# abcam

## Product datasheet

## Anti-TDP43 antibody ab41881



★★★★★ 4 Abreviews 12 References 2 图像

## 概述

产品名称 Anti-TDP43抗体

描述 兔多克隆抗体to TDP43

宿主 Rabbit

经测试应用 适用于: WB

种属反应性 与反应: Human

预测可用于: Mouse

免疫原 Synthetic peptide conjugated to KLH derived from within residues 350 to the C-terminus of

Human TARDBP.参阅Abcam的专有抗源政策(Peptide available as ab41970.)

常规说明 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.

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

性能

形式

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯度 Immunogen affinity purified

克隆 多克隆

同种型 IgG

#### 应用

### The Abpromise guarantee

Abpromise™承诺保证使用ab41881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。

应用	Ab评论	说明
WB	****(1)	Use a concentration of 1 µg/ml. Detects a band of approximately 47 kDa (predicted molecular weight: 45 kDa).

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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.

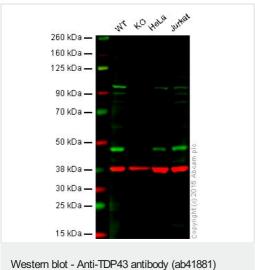
细胞定位

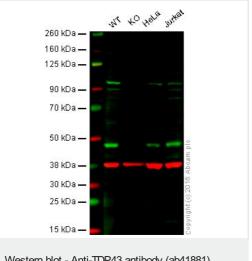
Nucleus. In patients with frontotemporal lobar degeneration and amyotrophic lateral sclerosis, it is

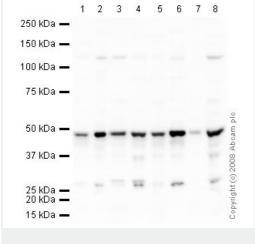
absent from the nucleus of affected neurons but it is the primary component of cytoplasmic

ubiquitin-positive inclusion bodies.

图片







Western blot - Anti-TDP43 antibody (ab41881)

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 - ab41881 observed at 48 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab41881 was shown to specifically react with TDP43 when TDP43 knockout samples were used. Wild-type and TDP43 knockout samples were subjected to SDS-PAGE. Ab41881 and ab8245 (loading control to GAPDH) were diluted at 1 µg/mL and 1/10000 dilution respectively and incubated overnight at 4C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

All lanes: Anti-TDP43 antibody (ab41881) at 1 µg/ml

Lane 1: HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2: HeLa (Human epithelial carcinoma cell line) Nuclear Lysate

Lane 3 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 4: Jurkat nuclear extract lysate (ab14844)

Lane 5: HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 6: Hep G2 nuclear extract lysate (ab14660)

Lane 7: A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 8: K-562 (Human) Nuclear Lysate - tumor cell line (ab29309)

Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

**Predicted band size:** 45 kDa **Observed band size:** 47 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- · Replacement or refund for products not performing as stated on the datasheet
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- 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

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