abcam

Product datasheet

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





重组 RabMAb

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概述

产品名称 Alexa Fluor® 488荧光Anti-TDP43抗体[EPR5810]

Alexa Fluor® 488荧光兔单克隆抗体[EPR5810] to TDP43 描述

宿主 Rabbit

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

经测试应用 适用于: ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: 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. 阳性对照

This product is a recombinant monoclonal antibody, which offers several advantages including: 常规说明

- 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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性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

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

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 EPR5810

应用

同种型

The Abpromise guarantee Abpromise™承诺保证使用ab193842于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

ΙgG

应用	Ab评论	说明
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.

靶标

功能 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.

组织特异性 Ubiquitously expressed. In particular, expression is high in pancreas, placenta, lung, genital tract

and spleen.

疾病相关 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.

序列相似性 Contains 2 RRM (RNA recognition motif) domains.

结构域 The RRM domains can bind to both DNA and RNA.

翻译后修饰

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

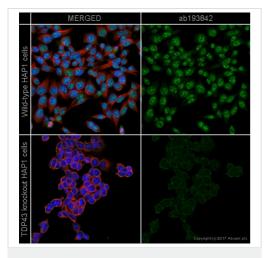
Ubiquitinated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

Cleaved to generate C-terminal fragments in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

细胞定位

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.

图片

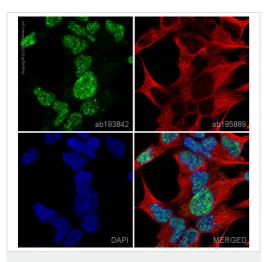


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810] (ab193842)

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.

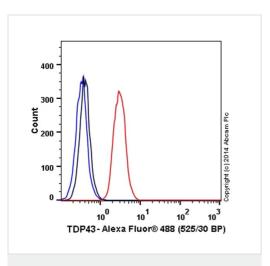


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-TDP43 antibody [EPR5810] (ab193842)

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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