# abcam

#### Product datasheet

## Anti-TDP43 antibody [DB9] ab254166



#### ★★★★ 4 Abreviews 7 图像

#### 概述

产品名称 Anti-TDP43抗体[DB9]

描述 小鼠单克隆抗体[DB9] to TDP43

宿主 Mouse

经测试应用 适用于: WB, IHC-P, ELISA 种属反应性 与反应: Mouse, Rat, Human

预测可用于: Common marmoset 4

Recombinant fragment within Human TDP43 aa 200 to the C-terminus. The exact immunogen 免疫原

> sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact

our Scientific Support team to discuss your requirements.

Database link: Q13148

Run BLAST with Run BLAST with

阳性对照 WB: HeLa, Jurkat, K562, HEK-293T, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates.

IHC-P: Human cerebrum and colon tissue; mouse cerebrum tissue; rat cerebrum tissue.

常规说明 This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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.

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 long

term. Avoid freeze / thaw cycle.

存储溶液

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 DB9

 同种型
 IgG1

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab254166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		Use a concentration of 0.467 µg/ml. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa).
IHC-P	★★★★ (4)	Use a concentration of 4.67 - 23.35 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Human: 4.67µg/ml Mouse and rat: 23.35µg/ml
ELISA		Use at an assay dependent concentration. 1000-10000 ng/mL

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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

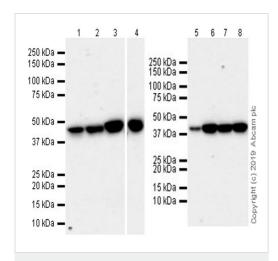
FTLDU.

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 [DB9] (ab254166)

**All lanes :** Anti-TDP43 antibody [DB9] (ab254166) at 1/1000 dilution

**Lane 1 :** HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate at 20  $\mu g$ 

**Lane 2 :** Jurkat (human T cell leukemia T lymphocyte), whole cell lysate at 20  $\mu$ g

Lane 3: K562 (human chronic myelogenous leukemia lymphoblast), whole cell lysate at 20 µg

Lane 4 : HEK-293 (human embryonic kidney epithelial cell), whole cell lysate at 20  $\mu g$ 

Lane 5 : C6 (rat glial tumor glial cell), whole cell lysate at 10 μg

Lane 6: RAW264.7 (mouse Abelson murine leukemia virusinduced tumor macrophage), whole cell lysate at 10 µg

Lane 7 : PC-12 (rat adrenal gland pheochromocytoma), whole cell lysate at 10 µg

**Lane 8 :** NIH/3T3 (mouse embryonic fibroblast), whole cell lysate at  $10 \ \mu g$ 

#### Secondary

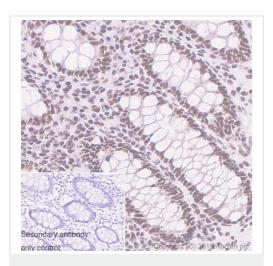
**All lanes :** Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/100000 dilution

**Predicted band size:** 44 kDa **Observed band size:** 44 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times.

Lanes 1-4: 103 seconds; Lanes 5-8: 48 seconds.

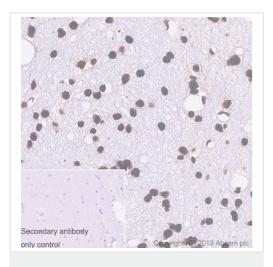


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TDP43 antibody [DB9] (ab254166)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling TDP43 with ab254166 at  $4.67\mu g/ml$ , followed by Goat Anti-Mouse IgG H&L (HRP polymer) (<u>ab214879</u>) ready to use. Nuclear staining on human colon is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use.

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

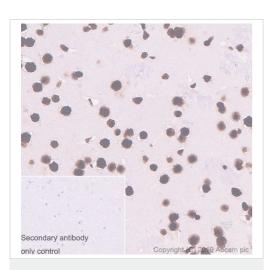


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TDP43 antibody [DB9] (ab254166)

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling TDP43 with ab254166 at 23.35µg/ml, followed by Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use. Nuclear staining on rat cerebrum is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use.

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TDP43 antibody [DB9] (ab254166)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling TDP43 with ab254166 at 23.25µg/ml, followed by Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use. Nuclear staining on mouse cerebrum is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use.

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

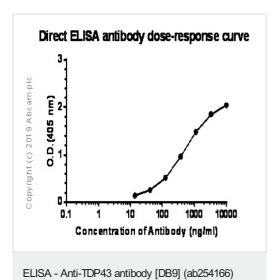


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TDP43 antibody [DB9] (ab254166)

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling TDP43 with ab254166 at 4.67µg/ml followed by Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use. Nuclear staining on human cerebrum is observed. Counter stained with hematoxylin.

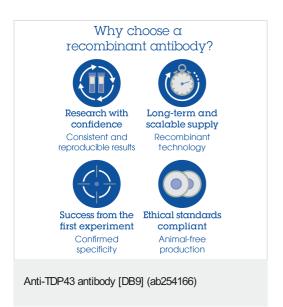
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) ready to use.

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



TDP43 = 5000 ng/mL.

ab254166 used at 0 - 10,000 ng/mL. Alkaline Phosphataseconjugated AffiniPure Goat Anti-Mouse lgG (H+L) secondary antibody was used at 1000ng/ml



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