abcam

ab196022

Anti-PBRM1/BAF180 antibody [EPR15860]

Recombinant | RabMAb | KO Validated

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	EPR15860
Purification technique	Affinity purification Protein A
Concentration	0.952 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/10000
Notes	-

Expected

Species	Mouse
Dilution info	1/10000
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Expected

Species	Mouse
Dilution info	1/100
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human

Dilution info	-
Notes	-

Expected

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

Predicted

Species	Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

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.

Predicted

Species	Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information PBRM1

Function	Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Required for the stability of the SWI/SNF chromatin remodeling complex SWI/SNF-B (PBAF). Acts as a negative regulator of cell proliferation.

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	PBRM1 also known as BAF180 is an important component of the SWI/SNF chromatin remodeling complex. It has a molecular weight of approximately 187 kDa. Within the cell PBRM1 is expressed in various tissues but shows higher expression in kidney and breast tissues. Its role involves binding to acetylated histones which influences chromatin structure and gene expression regulation.
Biological function summary	The PBRM1/BAF180 protein functions as part of the SWI/SNF complex which includes the catalytic subunit BRG1 or BRM. This complex is important for altering chromatin architecture which regulates access of transcriptional machinery to DNA. It plays a significant role in the control of cell growth and differentiation processes. The structural integrity of PBRM1 is necessary for the functionality of the SWI/SNF complex.
Pathways	PBRM1/BAF180 is an important player in pathways involving chromatin remodeling and transcriptional regulation. It is implicated in the WNT signaling pathway interacting with proteins such as β-catenin to influence gene transcription. It also partakes in the p53 pathway where it contributes to the regulation of cell cycle and apoptosis by modulating p53 activity.
Associated diseases and disorders	Mutations in PBRM1 are frequently observed in renal cell carcinoma. Its disruption affects chromatin remodeling which disrupts normal gene expression contributing to cancer progression. PBRM1 also relates to breast cancer where alterations can promote tumor formation. In these contexts the interaction of PBRM1 with other proteins like VHL in renal carcinoma helps elucidate its role in tumor suppression and development.

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.

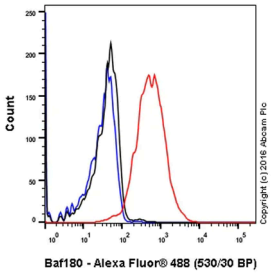
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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:
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6 product images

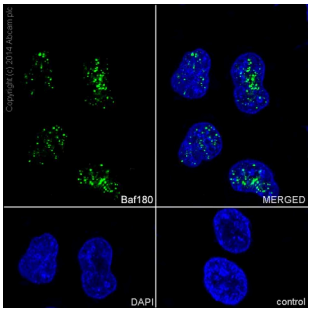


Flow Cytometry (Intracellular) - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)

PBRM1/BAF180 Flow Cytometry (Intracellular) staining using rabbit Anti-PBRM1/BAF180 antibody

ab196022 staining PBRM1/BAF180 in the human cell line HeLa (human cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. The sample was incubated with the primary antibody at a dilution of 1/250. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody. Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

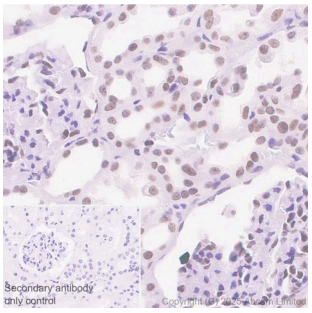


Immunocytochemistry/ Immunofluorescence - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)

PBRM1/BAF180 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PBRM1/BAF180 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling PBRM1/BAF180 with ab196022 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). The nuclear counter stain is DAPI (blue).
Nuclear staining on HeLa cell line is observed.

-ve control - Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution. The nuclear counter stain is DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)

PBRM1/BAF180 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human kidney using rabbit Anti-PBRM1/BAF180 antibody

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling PBRM1/BAF180 with ab196022 at 1/200 dilution.
Nuclear staining on human kidney

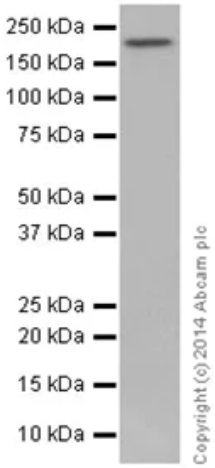
The primary antibody was incubated for 30 mins at room temperature.

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

Counterstained with Hematoxylin.

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

Western blot - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)



PBRM1/BAF180 Western blot staining of HeLa (Human epithelial cells from cervix adenocarcinoma) nuclear lysate using rabbit Anti-PBRM1/BAF180 antibody

5% NFDM/TBST: Blocking and diluting buffer.
All lanes:
Western blot - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022) at 1/10000 dilution

All lanes:
HeLa (Human epithelial cells from cervix adenocarcinoma) nuclear lysate at 10 µg

Secondary

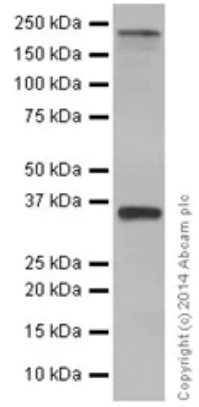
All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 193 kDa

Observed band size: 193 kDa

Exposure time: 15s

Western blot - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)



PBRM1/BAF180 Western blot staining of Human fetal kidney lysate using rabbit Anti-PBRM1/BAF180 antibody

5% NFDM/TBST: Blocking and diluting buffer.
All lanes:
Western blot - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022) at 1/10000 dilution

All lanes:
Human fetal kidney lysate at 10 µg

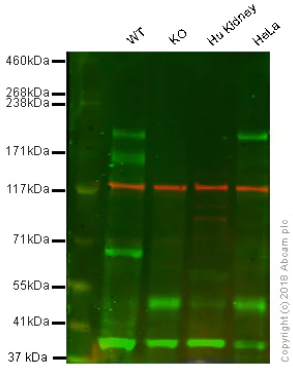
Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 193 kDa

Observed band size: 193 kDa, 35 kDa

Exposure time: 3min



Western blot - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)

PBRM1/BAF180 Western blot staining using rabbit Anti-PBRM1/BAF180 antibody

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: PBRM1/BAF180 knockout HAP1 cell lysate (20 µg)
Lane 3: Human kidney tissue lysate (20 µg)
Lane 4: HeLa cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab196022 observed at 193 kDa. Red - loading control, ab18058, observed at 124 kDa.

ab196022 was shown to recognize PBRM1/BAF180 when PBRM1/BAF180 knockout samples were used, along with additional cross-reactive bands. Wild-type and PBRM1/BAF180 knockout samples were subjected to SDS-PAGE. ab196022 and ab18058 (loading control to Vinculin) were diluted 1/5000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-PBRM1/BAF180 antibody [EPR15860] (ab196022)

Predicted band size: 193 kDa

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