abcam

ab236047

Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free

Recombinant | RabMAb | Advanced Validation

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	EPR3411
Purification technique	Affinity purification Protein A
Concentration	0.967 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Rat
Dilution info	-

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

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Expected

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

ChIP-seq

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

ChIC/CUT&RUN-seq

Tested

Species	Human

Dilution info	-
Notes	-

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information RBBP4

Function	Core histone-binding subunit that may target chromatin assembly factors, chromatin remodeling factors and histone deacetylases to their histone substrates in a manner that is regulated by nucleosomal DNA (PubMed:10866654). Component of the chromatin assembly factor 1 (CAF-1) complex, which is required for chromatin assembly following DNA replication and DNA repair (PubMed:8858152). Component of the core histone deacetylase (HDAC) complex, which promotes histone deacetylation and consequent transcriptional repression (PubMed:9150135). Component of the nucleosome remodeling and histone deacetylase complex (the NuRD complex), which promotes transcriptional repression by histone deacetylation and nucleosome remodeling (PubMed:16428440, PubMed:28977666, PubMed:39460621). Component of the PRC2 complex, which promotes repression of homeotic genes during development (PubMed:29499137, PubMed:31959557). Component of the NURF (nucleosome remodeling factor) complex (PubMed:14609955, PubMed:15310751).

Storage

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

Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab236047 is the carrier-free version of ab79416.

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

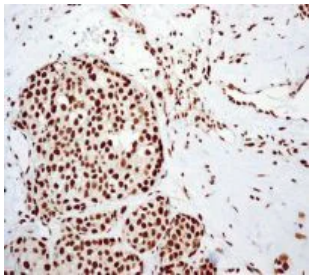
We do not recommend this combination. It is not covered by our product promise.

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.

13 product images

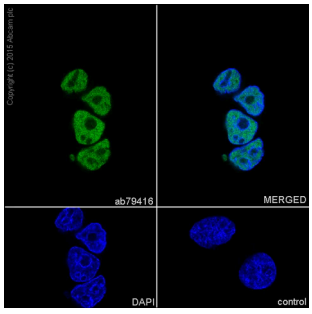


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP4 antibody

ab79416, at 1/100 dilution, staining RBBP4 in human breast carcinoma tissue by Immunohistochemistry.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

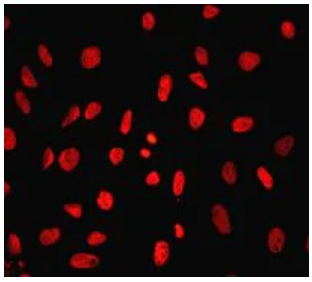


Immunocytochemistry/ Immunofluorescence - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RBBP4 antibody

ab79416 staining RBBP4 in MCF-7 (human breast carcinoma) cells by ICC (Immunocytochemistry). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000. DAPI was used as a nuclear counterstain.
Negative control 1: PBS only.

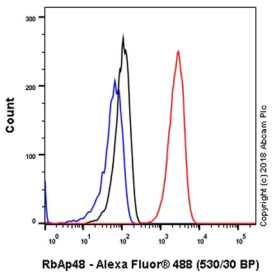
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).



Immunocytochemistry/ Immunofluorescence - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RBBP4 antibody

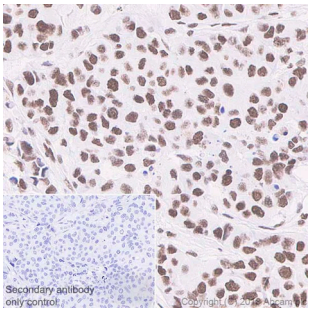
Immunocytochemical staining of RBBP4 in HeLa cells using unpurified ab79416 at 1/100 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).



Flow Cytometry (Intracellular) - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Flow Cytometry (Intracellular) staining using rabbit Anti-RBBP4 antibody

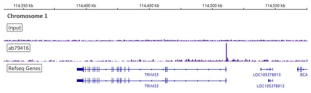
Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling RBBP4 with purified ab79416 at 1/20 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP4 antibody

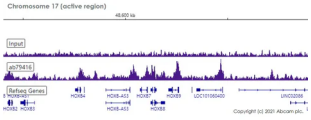
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast cancer tissue sections labeling RBBP4 with Purified ab79416 at 1:8000 dilution (0.014 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0) ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylinwas used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).



ChIP-sequencing - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

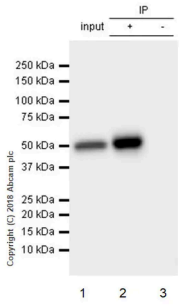
Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 30 µg of chromatin and 4 µg of ab79416. ChIP DNA was sequenced on the Illumina NextSeq 500 to a depth of 30 million reads. ChIP-Seq validation performed by Active Motif, Carlsbad, CA.
Additional screenshots of mapped reads can be downloaded here.

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ChIP-sequencing - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 10^7 HeLa cells and 8 µg of ab79416 [EPR3411]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.
Additional screenshots of mapped reads can be downloaded here.



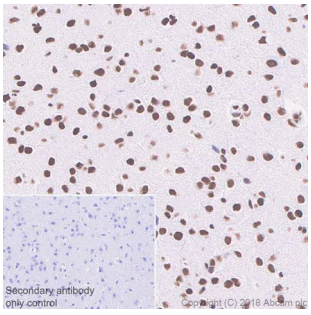
Immunoprecipitation - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

ab79416 (purified) at 1:20 dilution (2µg) immunoprecipitating RBBP4 in HeLa whole cell lysate.
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg
Lane 2 (+): ab79416 & HeLa whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab79416 in HeLa whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).

All lanes:
Immunoprecipitation - Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416)

Predicted band size: 48 kDa

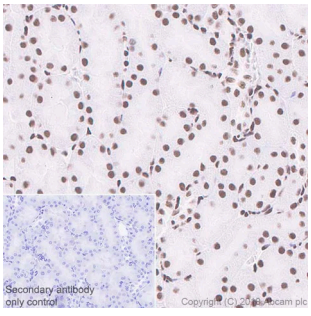
Observed band size: 33 kDa, 42 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP4 antibody

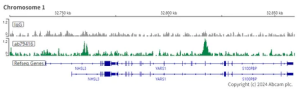
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse cerebrum tissue sections labeling RBBP4 with Purified ab79416 at 1:8000 dilution (0.014 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0) ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylinwas used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

RBBP4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP4 antibody

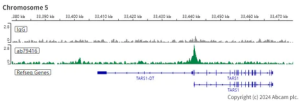
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat pancreas tissue sections labeling RBBP4 with Purified ab79416 at 1:8000 dilution (0.014 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0) ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody.Hematoxylinwas used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab79416).



ChIC/CUT&RUN sequencing - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

This data was developed using the same antibody clone in a different buffer formulation (ab79416).

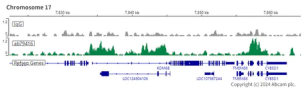
ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/mL, 2.5 x 10^5 HeLa (Human cervix adenocarcinoma epithelial cell) cells and 5 µg of ab79416 [EPR3411]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control ab172730 is also shown. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



ChIC/CUT&RUN sequencing - Anti-RBBP4 antibody [EPR3411] - ChIP Grade - BSA and Azide free (ab236047)

This data was developed using the same antibody clone in a different buffer formulation (ab79416).

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