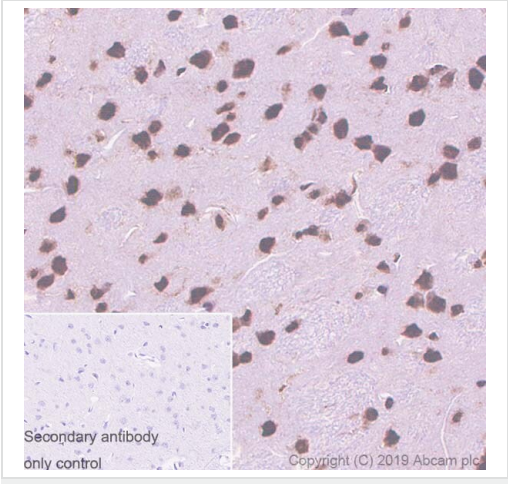


Western blot - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Lane 1: Wild-type HAP1 cell lysate (40 µg)
Lane 2: TDP43 knockout HAP1 cell lysate (40 µg)
Lane 3: HeLa cell lysate (40 µg)
Lane 4: Jurkat cell lysate (40 µg)

Lanes 1 - 4: Merged signal (red and green). Green - **ab109535** observed at 48 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

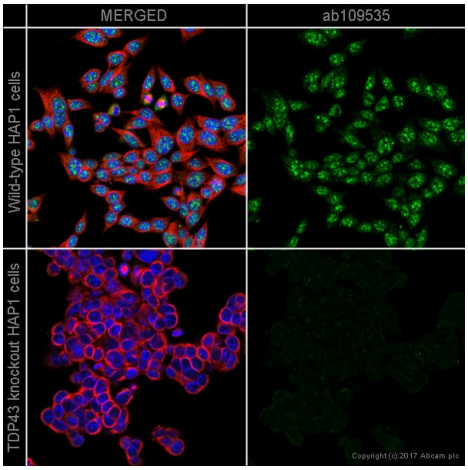
Unpurified **ab109535** was shown to specifically react with TDP43 when TDP43 knockout samples were used. Wild-type and TDP43 knockout samples were subjected to SDS-PAGE. Ab109535 and **ab8245** (loading control to GAPDH) were diluted at 1/1000 and 1/10,000 dilution respectively and incubated overnight at 4C. Blots were developed with IRDye® 800CW Goat anti-Rabbit IgG (H + L) and IRDye® 680 Goat anti-Mouse IgG (H + L) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling TDP43 with purified **ab109535** at 1/100 dilution (0.3 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).

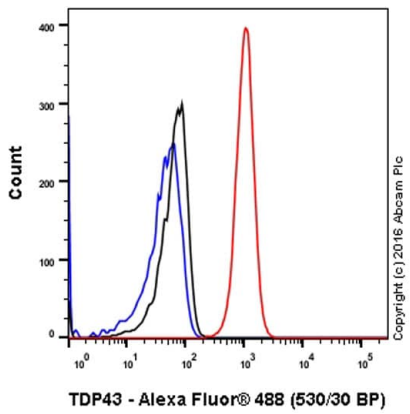


Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

ab109535 staining TDP43 in wild-type HAP1 cells (top panel) and TDP43 knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% 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 with **ab109535** at 1µg/ml concentration and **ab195889** at 1/250 dilution (shown in pseudo colour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).

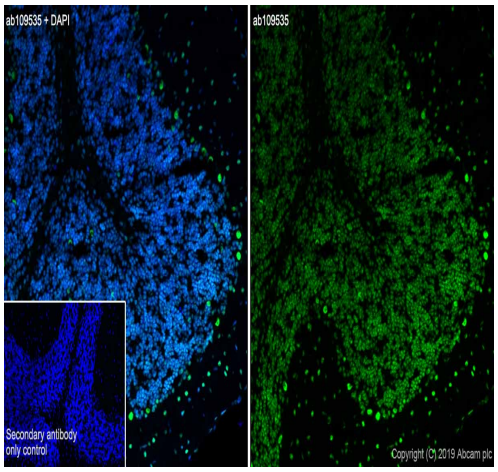
This antibody is not suitable to detect TDP43 using PFA fixation in ICC.



Flow Cytometry (Intracellular) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Intracellular Flow Cytometry analysis of K562 (human chronic myelogenous leukemia) cells labeling TDP43 with purified **ab109535** at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

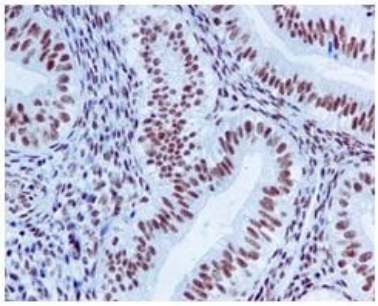
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).



Immunohistochemistry (Frozen sections) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Immunohistochemistry (Frozen sections) analysis of mouse cerebrum tissue sections labeling TDP43 with Purified unpurified **ab109535** at 1/50 (0.5 µg/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).

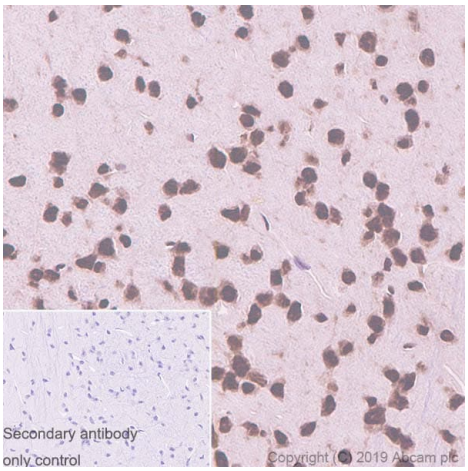


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

ab109535 at 1/100 dilution staining TARDBP in paraffin-embedded Human papillary carcinoma tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).

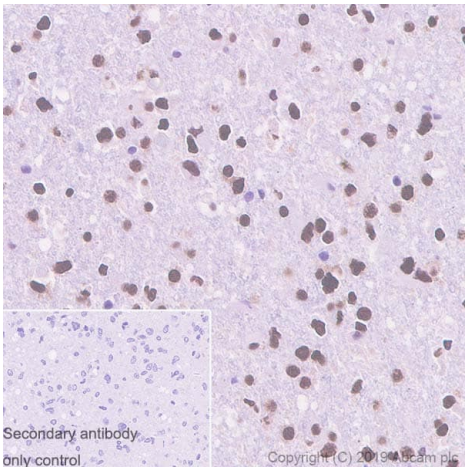
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissue sections labeling TDP43 with purified **ab109535** at 1/100 dilution (0.3 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

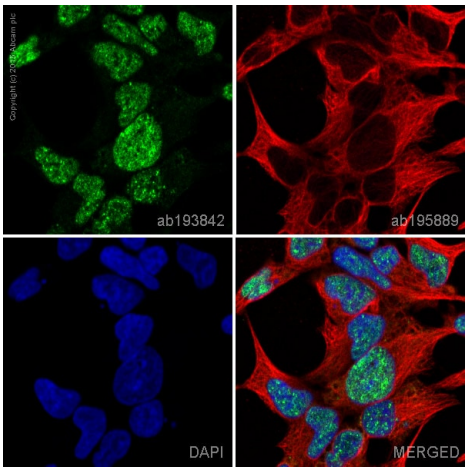
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human glioma tissue sections labeling TDP43 with purified **ab109535** at 1/100 dilution (0.3 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).



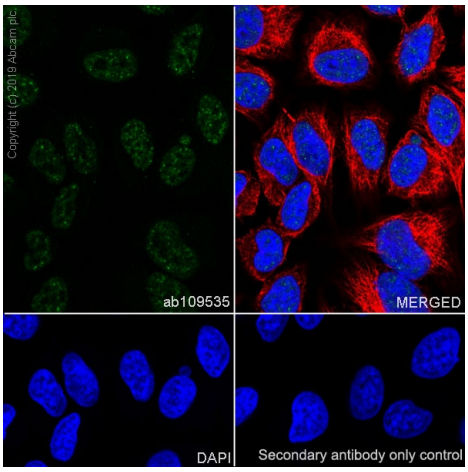
Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Clone EPR5810 (ab185133) has been successfully conjugated by Abcam. This image was generated using Anti-TDP43 antibody [EPR5810] (Alexa Fluor® 488). Please refer to **ab193842** for protocol details.

ab193842 staining TDP43 in Hek293 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% 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 overnight at +4°C with **ab193842** at a 1/250 dilution (shown in green) and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This antibody is not suitable to detect TDP43 using PFA fixation in ICC.

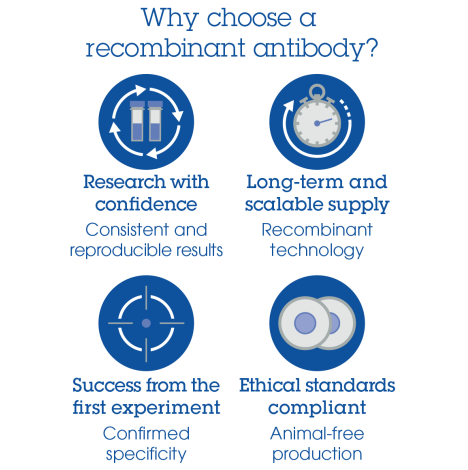


Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling TDP43 with purified **ab109535** at 1/50 dilution (6.2 µg/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with **ab195889** anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109535**).

This antibody is not suitable to detect TDP43 using PFA fixation in ICC.



Anti-TDP43 antibody [EPR5810] - BSA and Azide free (ab185133)

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.co.jp/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors