# abcam

### Product datasheet

## Anti-ADAR1 antibody [EPR7033] ab126745





重组 RabMAb

9 References 6 图像

概述

产品名称 Anti-ADAR1抗体[EPR7033]

描述 兔单克隆抗体[EPR7033] to ADAR1

宿主 Rabbit

特异性 The immunogen is designed to detect the p150 isoform and not the p110.

经测试应用 适用于: WB, IHC-P, Flow Cyt (Intra)

不适用于: ICC/IF or IP

种属反应性 与反应: Human

免疫原 Synthetic peptide within Human ADAR1 aa 200-300. The exact sequence is proprietary. The

immunogen used to raise this antibody is designed to detect isoform 1 (p150) and isoforms 2-4. It

does not detect Isoform 5 (p110).

Database link: P55265

阳性对照 WB: HEK293T, HeLa, Ramos and SH-SY5Y cell lysates. IHC-P: Human brain tissue Flow Cyt

(intra): HeLa cells

常规说明 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

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.

Stable for 12 months at -20°C.

**存储溶液** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

纯**度** Protein A purified

**同种型** IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab126745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		1/1000 - 1/10000. Detects a band of approximately 150 kDa (predicted molecular weight: 136 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/10 - 1/100.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

应用说明 Is unsuitable for ICC/IF or IP.

靶标

功能 Converts multiple adenosines to inosines and creates I/U mismatched base pairs in double-

helical RNA substrates without apparent sequence specificity. Has been found to modify more frequently adenosines in AU-rich regions, probably due to the relative ease of melting A/U base pairs as compared to G/C pairs. Functions to modify viral RNA genomes and may be responsible for hypermutation of certain negative-stranded viruses. Edits the messenger RNAs for glutamate receptor (GLUR) subunits by site-selective adenosine deamination. Produces low-level editing at

the GLUR-B Q/R site, but edits efficiently at the R/G site and HOTSPOT1. Binds to short interfering RNAs (siRNA) without editing them and suppresses siRNA-mediated RNA interference. Binds to ILF3/NF90 and up-regulates ILF3-mediated gene expression.

组织特异性 Ubiquitously expressed, highest levels were found in brain and lung.

疾病相关 Defects in ADAR are a cause of dyschromatosis symmetrical hereditaria (DSH) [MIM:127400];

also known as reticulate acropigmentation of Dohi. DSH is a pigmentary genodermatosis of

autosomal dominant inheritance characterized by a mixture of hyperpigmented and hypopigmented macules distributed on the dorsal parts of the hands and feet.

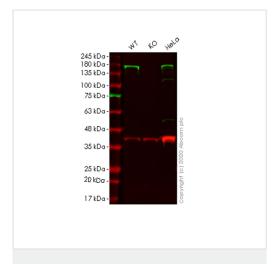
序列相似性 Contains 1 A to I editase domain.

Contains 2 DRADA repeats.

Contains 3 DRBM (double-stranded RNA-binding) domains.

翻译后修饰 Sumoylation reduces RNA-editing activity.

#### 图片



Western blot - Anti-ADAR1 antibody [EPR7033] (ab126745)

**All lanes :** Anti-ADAR1 antibody [EPR7033] (ab126745) at 1/1000 dilution

Lane 1: Wild-type HEK293T cell lysate

Lane 2: ADAR knockout HEK293T cell lysate

Lane 3: HeLa cell lysate

Lysates/proteins at 20 µg per lane.

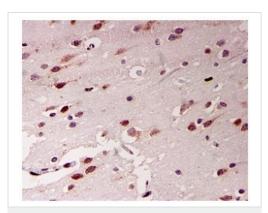
#### **Secondary**

**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 136 kDa
Observed band size: 130 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab126745 observed at 130 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab126745 Anti-ADAR1 antibody [EPR7033] was shown to specifically react with ADAR1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line <a href="mailto:ab266846">ab266846</a> (knockout cell lysate <a href="mailto:ab257131">ab266846</a> (knockout cell lysate <a href="mailto:ab257131">ab257131</a>) was used. Wild-type and ADAR1 knockout samples were subjected to SDS-PAGE. ab126745 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

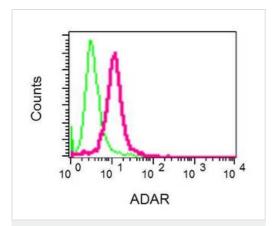


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ADAR1 antibody

[EPR7033] (ab126745)

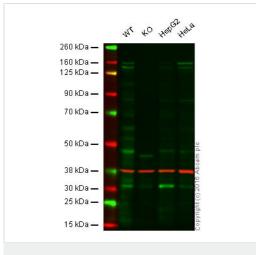
ab126745, at 1/50 dilution, staining ADAR1 in paraffin-embedded Human brain tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

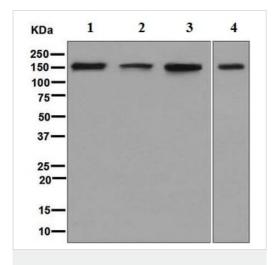


Flow Cytometry (Intracellular) - Anti-ADAR1 antibody [EPR7033] (ab126745)

Intracellular flow cytometric analysis of permeabilized Ramos cells, staining ADAR1 (red) with ab126745. 1x10<sup>6</sup> cells were collected and washed with blocking buffer. Cells were fixed with 2% paraformaldehyde, permeabilized with 1X FACS permeabilizing solution and blocked with blocking buffer for 30 minutes at room temperature. Cells were incubated with primary antibody (1/10) for 30 minutes at room temperature before a Fluorescently-conjugated secondary antibody or 30 min at room temperature. A rabbit IgG was used as a negative control (green).



Western blot - Anti-ADAR1 antibody [EPR7033] (ab126745)



Western blot - Anti-ADAR1 antibody [EPR7033] (ab126745)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: ADAR1 knockout HAP1 cell lysate (20 µg)

Lane 3: HepG2 cell lysate (20 µg)

Lane 4: HeLa cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab126745 observed at 150 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab126745 was shown to recognize ADAR1 when ADAR1 knockout samples were used, along with additional cross-reactive bands. Wild-type and ADAR1 knockout samples were subjected to SDS-PAGE. ab126745 and <u>ab8245</u> (loading control to GAPDH) were diluted at 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.

**All lanes :** Anti-ADAR1 antibody [EPR7033] (ab126745) at 1/1000 dilution

Lane 1: HeLa (treated with IFN-alpha) cell lysate

Lane 2: HeLa cell lysate

Lane 3: Ramos cell lysate

Lane 4: SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 136 kDa **Observed band size:** 150 kDa



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