

## Product datasheet

# Anti-RBBP4 antibody [EPR3411] - CHIP Grade ab79416

Recombinant RabMAb

[14 References](#) [14 Images](#)

### Overview

<b>Product name</b>	Anti-RBBP4 antibody [EPR3411] - CHIP Grade
<b>Description</b>	Rabbit monoclonal [EPR3411] to RBBP4 - CHIP Grade
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IP, IHC-P, ChIP-sequencing, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human RBBP4 aa 1-100 (N terminal). The exact sequence is proprietary. Database link: <a href="#">Q09028</a>
<b>Positive control</b>	WB: HeLa, Jurkat, NIH/3T3, 293 and HeLa, whole cell lysates. Mouse spleen, Rat spleen and Human fetal spleen tissue lysates; IHC-P: Human breast cancer, rat pancreas and Mouse cerebrum; Flow Cyt (intra): MCF7 cells; IP: HeLa cells; ICC/IF: MCF-7 and HeLa cells. ChIP-Seq: Chromatin from HeLa cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                   EPR3411  
 Isotype                            IgG

## Applications

**The Abpromise guarantee**           Our **Abpromise guarantee** covers the use of ab79416 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
Flow Cyt (Intra)		1/20. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/50
WB		1/10000 - 1/50000. Detects a band of approximately 48 kDa (predicted molecular weight: 48 kDa).
IP		1/20. <b>For unpurified use at 1/50</b>
IHC-P		1/8000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> . <b>For unpurified use at 1/100 - 1/250</b>
ChIP-sequencing		Use 3 µg for 30 µg of chromatin.
ICC/IF		1/100 - 1/250.

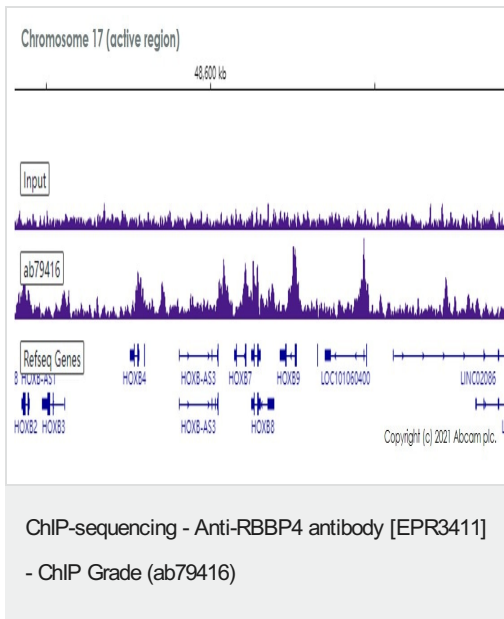
## Target

**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. Component of several complexes which regulate chromatin metabolism. These include the chromatin assembly factor 1 (CAF-1) complex, which is required for chromatin assembly following DNA replication and DNA repair; the core histone deacetylase (HDAC) complex, which promotes histone deacetylation and consequent transcriptional repression; the nucleosome remodeling and histone deacetylase complex (the NuRD complex), which promotes transcriptional repression by histone deacetylation and nucleosome remodeling; the PRC2/EED-EZH2 complex, which promotes repression of homeotic genes during development; and the NURF (nucleosome remodeling factor) complex.

**Sequence similarities**                    Belongs to the WD repeat RBAP46/RBAP48/MSI1 family.  
Contains 6 WD repeats.

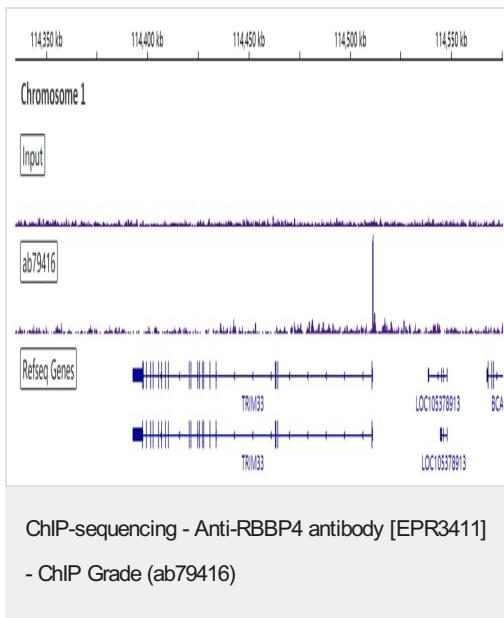
**Cellular localization**                    Nucleus.

## Images



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  $\mu$ g of ab79416 [EPR3411]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

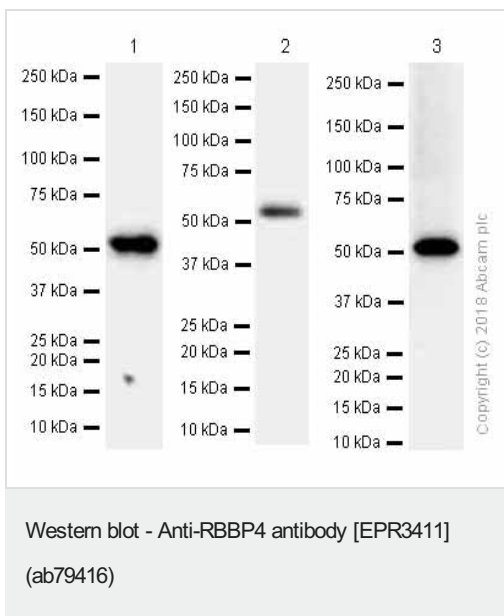
Additional screenshots of mapped reads can be downloaded [here](#).



Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 30  $\mu$ g of chromatin and 3  $\mu$ g 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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**All lanes** : Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416) at 0.006  $\mu$ g/ml (purified)

**Lane 1** : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2** : Mouse spleen lysates

**Lane 3** : Rat spleen lysates

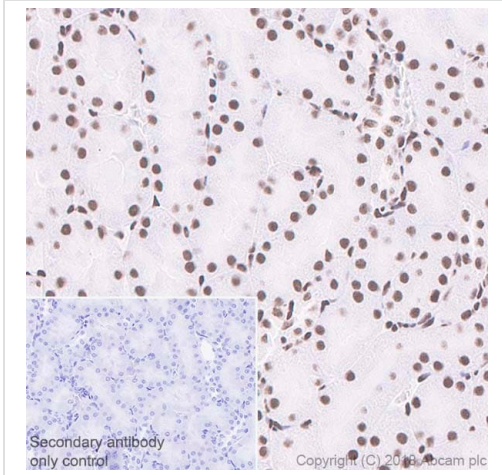
Lysates/proteins at 15  $\mu$ g per lane.

### Secondary

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

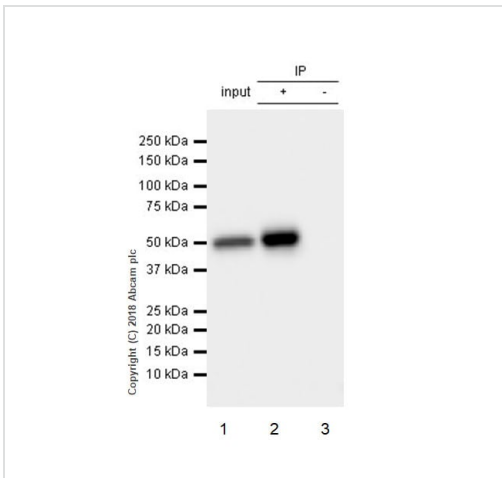
**Predicted band size:** 48 kDa

Blocking and diluting buffer: 5% NFDm/TBST.



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. Hematoxylin was used as a counterstain

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] (ab79416)



Immunoprecipitation - Anti-RBBP4 antibody [EPR3411] (ab79416)

ab79416 (purified) at 1:20 dilution (2µg) immunoprecipitating RBBP4 in HeLa whole cell lysate.

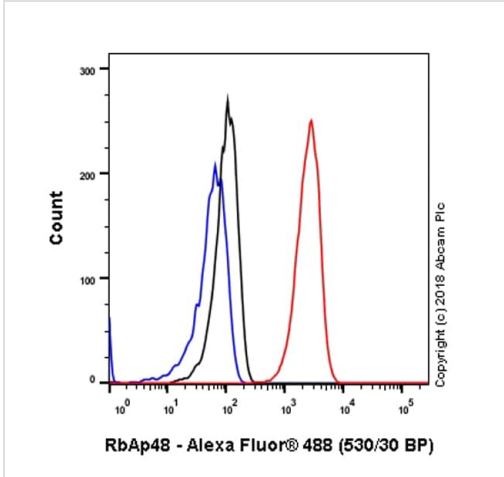
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab79416 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab79416 in HeLa whole cell lysate

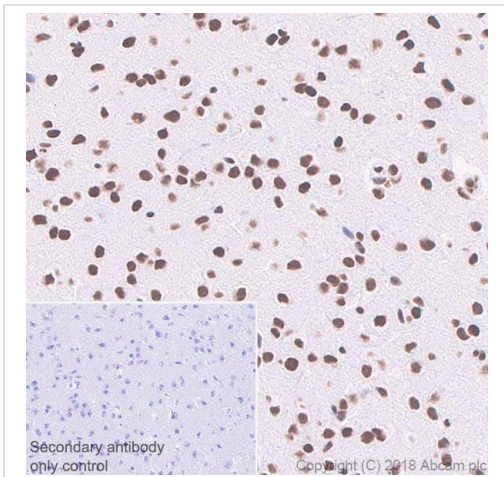
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDm/TBST.



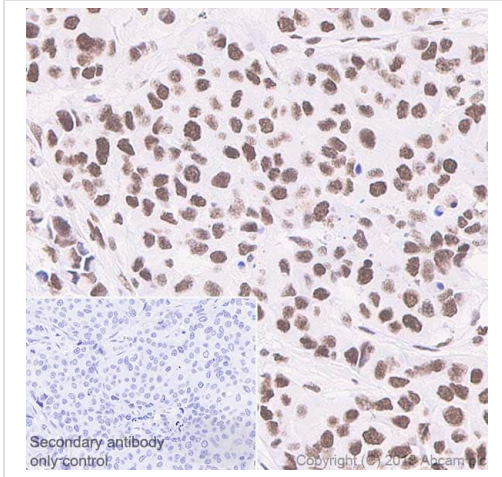
Flow Cytometry (Intracellular) - Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416)

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).



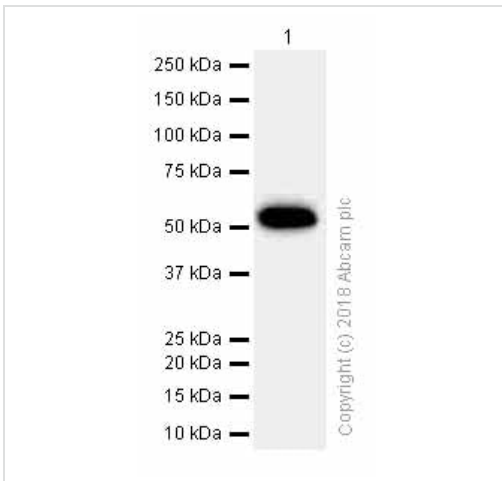
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] (ab79416)

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. Hematoxylin was used as a counterstain



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] (ab79416)

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. Hematoxylin was used as a counterstain



Western blot - Anti-RBBP4 antibody [EPR3411] (ab79416)

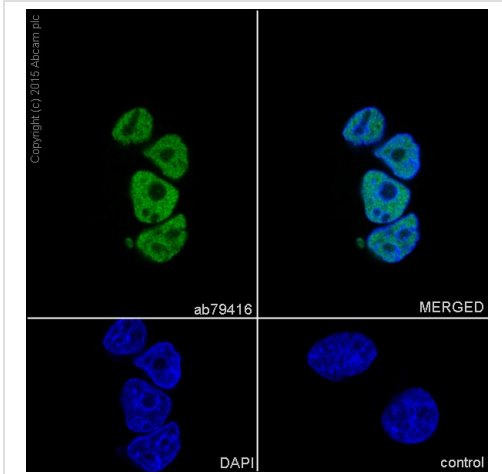
Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416) at 0.006 µg/ml (purified) + Human fetal spleen lysates at 15 µg

**Secondary**

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size: 48 kDa**

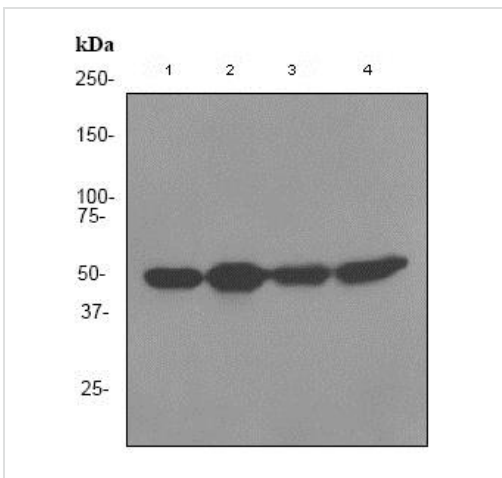
Blocking and diluting buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416)

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.



Western blot - Anti-RBBP4 antibody [EPR3411] (ab79416)

**All lanes :** Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416) at 1/50000 dilution (Unpurified)

**Lane 1 :** HeLa lysate

**Lane 2 :** Jurkat lysate

**Lane 3 :** NIH/3T3 lysate

**Lane 4 :** 293 lysate

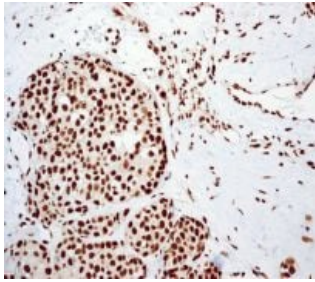
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 48 kDa

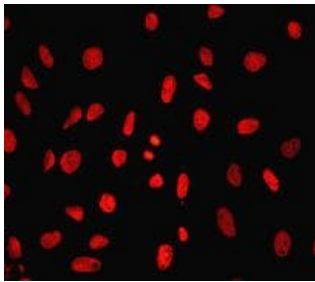
**Observed band size:** 48 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP4 antibody [EPR3411] (ab79416)

Unpurified ab79416, at 1/100 dilution, staining RBBP4 in human breast carcinoma tissue by Immunohistochemistry.

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



Immunocytochemistry/ Immunofluorescence - Anti-RBBP4 antibody [EPR3411] - ChIP Grade (ab79416)

Immunocytochemical staining of RBBP4 in HeLa cells using unpurified ab79416 at 1/100 dilution.

### 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-RBBP4 antibody [EPR3411] (ab79416)

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



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