abcam

ab326730

Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR30363-35
Purification technique	Affinity purification Protein A
Concentration	1.029 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse, Human
Dilution info	-

Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

IHC-P

Tested

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

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ChIP-seq

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ChIC/CUT&RUN-seq

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information Hdac9

Function	Devoided of intrinsic deacetylase activity, promotes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) by recruiting HDAC1 and HDAC3. Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Represses MEF2-dependent transcription, inhibits skeletal myogenesis and may be involved in heart development. Protects neurons from apoptosis, both by inhibiting JUN phosphorylation by MAPK10 and by repressing JUN transcription via HDAC1 recruitment to JUN promoter.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab326730 is the carrier-free version of ab326719

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

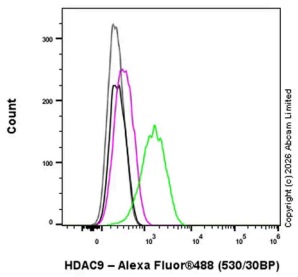
We do not recommend this combination. It is not covered by our product promise.

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.

11 product images



Flow Cytometry - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

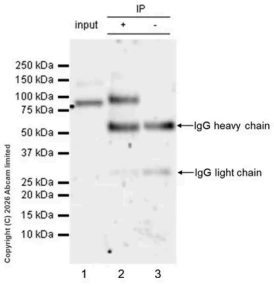
HDAC9 Flow Cytometry staining using rabbit Anti-HDAC9 antibody

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of parental HAP1 (human chronic myelogenous leukemia near-haploid cell, Green and black) HDAC9 knockout HAP1 (Magenta and grey) cells labelling HDAC9 with ab326719 at 1/50 dilution (1ug) / Magenta and Green compared with a Rabbit monoclonal IgG (ab172730) / Black and Grey isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.



Immunoprecipitation - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

HDAC9 was immunoprecipitated from 0.35 mg SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate with ab326719 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab326719 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate
Lane 2: ab326719 IP in SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab326719 in SH-SY5Y whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 180 seconds.

All lanes:
Immunoprecipitation - Anti-HDAC9 antibody [EPR30363-35] (ab326719) at 1/1000 dilution

Lane 1:
SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate at 10 µg

Lane 2:
ab326719 at 1/30 IP in SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate

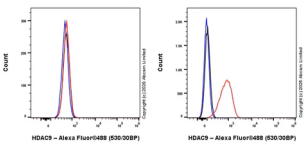
Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab326719 in SH-SY5Y whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Observed band size: 90 kDa, 150 kDa

Exposure time: 180s



Flow Cytometry - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

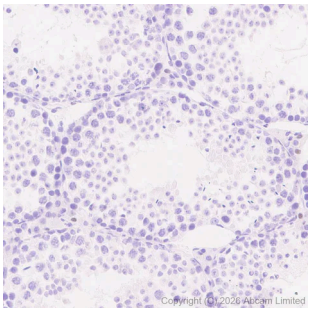
HDAC9 Flow Cytometry staining using rabbit Anti-HDAC9 antibody

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of A20 (mouse reticulum sarcoma B lymphocyte, Right) B16-F10 (mouse skin melanoma cell, Left) cells labelling HDAC9 with ab326719 at 1/50 dilution (1ug) / Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells. Negative control: B16-F10.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HDAC9 antibody

This data was developed using ab326719 , the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling HDAC9 with ab326719 at 1/100 (5.15 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Low expression tissue: Nearly no staining on mouse testis.

The primary antibody was incubated for 30 mins at room temperature.

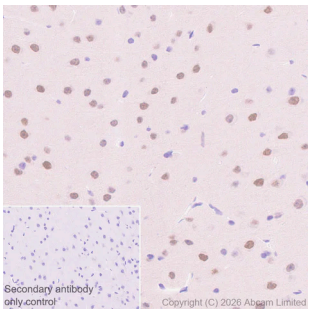
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed 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-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse cerebrum using rabbit Anti-HDAC9 antibody

This data was developed using ab326719 , the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling HDAC9 with ab326719 at 1/100 (5.15 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on mouse cerebrum (PMID: 11390982).

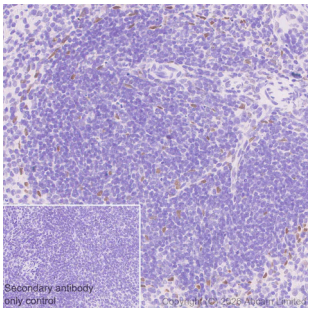
The primary antibody was incubated for 30 mins at room temperature.

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).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse spleen using rabbit Anti-HDAC9 antibody

This data was developed using ab326719 , the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling HDAC9 with ab326719 at 1/100 (5.15 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on mouse spleen.

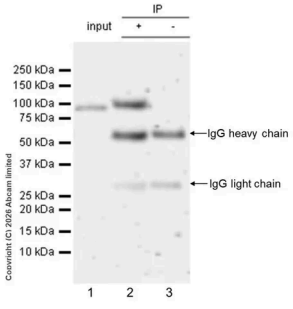
The primary antibody was incubated for 30 mins at room temperature.

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).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunoprecipitation - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

HDAC9 was immunoprecipitated from 0.35 mg RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate with ab326719 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab326719 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate
Lane 2: ab326719 IP in RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab326719 in RAW 264.7 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 180 seconds.
All lanes:
Immunoprecipitation - Anti-HDAC9 antibody [EPR30363-35] (ab326719) at 1/1000 dilution

Lane 1:
RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

Lane 2:
ab326719 at 1/30 IP in RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

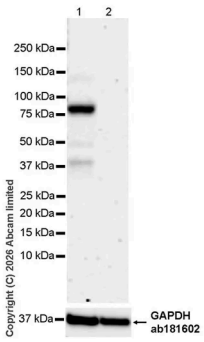
Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab326719 in RAW 264.7 whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Observed band size: 90 kDa, 150 kDa

Exposure time: 180s



Western blot - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Western blot staining using rabbit Anti-HDAC9 antibody

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

In Western blot, ab326938 was shown to bind specifically to HDAC9. Target of interest was observed at 150, 90 kDa in wild-type HAP1 cell lysates (lane 1) with no signal observed at this size in HDAC9 HAP1 knockout cell lysates(lane 2).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

All lanes:
Western blot - Anti-HDAC9 antibody [EPR30363-35] (ab326719) at 1/1000 dilution

Lane 1:
Wilde-type HAP1 (human chronic myelogenous leukemia near-haploid cell) whole cell lysate at 20 µg

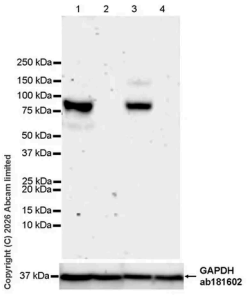
Lane 2:
HDAC9 knockout HAP1 whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 90 kDa, 150 kDa, 36 kDa

Exposure time: 180s



Western blot - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Western blot staining using rabbit Anti-HDAC9 antibody

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: HT-29(PMID: 12590135), B16-F10

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

All lanes:
Western blot - Anti-HDAC9 antibody [EPR30363-35] (ab326719) at 1/1000 dilution

Lane 1:
A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate at 20 µg

Lane 2:
B16-F10 (mouse skin melanoma cell) whole cell lysate at 20 µg

Lane 3:
SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate at 20 µg

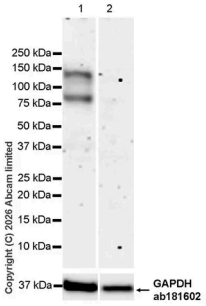
Lane 4:
HT-29 (human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 90 kDa, 150 kDa, 36 kDa

Exposure time: 180s



Western blot - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Western blot staining of Mouse brain fresh tissue lysate using rabbit Anti-HDAC9 antibody

This data was developed using ab326719, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: testis(PMID: 1139082)

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).
All lanes:
Western blot - Anti-HDAC9 antibody [EPR30363-35] (ab326719) at 1/1000 dilution

Lane 1:
Mouse brain fresh tissue lysate at 20 µg

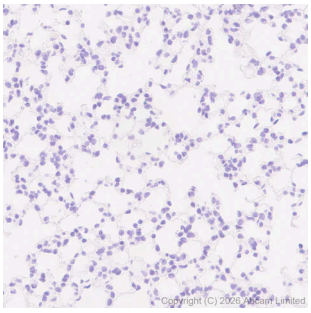
Lane 2:
Mouse testis fresh tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 90 kDa, 150 kDa, 36 kDa

Exposure time: 180s



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HDAC9 antibody [EPR30363-35] - BSA and Azide free (ab326730)

HDAC9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HDAC9 antibody

This data was developed using ab326719 , the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling HDAC9 with ab326719 at 1/100 (5.15 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Low expression tissue: No staining on mouse lung.

The primary antibody was incubated 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).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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