abcam

Product datasheet

Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free ab307586





RabMAb

9 图像

概述

产品名称 Anti-ADAR1抗体[EPR25431-60] - BSA and Azide free

描述 兔单克隆抗体[EPR25431-60] to ADAR1 - BSA and Azide free

宿主 Rabbit

经测试应用 适用于: WB, ICC/IF, Flow Cyt (Intra), IP

不适用于: IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa, 293T, SH-SY5Y, HepG2, Wild-type HEK-293T, Ramos, HeLa treated with 10ng/ml

IFN alpha 1 for 16 hours and Human kidney whole cell lysates. ICC: HeLa cells treated with IFN alpha 1 (human) (10 ng/ml) for 16 hours and HEK293T treated with IFN alpha 1 (10 ng/ml) for 16

hours Flow Cyt: Wild-type 293T cell. IP: HeLa cell.

常规说明 ab307586 is the carrier-free version of ab307585

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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.

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Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C.

存储溶液 pH: 7.20

Constituent: 100% PBS

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPR25431-60

同种型 lgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab307586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 at an assay dependent concentration. Predicted molecular weight: 150 kDa.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

应用说明 Is unsuitable for IHC-P.

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.

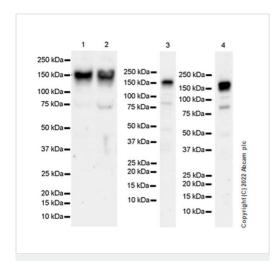
Contains 3 DRBM (double-stranded RNA-binding) domains.

翻译后修饰 Sumoylation reduces RNA-editing activity.

细胞定位 Cytoplasm. Nucleus > nucleolus. Isoform 1 is found predominantly in cytoplasm but appears to

shuttle between the cytoplasm and nucleus. Isoform 5 is found exclusively in the nucleolus.

图片



Western blot - Anti-ADAR1 antibody [EPR25431-60]

- BSA and Azide free (ab307586)

All lanes : Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free (ab307586) at 1/1000 dilution

Lane 1 : HeLa (human cervical adenocarcinoma epithelial cell)

whole cell lysate 20 µg

Lane 2: 293T (human embryonic kidney epithelial cell) whole cell

lysate 20 µg

Lane 3: SH-SY5Y (human neuroblastoma epithelial cell) whole cell

lysate 20 µg

Lane 4: HepG2 (human hepatocellular carcinoma epithelial cell)

whole cell lysate 20 µg

Secondary

All lanes: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated

(ab97051) at 1/100000 dilution

Predicted band size: 150 kDa Observed band size: 150 kDa

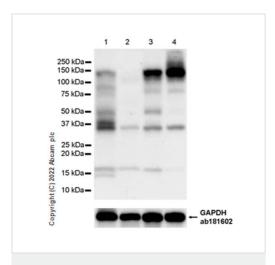
Exposure time: 70 seconds

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Lysates were freshly made and used for Western blotting immediately to minimize protein degradation.

Exposure time: 70 seconds



Western blot - Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free (ab307586)

All lanes : Anti-ADAR1 antibody [EPR25431-60] (**ab307585**) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T (human embryonic kidney epithelial cell) whole cell lysate 20 μg

Lane 2: ADAR1 knockout HEK-293T whole cell lysate 20 µg

Lane 3 : HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate 20 µg

Lane 4 : Ramos (human burkitt's lymphoma b lymphocyte) whole cell lysate 20 μg

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 150 kDa Observed band size: 150 kDa

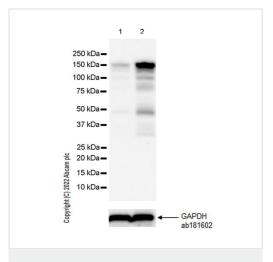
Exposure time: 59 seconds

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST Performed under reducing conditions.

In Western blot, <u>ab307585</u> was shown to bind specifically to ADAR1. A band was observed at 150 kDa in wild-type HEK-293T cell lysates whereas no signal observed at this size in ADAR1 knockout cell line <u>ab266846</u> (knockout cell lysate <u>ab257131</u>).

Exposure time: 59 seconds



Western blot - Anti-ADAR1 antibody [EPR25431-60]

- BSA and Azide free (ab307586)

All lanes : Anti-ADAR1 antibody [EPR25431-60] (**ab307585**) at 1/1000 dilution

Lane 1 : Untreated HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate 20 μg

Lane 2 : HeLa treated with 10ng/ml IFN alpha 1 for 16 hours whole cell lysate 20 μg

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

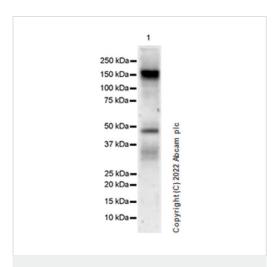
Predicted band size: 150 kDa **Observed band size:** 150 kDa

Exposure time: 37 seconds

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: $5\% \ NFDM/TBST$

Exposure time: 37 seconds



Western blot - Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free (ab307586)

Human kidney tissue lysate 20 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 150 kDa

Observed band size: 150 kDa

Exposure time: 158 seconds

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

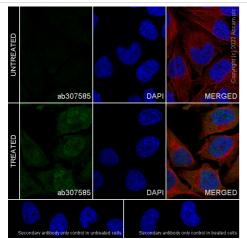
Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 158 seconds

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa (human cervical adenocarcinoma epithelial cell) cells labelling ADAR1 with ab307585 at 1/500 (1.08 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing increased nuclear and cytoplasmic staining in HeLa cells treated with IFN alpha 1 (human) (10 ng/ml) for 16 hours. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150081</u>



Immunocytochemistry/ Immunofluorescence - Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free (ab307586)

Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.

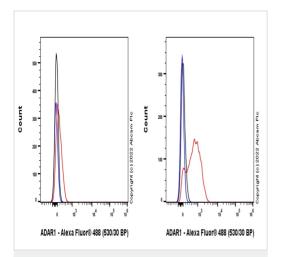
1 ende Mar 1850-01 Merge D DAPI MERGED DAP

Immunocytochemistry/ Immunofluorescence - Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free (ab307586)

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized ADAR KO HEK293T (ab266846) cells labelling ADAR1 with ab307585 at 1/500 (1.08 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing increased nuclear and cytoplasmic staining in parental HEK293T cells treated with IFN alpha 1 (human) (10 ng/ml) for 16 hours, and no staining in treated ADAR KO HEK293T cells. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

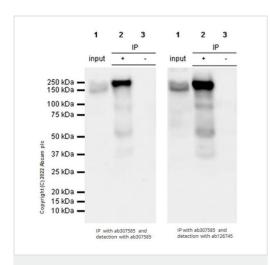
Secondary antibody only control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



Flow Cytometry (Intracellular) - Anti-ADAR1 antibody [EPR25431-60] - BSA and Azide free (ab307586)

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Wild-type 293T (human embryonic kidney epithelial cell, Right) / ADAR1 knockout 293T (Left) cells labelling ADAR1 with ab307585 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-ADAR1 antibody
[EPR25431-60] - BSA and Azide free (ab307586)

This data was developed using <u>ab307585</u>, the same antibody clone in a different buffer formulation.

ADAR1 was immunoprecipitated from 0.35 mg HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate 10 ug with **ab307585** at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using **ab307585** at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) (**ab131366**) was used at 1/5000 dilution.

Lane 1: HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate 10 ug

Lane 2: abab307585 IP in HeLa whole cell lysate

Lane 3:Rabbit monoclonal IgG ($\underline{ab172730}$) instead of $\underline{ab307585}$ in HeLa whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: Lanes 1-3: 5 seconds (left), Lanes 1-3: 3 seconds (right).

The IP experiment was performed by <u>ab307585</u> using HeLa cells. On the left the IP blot was probed with <u>ab307585</u> and on the right the blot was probed by another anti-ADAR1 antibody (<u>ab126745</u>) (1:1000 dilution).



Azide free (ab307586)

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