abcam

ab259957

Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade

Recombinant | RabMAb | Advanced Validation | KO Validated | 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	EPR23796-74
Purification technique	Affinity purification Protein A
Concentration	0.59 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Human

Dilution info	1/500
Notes	-

Expected

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

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Species	Human
Dilution info	1/30
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000

Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ChIP-seq

Tested

Species	Human
Dilution info	3 µg for 30 µg chromatin
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/600
Notes	-

Species	Human
Dilution info	1/600
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.

Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information RBBP7

Function	Core histone-binding subunit that may target chromatin remodeling factors, histone acetyltransferases 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 type B histone acetyltransferase (HAT) complex, which is required for chromatin assembly following DNA replication; 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; and the PRC2/EED-EZH2 complex, which promotes repression of homeotic genes during development; and the NURF (nucleosome remodeling factor) complex.

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

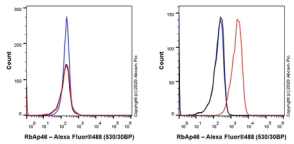
We do not recommend this combination. It is not covered by our product promise.

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.

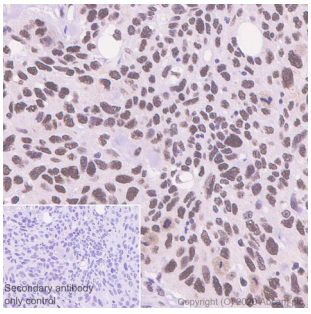
17 product images



Flow Cytometry (Intracellular) - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Flow Cytometry (Intracellular) staining using rabbit Anti-RBBP7 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized parental HAP1 (Wildtype control Human chronic myelogenous leukemia near-haploid cell line (Right) / RBBP7 (RbAp46) KO HAP1 (Left) cells labelling RBBP7 with ab259957 at 1/600 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).
A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

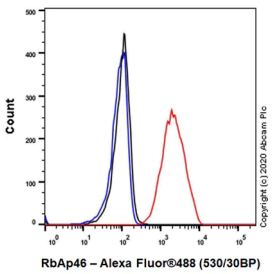


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP7 antibody

Immunohistochemical analysis of paraffin-embedded Human lung cancer tissue labeling RBBP7 with ab259957 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining in human lung cancer (PMID: 19655816).The section was incubated with ab259957 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

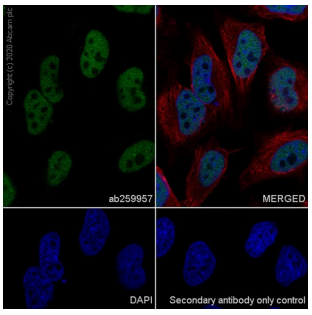


Flow Cytometry (Intracellular) - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Flow Cytometry (Intracellular) staining using rabbit Anti-RBBP7 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized Hela (Human cervix adenocarcinoma epithelial cell) cells labelling RBBP7 with ab259957 at 1/600 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control

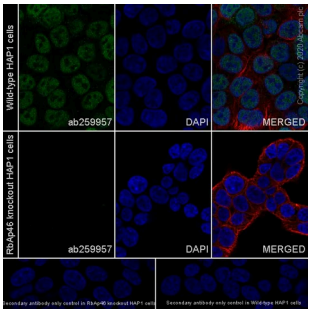
and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).
A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RBBP7 antibody

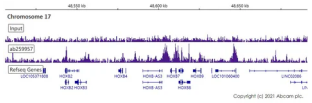
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling RBBP7 with ab259957 at 1/500 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing mainly nuclear staining in HeLa cell line. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.



Immunocytochemistry/ Immunofluorescence - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

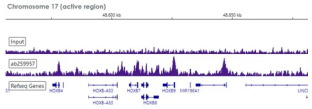
RBBP7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RBBP7 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RBBP7 (RbAp46) KO HAP1 cells labelling RBBP7 with ab259957 at 1/500 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing no staining in RBBP7 (RbAp46) KO HAP1 cells. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.



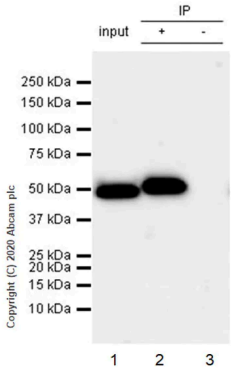
ChIP-sequencing - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

Chromatin was prepared from HeLa cells. Cells were fixed with 1% formaldehyde for 10 minutes. ChIP was performed with 107 HeLa cells and 3 µg of ab259957 [EPR23796-74]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads. At time of publication of this image, ChIP-seq was not widely characterised in HeLa for this antibody. For any questions, please contact Abcam Technical Support.
Additional screenshots of mapped reads can be downloaded here.



ChIP-sequencing - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

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 ab259957 [EPR23796-74]. 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-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate with ab259957 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab259957 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.
Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate 10 ug

Lane 2: ab259957 IP in HeLa whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab259957 in HeLa whole cell lysate

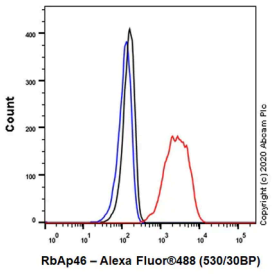
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 24 seconds.

All lanes:
Immunoprecipitation - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

Predicted band size: 48 kDa

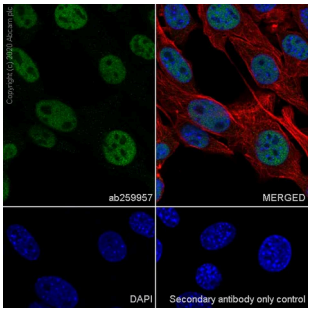
Observed band size: 48 kDa



Flow Cytometry (Intracellular) - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Flow Cytometry (Intracellular) staining using rabbit Anti-RBBP7 antibody

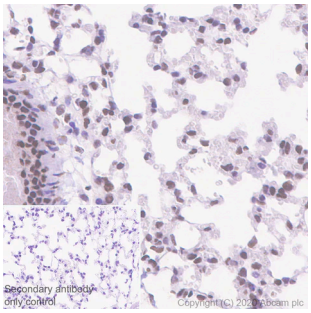
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized NIH/3T3 (Mouse embryonic fibroblast) cells labelling RBBP7 with ab259957 at 1/600 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).
A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RBBP7 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 cells labelling RBBP7 with ab259957 at 1/500 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing mainly nuclear staining in NIH/3T3 cell line. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.

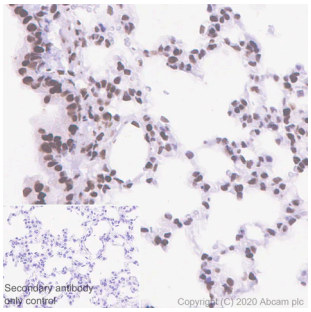


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP7 antibody

Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling RBBP7 with ab259957 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining in mouse lung (PMID: 19655816). The section was incubated with ab259957 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

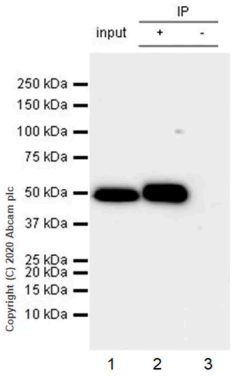


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RBBP7 antibody

Immunohistochemical analysis of paraffin-embedded Rat lung tissue labeling RBBP7 with ab259957 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining in rat lung (PMID: 19655816). The section was incubated with ab259957 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunoprecipitation - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 was immunoprecipitated from 0.35 mg NIH/3T3 (mouse embryonic fibroblast) whole cell lysate with ab259957 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab259957 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: NIH/3T3 (mouse embryonic fibroblast) whole cell lysate 10 ug

Lane 2: ab259957 IP in NIH/3T3 whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab259957 in NIH/3T3 whole cell lysate

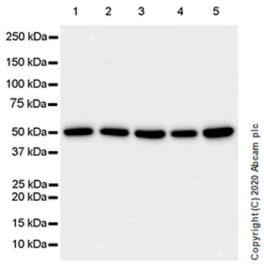
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 24 seconds.

All lanes:
Immunoprecipitation - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

Predicted band size: 48 kDa

Observed band size: 48 kDa



Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Exposure times: 8 seconds.

All lanes:
Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957) at 1/1000 dilution

Lane 1:
Jurkat (human t cell leukemia t lymphocyte) whole cell lysate at 20 µg

Lane 2:
MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

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

Lane 4:
LNCaP (human prostate carcinoma epithelial cell) whole cell lysate at 20 µg

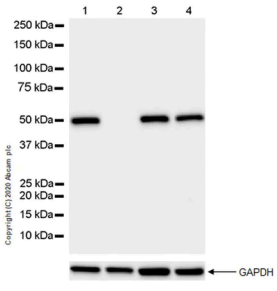
Lane 5:
F9 (mouse embryonal carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 48 kDa

Observed band size: 48 kDa



Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Western blot staining using rabbit Anti-RBBP7 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
ab259957 was shown to specifically react with RBBP7 in wild-type HAP1 cells as signal was lost in RBB7 (RbAp46) knockout cells.

Wild-type and RBB7 (RbAp46) knockout samples were subjected to SDS-PAGE. ab259957 and ab181602 (Rabbit anti-GAPDH loading control) were incubated 1 hour at room temperature at 1/2000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) secondary antibody at 1/50,000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument using the ECL technique.

Exposure time: 10 seconds.

All lanes:
Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957) at 1/2000 dilution

Lane 1:
Wild-type HAP1 whole cell lysate at 20 µg

Lane 2:
RBBP7 (RbAp46) knockout HAP1 whole cell lysate at 20 µg

Lane 3:
HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

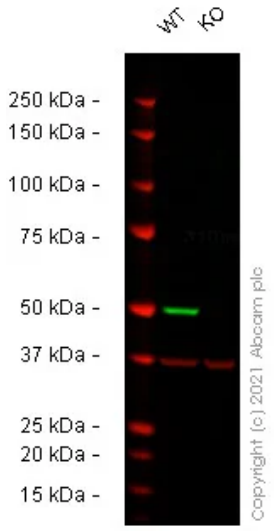
Lane 4:
HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 48 kDa

Observed band size: 48 kDa



Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

RBBP7 Western blot staining using rabbit Anti-RBBP7 antibody

Lanes 1 - 2: Merged signal (red and green). Green - ab259957 observed at 50 kDa. Red - loading control ab8245 (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.
ab259957 was shown to react with RBBP7 in wild-type HeLa cells in Western blot with loss of signal observed in RBBP7 knockout cell line ab264677 (RBBP7 knockout cell lysate ab258628). Wild-type HeLa and RBBP7 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab259957 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

All lanes:
Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957) at 1/1000 dilution

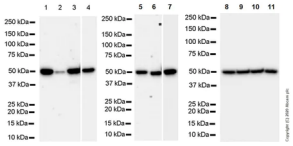
Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
Western blot - Human RBBP7 (RbAp46) knockout HeLa cell lysate (ab258628) at 20 µg

Performed under reducing conditions.

Predicted band size: 48 kDa

Observed band size: 50 kDa



Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957)

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

Exposure times: Lanes 1-3: 3 minutes; Lane 4: 3 seconds; Lanes 5-6: 3 minutes; Lane 7-11: 3 seconds.
All lanes:
Western blot - Anti-RBBP7 antibody [EPR23796-74] - ChIP Grade (ab259957) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse heart tissue lysate at 20 µg

Lane 3:
Mouse liver tissue lysate at 20 µg

Lane 4:
Mouse spleen tissue lysate at 20 µg

Lane 5:
Rat heart tissue lysate at 20 µg

Lane 6:
Rat kidney tissue lysate at 20 µg

Lane 7:
Rat spleen tissue lysate at 20 µg

Lane 8:
C6 (rat glial tumor glial cell) whole cell lysate at 20 µg

Lane 9:
RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20 µg

Lane 10:
PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate at 20 µg

Lane 11:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 48 kDa

Observed band size: 48 kDa

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