abcam

ab307540

Anti-Dnmt3a (mutated R882H) antibody [EPR27389-11]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR27389-11
Purification technique	Affinity purification Protein A
Concentration	0.546 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ChIP

Not recommended

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Rat, Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat, Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/5000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Rat
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

WB

Not recommended

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

Target data

See full target information DNMT3A mutated R882H

Function

Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development (PubMed:12138111, PubMed:16357870, PubMed:30478443). DNA methylation is coordinated with methylation of histones (PubMed:12138111, PubMed:16357870, PubMed:30478443). It modifies DNA in a non-processive manner and also methylates non-CpG sites (PubMed:12138111, PubMed:16357870, PubMed:30478443). May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1 (By similarity). Plays a role in paternal and maternal imprinting (By similarity). Required for methylation of most imprinted loci in germ cells (By similarity). Acts as a transcriptional corepressor for

ZBTB18 (By similarity). Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites (By similarity). Can actively repress transcription through the recruitment of HDAC activity (By similarity). Also has weak auto-methylation activity on Cys-710 in absence of DNA (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

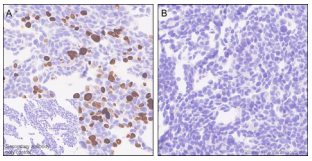
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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4 product images

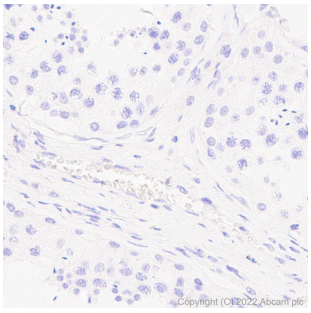


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dnmt3a (mutated R882H) antibody [EPR27389-11] (ab307540)

Dnmt3a (mutated R882H) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of HEK-293T cells using rabbit Anti-Dnmt3a (mutated R882H) antibody

Immunohistochemical analysis of paraffin-embedded HEK-293T cells tran tissue labeling Dnmt3a (mutated R882H) with ab307540 at 1/5000 (0.109 ug/ml) followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Positive staining on HEK-293T cells transfected with a human DNMT3A (R882H) expression vector containing myc and his tag (Image A) and no staining on HEK-293 cells transfected with human wildtype DNMT3A expression vector containing myc and his tag (Image B).The section was incubated with ab307540 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

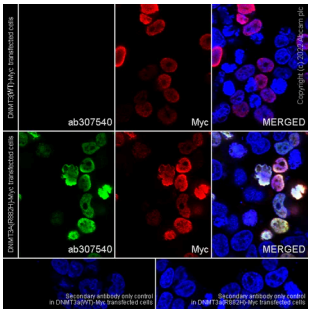
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dnmt3a (mutated R882H) antibody [EPR27389-11] (ab307540)

Dnmt3a (mutated R882H) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human testis using rabbit Anti-Dnmt3a (mutated R882H) antibody

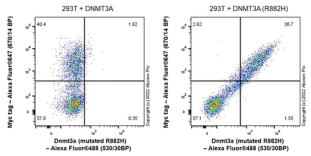
Immunohistochemical analysis of paraffin-embedded Human testis tissue lABeling Dnmt3a (mutated R882H) with ab307540 at 1/5000 (0.109 ug/ml) followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Negative control: no staining on human testis.The section was incubated with ab307540 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-Dnmt3a (mutated R882H) antibody [EPR27389-11] (ab307540)

Dnmt3a (mutated R882H) Immunocytochemistry/ Immunofluorescence staining of 293T (human embryonic kidney epithelial cell) using rabbit Anti-Dnmt3a (mutated R882H) antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T (human embryonic kidney epithelial cell) cells labelling Dnmt3a (mutated R882H) with ab307540 at 1/1000 (0.546 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal showing positive staining in HEK-293T cells transfected with a human DNMT3A (R882H) expression vector containing a myc tag, and showing no staining in HEK-293 cells transfected with human wildtype DNMT3A expression vector containing a myc tag.The image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. Myc-Tag Mouse mAb (Alexa Fluor® 647) was used to counterstain tubulin at 1/100 0.38 ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-RABbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Flow Cytometry (Intracellular) - Anti-Dnmt3a (mutated R882H) antibody [EPR27389-11] (ab307540)

Dnmt3a (mutated R882H) Flow Cytometry (Intracellular) staining of HEK-293T using rabbit Anti-Dnmt3a (mutated R882H) antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HEK-293T (human embryonic kidney) cells transfected with a human DNMT3A expression vector containing a myc-his tag (Left) / HEK-293T transfected with a human DNMT3A (R882H) expression vector containing a myc-his tag (Right) cells labelling Dnmt3a (mutated R882H) with ab307540 at 1/500 dilution (0.1ug)/ Right and Left (Red) compared with a 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.