

## Product datasheet

# Anti-Menin antibody [EPR3986] - BSA and Azide free ab239910

**KO VALIDATED** Recombinant RabMAB

8 Images

### Overview

<b>Product name</b>	Anti-Menin antibody [EPR3986] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR3986] to Menin - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, IHC-P, ICC/IF, WB <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Wild-type HAP1, Jurkat cell lysate. IP: Jurkat whole cell lysate. ICC: Jurkat cells.
<b>General notes</b>	<p>ab239910 is the carrier-free version of <a href="#">ab92443</a>.</p> <p>Our <a href="#">carrier-free</a> 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.</p> <p>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.</p> <p>Use our <a href="#">conjugation kits</a> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p>

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.20 Constituent: 100% PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3986
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab239910 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
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 68 kDa.

**Application notes** Is unsuitable for Flow Cyt.

## Target

**Function** Essential component of a MLL/SET1 histone methyltransferase (HMT) complex, a complex that specifically methylates 'Lys-4' of histone H3 (H3K4). Functions as a transcriptional regulator. Binds to the TERT promoter and represses telomerase expression. Plays a role in TGFB1-mediated inhibition of cell-proliferation, possibly regulating SMAD3 transcriptional activity. Represses JUND-mediated transcriptional activation on AP1 sites, as well as that mediated by NFkB subunit RELA. Positively regulates HOXC8 and HOXC6 gene expression. May be involved in normal hematopoiesis through the activation of HOXA9 expression (By similarity). May be

involved in DNA repair.

### Tissue specificity

Ubiquitous.

### Involvement in disease

Defects in MEN1 are the cause of familial multiple endocrine neoplasia type I (MEN1) [MIM:131100]. Autosomal dominant disorder characterized by tumors of the parathyroid glands, gastro-intestinal endocrine tissue, the anterior pituitary and other tissues. Cutaneous lesions and nervous-tissue tumors can exist. Prognosis in MEN1 patients is related to hormonal hypersecretion by tumors, such as hypergastrinemia causing severe peptic ulcer disease (Zollinger-Ellison syndrome, ZES), primary hyperparathyroidism, and acute forms of hyperinsulinemia.

Defects in MEN1 are the cause of familial isolated hyperparathyroidism (FIHP) [MIM:145000]; also known as hyperparathyroidism type 1 (HRPT1). FIHP is an autosomal dominant disorder characterized by hypercalcemia, elevated parathyroid hormone (PTH) levels, and uniglandular or multiglandular parathyroid tumors.

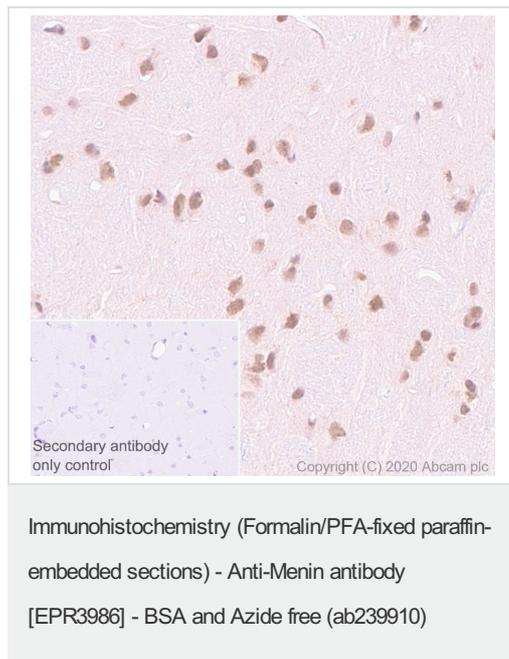
### Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

### Cellular localization

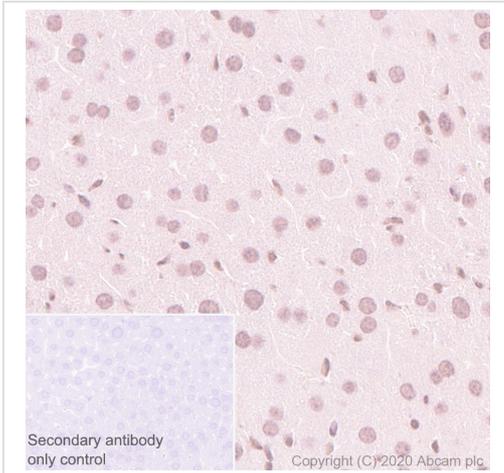
Nucleus. Concentrated in nuclear body-like structures. Relocates to the nuclear matrix upon gamma irradiation.

## Images



This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

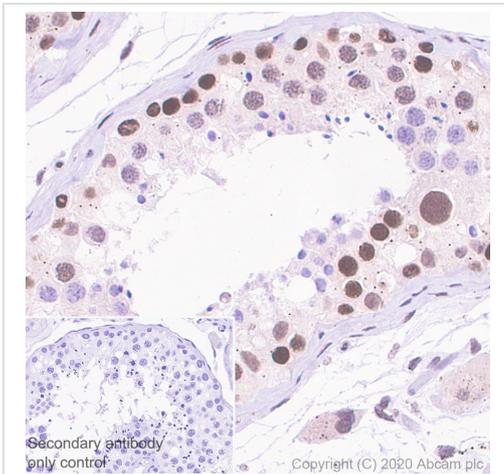
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling Menin with purified [ab92443](#) at 1/100 dilution (6.08 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Menin antibody [EPR3986] - BSA and Azide free (ab239910)

This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

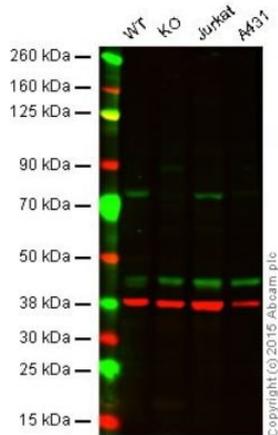
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labeling Menin with purified [ab92443](#) at 1/100 dilution (6.08 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Menin antibody [EPR3986] - BSA and Azide free (ab239910)

This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue sections labeling Menin with purified [ab92443](#) at 1/500 dilution (1.22 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Menin antibody [EPR3986] - BSA and Azide free (ab239910)

This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

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

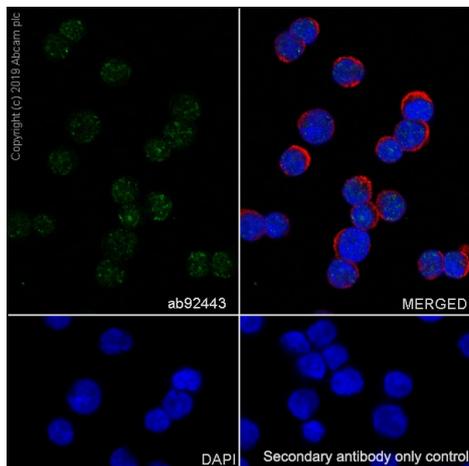
**Lane 2:** Menin knockout HAP1 cell lysate (20 µg)

**Lane 3:** Jurkat cell lysate (20 µg)

**Lane 4:** A431 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - [ab92443](#) observed at 74 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

[ab92443](#) was shown to recognize Menin when Menin knockout samples were used, along with additional cross-reactive bands. Wild-type and Menin knockout samples were subjected to SDS-PAGE. [ab92443](#) and [ab8245](#) (loading control to GAPDH) were diluted 1/10,000 and 1/2000 respectively and incubated overnight at 4°C. 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 1/10 000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-Menin antibody [EPR3986] - BSA and Azide free (ab239910)

This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

Immunocytochemistry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling Menin with purified [ab92443](#) at 1/50 dilution (12.1 µg/mL). Cells were fixed in 100% Methanol and permeabilized with 0.1% tritonX-100. Cells were counterstained with [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.6 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150078](#)) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-Menin antibody  
[EPR3986] - BSA and Azide free (ab239910)

This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

Purified [ab92443](#) at 1/50 dilution (2µg) immunoprecipitating Menin in Jurkat whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10µg

Lane 2 (+): [ab92443](#) + Jurkat whole cell lysate.

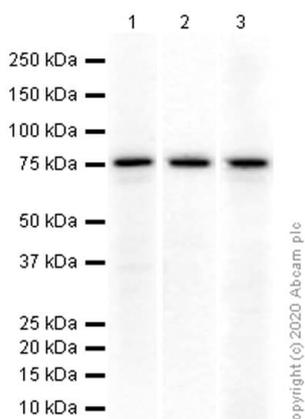
Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of [ab92443](#) in Jurkat whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 75 kDa



Western blot - Anti-Menin antibody [EPR3986] -  
BSA and Azide free (ab239910)

**All lanes** : Anti-Menin antibody [EPR3986] ([ab92443](#)) at 1/1000 dilution (Purified)

**Lane 1** : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

**Lane 2** : MEF (Mouse embryonic fibroblast (immortalized)) whole cell lysate

**Lane 3** : PC-12 (Rat adrenal gland pheochromocytoma ) whole cell lysate

Lysates/proteins at 15 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 68 kDa

**Observed band size:** 75 kDa

This data was developed using [ab92443](#), the same antibody clone in a different buffer formulation.

### 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-Menin antibody [EPR3986] - BSA and Azide free (ab239910)

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

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