abcam

Product datasheet

Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810] ab193842



יעלטעבע RabMAb

1 Abreviews 1 References 画像数 4

製品の概要

製品名 Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810]

製品の詳細 Alexa Fluor® 488 Rabbit monoclonal [EPR5810] to TDP43

由来種 Rabbit

Alexa Fluor® 488. Ex: 495nm, Em: 519nm 標識

アプリケーション 適用あり: ICC/IF, Flow Cyt (Intra)

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ICC/IF: Hek293 and HAP1-TARDBP cells. Flow Cyt (intra): Hek293 cells.

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**.

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ポジティブ・コントロール 特記事項

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.

Avoid freeze / thaw cycle. Store In the Dark.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), PBS, 1% BSA

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 lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab193842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
ICC/IF		Use a concentration of 1 µg/ml. This product gave a positive signal in Hek293 cells fixed with 100% methanol (5 min). 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.
Flow Cyt (Intra)		1/500.

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.

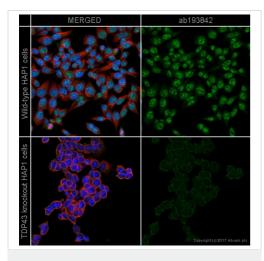
Ubiquitinated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

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

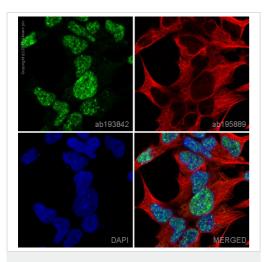


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810] (ab193842)

ab193842 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 ab193842 at 1µg/ml (shown in green) and ab195889 at 1/250 dilution (shown in pseudo colour red) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

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

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

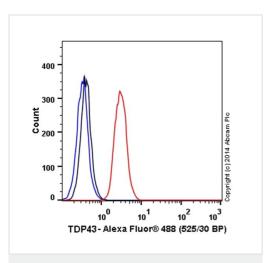


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810] (ab193842)

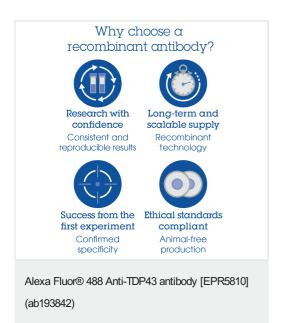
ab193842 staining TDP43 in Hek293 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab193842 at a 1/250 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.



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810] (ab193842) Overlay histogram showing HEK293 cells stained with ab193842 (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 (ab193842, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 488 used at the same concentration and conditions as the primary antibody. 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 HEK293 cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



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