

Anti-TDP43 antibody [EPR5811] ab133547

KO 評価済 リコンビナント RabMAb

★★★★☆ 3 Abreviews 3 References 画像数 10

製品の概要

製品名	Anti-TDP43 antibody [EPR5811]
製品の詳細	Rabbit monoclonal [EPR5811] to TDP43
由来種	Rabbit
アプリケーション	適用あり: WB, IHC-P, Flow Cyt (Intra), ICC/IF
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	IHC-P: Mouse, rat and human cerebellum tissue. Human colon tissue; WB: HAP1, HeLa, HepG2, and Jurkat whole cell lysates. Human, rat, and mouse brain tissue lysates; ICC/IF: HAP1-TARDBP and HeLa cells; Flow Cyt (intra): K-562 cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR5811

アプリケーション

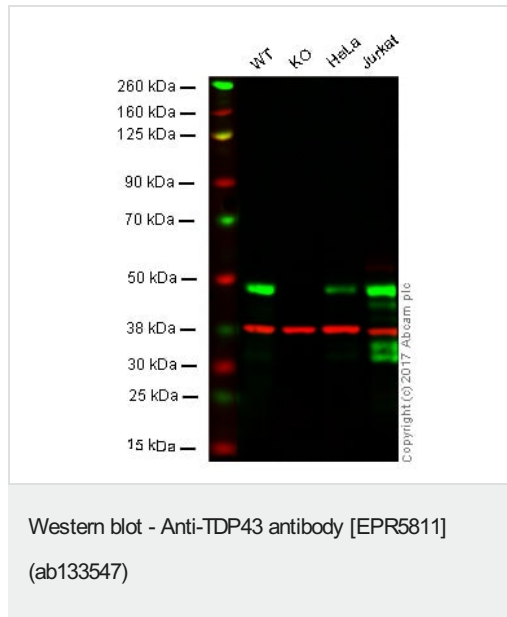
The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab133547の使用に適用されます**
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	1/1000. Predicted molecular weight: 44 kDa. For unpurified use at 1/10000 - 1/50000.
IHC-P		1/350. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols . For unpurified use at 1/100 - 1/250.
Flow Cyt (Intra)		1/70.
ICC/IF		1/100. For unpurified use at 1 µg/mL.

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

画像



Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

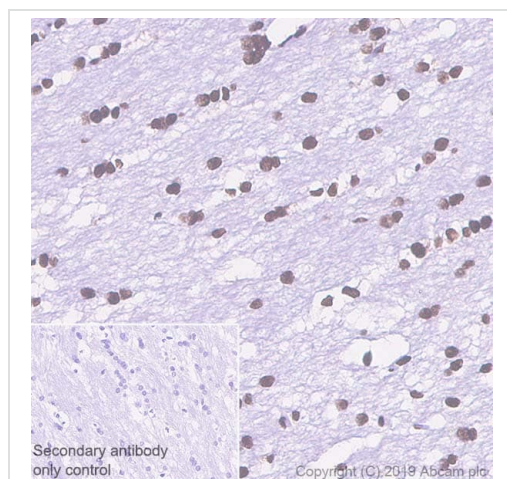
Lane 2: TARDBP knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: Jurkat whole cell lysate (20 µg)

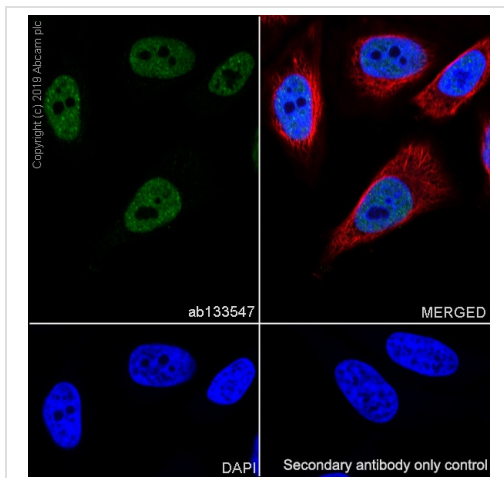
Lanes 1 - 4: Merged signal (red and green). Green - unpurified ab133547 observed at 44 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab133547 was shown to specifically react with TARDBP in wild-type HAP1 cells. No band was observed when TARDBP knockout samples were examined. Wild-type and TARDBP knockout samples were subjected to SDS-PAGE. Ab133547 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/10,000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



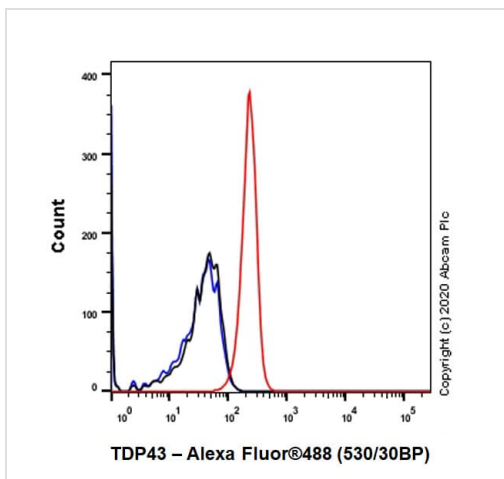
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling TDP43 with purified ab133547 at 1/350 dilution (1.92 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5811] (ab133547)



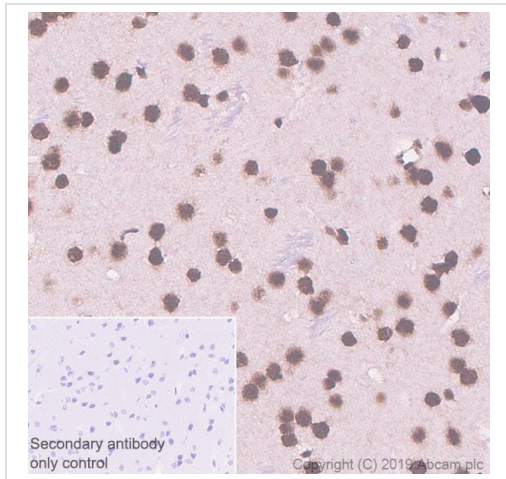
Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [EPR5811] (ab133547)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling TDP43 with purified ab133547 at 1/100 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% TritonX-100. 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.



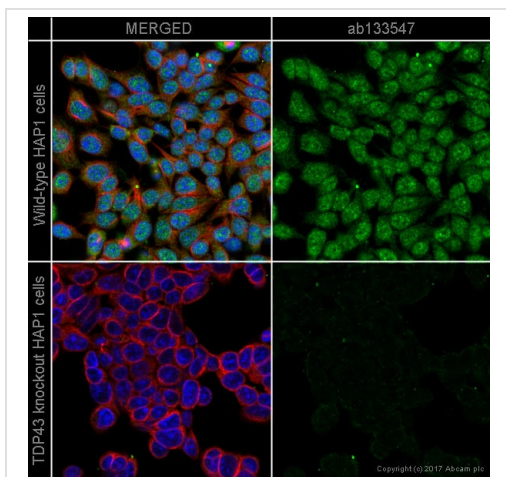
Flow Cytometry (Intracellular) - Anti-TDP43 antibody [EPR5811] (ab133547)

Intracellular Flow Cytometry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling TDP43 with purified ab133547 at 1/70 dilution (10µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5811] (ab133547)

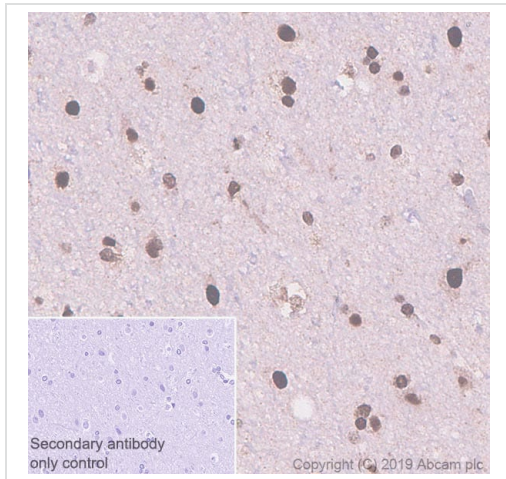
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissue sections labeling TDP43 with purified ab133547 at 1/350 dilution (1.92 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [EPR5811] (ab133547)

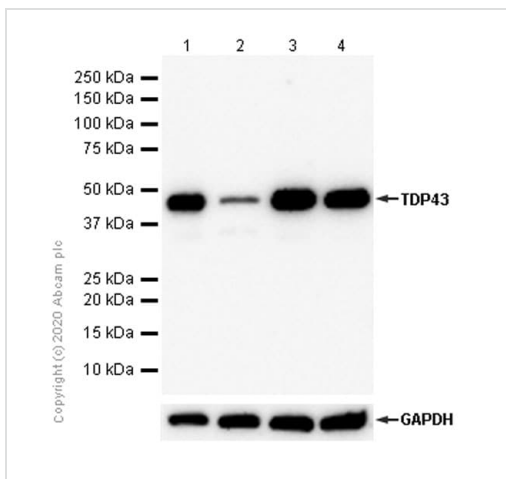
Unpurified ab133547 staining TDP43 in wild-type HAP1 cells (top panel) and TARDBP knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with unpurified ab133547 at 1 µg/mL and **ab195889** at 1/250 dilution (shown in pseudocolour 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.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5811] (ab133547)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling TDP43 with purified ab133547 at 1/350 dilution (1.92 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.



Western blot - Anti-TDP43 antibody [EPR5811] (ab133547)

All lanes : Anti-TDP43 antibody [EPR5811] (ab133547) at 1/1000 dilution (purified)

Lane 1 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 2 : Human brain lysate

Lane 3 : Mouse brain lysate

Lane 4 : Rat brain lysate

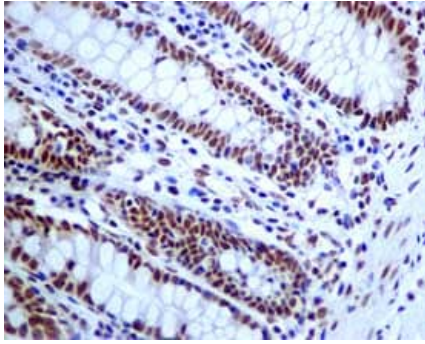
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 44 kDa

Observed band size: 44 kDa



Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling TARDBP with unpurified ab133547 at 1/100 dilution.

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 [EPR5811] (ab133547)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TDP43 antibody [EPR5811] (ab133547)

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