


Anti-TDP43 antibody [3H8] ab104223

KO 評価済

13 References 画像数 4

製品の概要

製品名	Anti-TDP43 antibody [3H8]
製品の詳細	Mouse monoclonal [3H8] to TDP43
由来種	Mouse
アプリケーション	適用あり: WB, ICC/IF, Flow Cyt
種交差性	交差種: Mouse, Rat, Human 交差が予測される動物種: a wide range of other species 
免疫原	Recombinant full length protein corresponding to Human TDP43.
ポジティブ・コントロール	Mouse brain tissue lysate, rat brain tissue. ICC/IF: HAP1-TARDBP cells
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	Preservative: 0.03% Sodium azide Constituents: 49.9% PBS, 50% Glycerol (glycerin, glycerine)
精製度	Affinity purified
ポリ/モノ	モノクローナル
クローン名	3H8
アイソタイプ	IgG1

アプリケーション

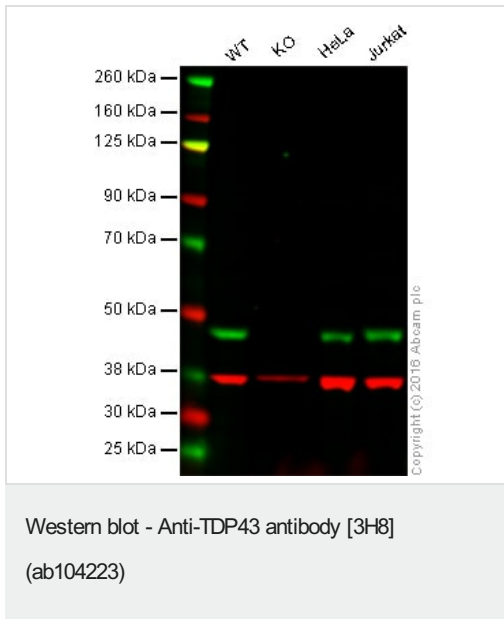
The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab104223の使用に適用されず**
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/5000. Predicted molecular weight: 45 kDa.
ICC/IF		1/500.
Flow Cyt		1/100. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

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



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

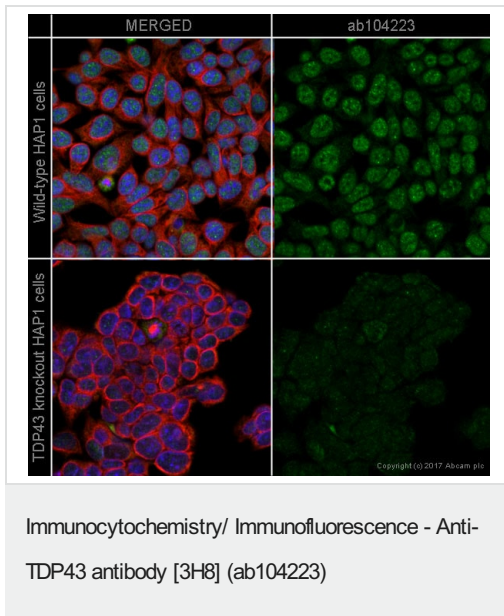
Lane 2: TDP43 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

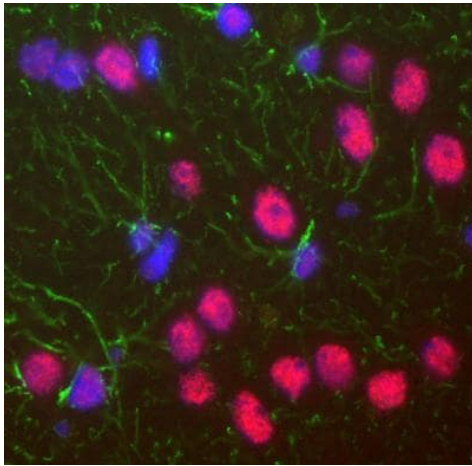
Lanes 1 - 4: Merged signal (red and green). Green - ab104223 observed at 48 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab104223 was shown to specifically react with TDP43 when TDP43 knockout samples were used. Wild-type and TDP43 knockout samples were subjected to SDS-PAGE. Ab104223 and **ab181602** (loading control to GAPDH) were diluted at 1/5000 and 1/10,000 dilution respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



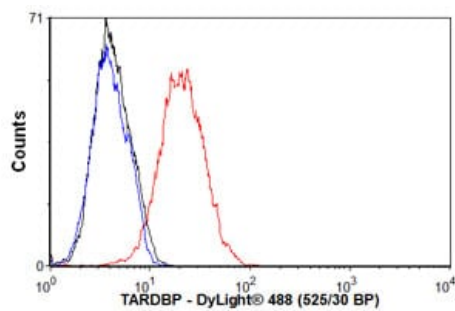
ab104223 staining TDP43 in wild-type HAP1 cells (top panel) and TARDBP knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab104223 at 1/500 dilution and **ab202272** 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 Mouse IgG (Alexa Fluor® 488) (**ab150117**) 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).



Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [3H8] (ab104223)

ab104223 at 1/1000 dilution, staining TARDBP in rat brain tissue (red). Chicken antibody to GFAP CPCA-GFAP (green) shows the processes of astrocytic glial cells. Nuclei of all cells are revealed with DAPI DNA stain (blue).



Flow Cytometry - Anti-TDP43 antibody [3H8] (ab104223)

Overlay histogram showing JEG3 cells stained with ab104223 (red line). The cells were fixed with 4% paraformaldehyde (10 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 (ab104223, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 1µg/1x10⁶ 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. This antibody gave a positive signal in JEG3 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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