

## Product datasheet

# Anti-ATIC antibody [EPR13243-53] ab188321

Recombinant RabMAb

1 References 4 Images

### Overview

<b>Product name</b>	Anti-ATIC antibody [EPR13243-53]
<b>Description</b>	Rabbit monoclonal [EPR13243-53] to ATIC
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, Flow Cyt, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment within Human ATIC aa 450 to the C-terminus. The exact sequence is proprietary. Database link: <a href="#">P31939</a>
<b>Positive control</b>	Jurkat, HeLa, HepG2 and HCT-116 cell lysates; HeLa cells.
<b>General notes</b>	

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise<sup>™</sup> guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work

with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR13243-53
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab188321** 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
WB		1/1000 - 1/10000. Detects a band of approximately 65 kDa (predicted molecular weight: 65 kDa).
Flow Cyt		1/140. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		1/40 - 1/60.

## Target

<b>Function</b>	Bifunctional enzyme that catalyzes 2 steps in purine biosynthesis.
<b>Pathway</b>	Purine metabolism; IMP biosynthesis via de novo pathway; 5-formamido-1-(5-phospho-D-ribose)imidazole-4-carboxamide from 5-amino-1-(5-phospho-D-ribose)imidazole-4-carboxamide (10-formyl THF route): step 1/1. Purine metabolism; IMP biosynthesis via de novo pathway; IMP from 5-formamido-1-(5-phospho-D-ribose)imidazole-4-carboxamide: step 1/1.
<b>Involvement in disease</b>	Defects in ATIC are the cause of AICA-ribosuria [MIM:608688]; also known as AICA-ribosiduria.

AICA-ribosuria is a neurologically devastating inborn error of purine biosynthesis. AICA-ribosuria patients excrete massive amounts of AICA-riboside in the urine and accumulate AICA-ribotide and its derivatives in erythrocytes and fibroblasts. AICA-ribosuria causes profound mental retardation, epilepsy, dysmorphic features and congenital blindness.

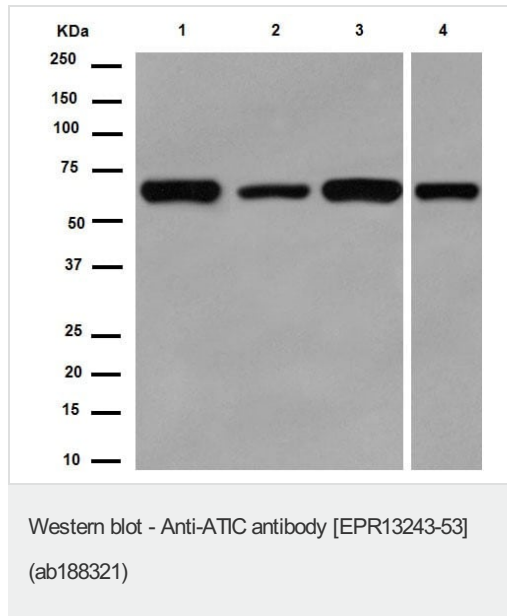
### Sequence similarities

Belongs to the purH family.

### Domain

The IMP cyclohydrolase activity resides in the N-terminal region.

## Images



**All lanes :** Anti-ATIC antibody [EPR13243-53] (ab188321) at 1/10000 dilution

**Lane 1 :** Jurkat cell lysate

**Lane 2 :** HeLa cell lysate

**Lane 3 :** HepG2 cell lysate

**Lane 4 :** HCT-116 cell lysate

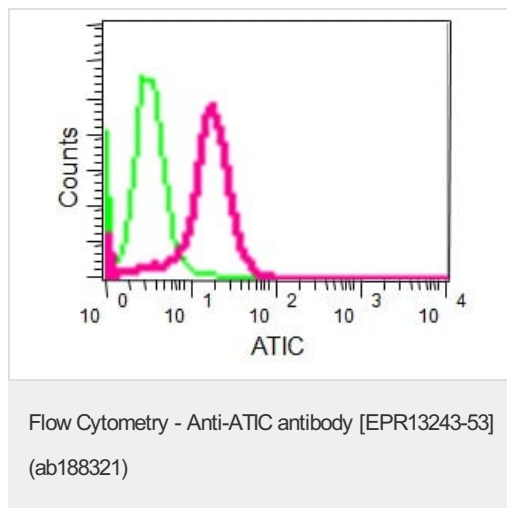
Lysates/proteins at 20 µg per lane.

### Secondary

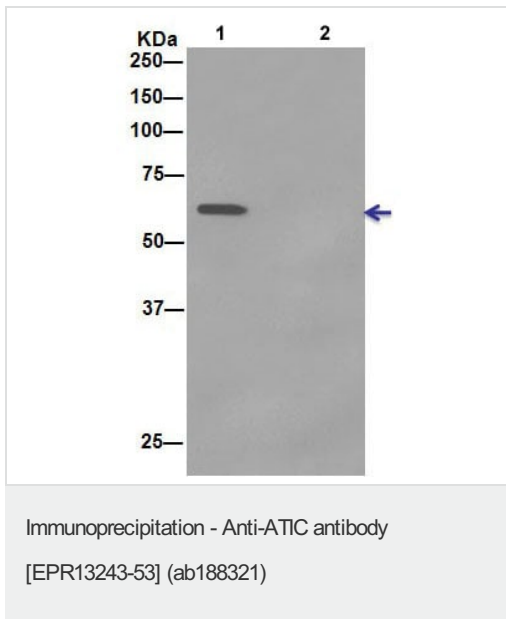
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

**Predicted band size:** 65 kDa

**Observed band size:** 65 kDa







Flow cytometric analysis of 2% paraformaldehyde-fixed HeLa cells labeling ATIC with ab188321 at 1/140 dilution (red) compared to a Rabbit monoclonal IgG isotype control (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.



Western blot analysis of ATIC in Jurkat cell lysate immunoprecipitated with ab188321 at 1/50 dilution (Lane 1). Lane 2: PBS instead of Jurkat lysate.

Secondary antibody: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.

Why choose a recombinant antibody?

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Anti-ATIC antibody [EPR13243-53] (ab188321)

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

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## Terms and conditions

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