




## Product datasheet

### Anti-ADAR1 antibody ab168809

★★★★★ [1 Abreviews](#) [7 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-ADAR1 antibody
<b>Description</b>	Rabbit polyclonal to ADAR1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Chimpanzee, Gorilla, Orangutan 
<b>Immunogen</b>	Synthetic peptide, corresponding to a region within amino acids 200-250 of Human ADAR1 (NP_001102.2). <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> 
<b>Positive control</b>	293T, HeLa and Jurkat whole cell lysates.
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at 4°C (stable for up to 12 months). Store at +4°C.
<b>Storage buffer</b>	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate  pH 7 to 8
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab168809 was affinity purified using an epitope specific to ADAR1 immobilized on solid support.
<b>Clonality</b>	Polyclonal

## Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab168809 in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/1000 - 1/5000. Predicted molecular weight: 136 kDa.
IP		Use at 2-10 µg/mg of lysate.

## Target

### Function

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.

### Tissue specificity

Ubiquitously expressed, highest levels were found in brain and lung.

### Involvement in disease

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.

### Sequence similarities

Contains 1 A to I editase domain.  
Contains 2 DRADA repeats.  
Contains 3 DRBM (double-stranded RNA-binding) domains.

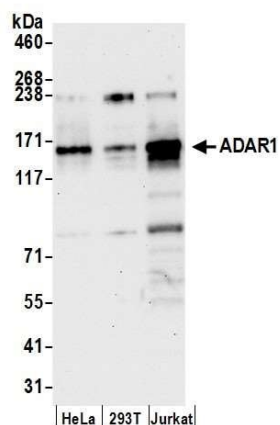
### Post-translational modifications

Sumoylation reduces RNA-editing activity.

### Cellular localization

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.

## Images



Western blot - Anti-ADAR1 antibody (ab168809)

**All lanes :** Anti-ADAR1 antibody (ab168809) at 0.1  $\mu\text{g/ml}$

**Lane 1 :** HeLa whole cell lysate

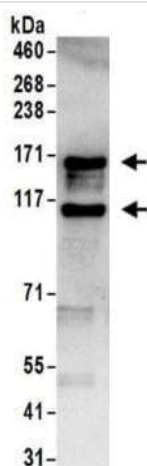
**Lane 2 :** 293T whole cell lysate

**Lane 3 :** Jurkat whole cell lysate

Lysates/proteins at 15  $\mu\text{g}$  per lane.

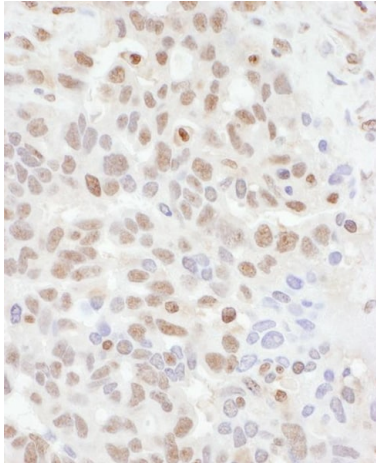
**Predicted band size:** 136 kDa

**Exposure time:** 30 seconds



Immunoprecipitation - Anti-ADAR1 antibody  
(ab168809)

Detection of ADAR1 in Immunoprecipitates of 293T whole cell lysate (1 mg for IP, 20% of IP loaded) using ab168809 at 6  $\mu\text{g/mg}$  lysate for IP and at 1  $\mu\text{g/ml}$  for subsequent Western blot detection. Detection: Chemiluminescence with an exposure time of 30 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human ovarian carcinoma tissue labelling ADAR1 with ab168809 at 1/1000 (1µg/ml). Detection: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ADAR1 antibody (ab168809)

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

#### **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.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

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