abcam

Product datasheet

Anti-TDP43 antibody [EPR5810] ab109535

敲除验证 重组 RabMAb

1 Abreviews 3 References 5 图像

概述

产品名称	Anti-TDP43抗体[EPR5810]
描述	兔单克隆抗体[EPR5810] to TDP43
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, Flow Cyt, WB, IP, IHC-P, ICC
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human TDP43 (N terminal). The exact sequence is proprietary. Database link: Q13148
阳性对照	HeLa, 293T, K562, and A431 cell lysates. Human papillary carcinoma tissue. ICC/IF: HAP1-TARDBP cells
常规说明	Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents This product is a recombinant rabbit monoclonal antibody.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
纯度	Tissue culture supernatant
克隆	单克隆
克隆编号	EPR5810
同种型	IgG

应用

Our Abpromise guarantee covers the use of **ab109535** in the following tested applications.

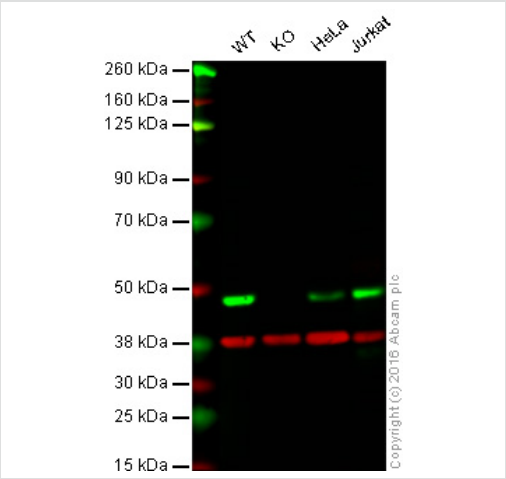
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
ICC/IF		1/250.
Flow Cyt		Use at an assay dependent concentration.
WB		1/1000 - 1/10000. Predicted molecular weight: 45 kDa.
IP		1/10 - 1/100.
IHC-P		1/100 - 1/250. antigen retrieval is recommended
ICC		1/100 - 1/250.

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.

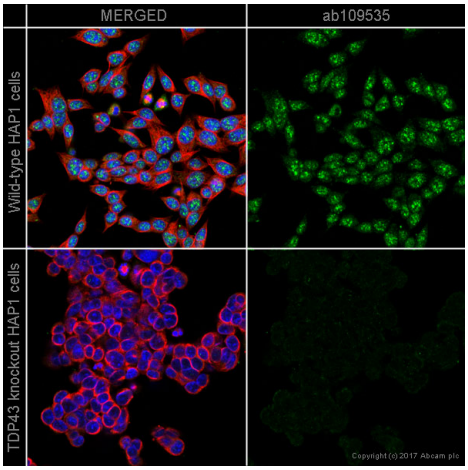
图片



Western blot - Anti-TDP43 antibody [EPR5810] (ab109535)

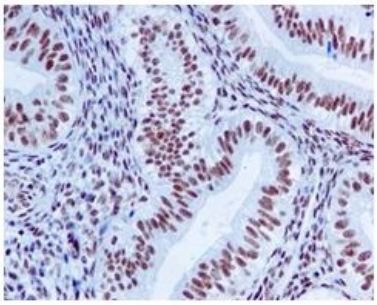
Lane 1: Wild-type HAP1 cell lysate (40 µg)
Lane 2: TDP43 knockout HAP1 cell lysate (40 µg)
Lane 3: HeLa cell lysate (40 µg)
Lane 4: Jurkat cell lysate (40 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab109535 observed at 48 kDa. Red - loading control, ab8245, observed at 37 kDa.

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.



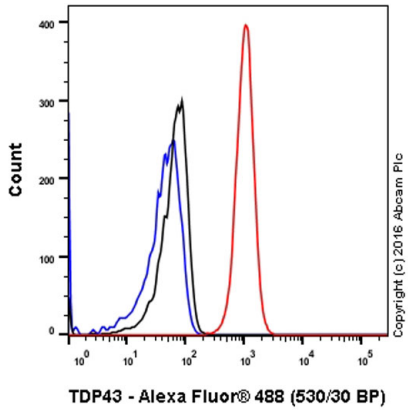
Immunocytochemistry/ Immunofluorescence - Anti-TDP43 antibody [EPR5810] (ab109535)

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.



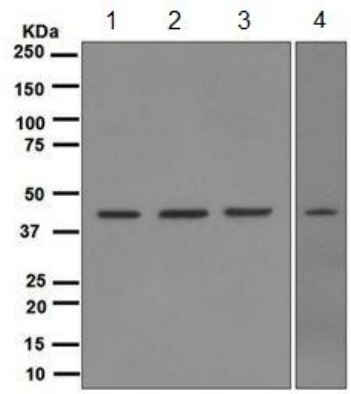
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TDP43 antibody [EPR5810] (ab109535)

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



Flow Cytometry - Anti-TDP43 antibody [EPR5810] (ab109535)

Flow Cytometry analysis of K562 (human chronic myelogenous leukemia) cells labeling TDP43 with purified ab109535 at 1/100 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.



Western blot - Anti-TDP43 antibody [EPR5810] (ab109535)

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

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.cn/abpromise or contact our technical team.

Terms and conditions

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