

Product datasheet

Anti-HINT1 antibody [EPR5108] ab124912

KO VALIDATED Recombinant RabMAb

[2 References](#) [6 Images](#)

Overview

Product name	Anti-HINT1 antibody [EPR5108]
Description	Rabbit monoclonal [EPR5108] to HINT1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human HINT1. The exact sequence is proprietary.
Positive control	WB: HeLa, 293T, MCF7, HepG2 and Jurkat cell lysates. IHC-P: Human breast carcinoma and Human colonic adenocarcinoma tissues. ICC/IF: MCF7 cells

General notes

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](#).

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[™] 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

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5108
Isotype	IgG

Applications

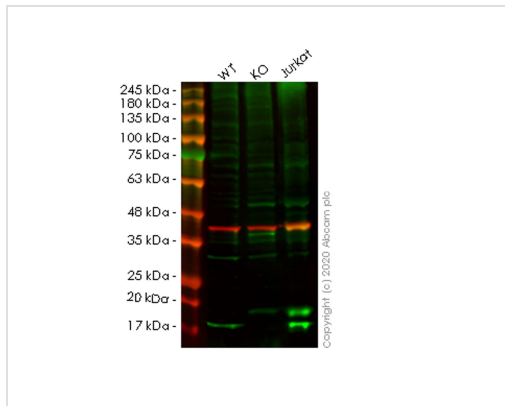
Our [Abpromise guarantee](#) covers the use of **ab124912** in the following tested applications.

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. Predicted molecular weight: 14 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. (Heat to 98°C, allow to cool for 10-20 minutes)
ICC/IF		1/1000.

Target

Function	Hydrolyzes adenosine 5'-monophosphoramidate substrates such as AMP-morpholidate, AMP-N-alanine methyl ester, AMP-alpha-acetyl lysine methyl ester and AMP-NH ₂ .
Tissue specificity	Widely expressed.
Sequence similarities	Belongs to the HINT family. Contains 1 HIT domain.
Domain	The histidine triad, also called HIT motif, forms part of the binding loop for the alpha-phosphate of purine mononucleotide.
Cellular localization	Cytoplasm. Nucleus. Interaction with CDK7 leads to a more nuclear localization.



Western blot - Anti-HINT1 antibody [EPR5108] (ab124912)

All lanes : Anti-HINT1 antibody [EPR5108] (ab124912) at 1/500 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : HINT1 knockout HeLa cell lysate

Lane 3 : Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

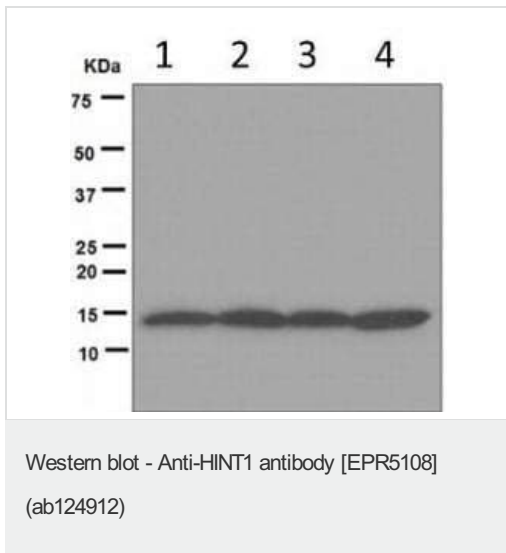
Predicted band size: 14 kDa

Observed band size: 17 kDa

[why is the actual band size different from the predicted?](#)

Lanes 1-3: Merged signal (red and green). Green - ab124912 observed at 17 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab124912 Anti-HINT1 antibody [EPR5108] was shown to specifically react with HINT1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265776](#) (knockout cell lysate [ab257465](#)) was used. Wild-type and HINT1 knockout samples were subjected to SDS-PAGE. ab124912 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at room temperature for 2.5 hours at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-HINT1 antibody [EPR5108] (ab124912) at 1/1000 dilution

Lane 1 : 293T cell lysate

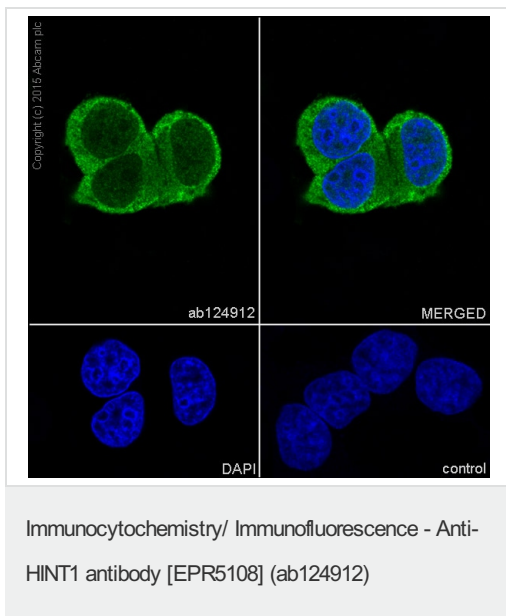
Lane 2 : MCF7 cell lysate

Lane 3 : HepG2 cell lysate

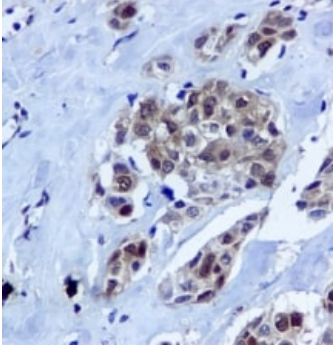
Lane 4 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 14 kDa



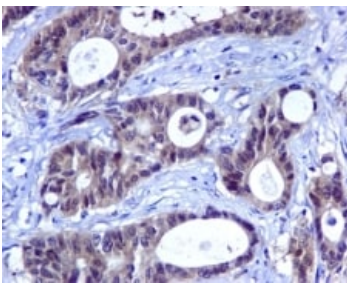
Immunocytochemistry/ Immunofluorescence analysis of MCF7 (human breast adenocarcinoma epithelial cell) cells labeling HINT1 with purified ab124912 at 1/1000 dilution (2 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HINT1 antibody [EPR5108] (ab124912)

ab124912, at 1/250 dilution, staining HINT1 in paraffin embedded breast carcinoma tissue by immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HINT1 antibody [EPR5108] (ab124912)

ab124912, at 1/250 dilution, staining HINT1 in paraffin embedded colonic adenocarcinoma tissue by immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Why choose a recombinant antibody?

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

Anti-HINT1 antibody [EPR5108] (ab124912)

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

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- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
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- We investigate all quality concerns to ensure our products perform to the highest standards

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