abcam

ab243876

Anti-PBRM1/BAF180 antibody [BL-39-2C3]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline, 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human PBRM1 aa 1-300. The exact immunogen used to generate this antibody is proprietary information. Database link Q86U86
Clone number	BL-39-2C3
Purification notes	Recombinant antibody was purified from cell culture supernatant.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Expected

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

ICC

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	-

Expected

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

IP

Tested

Species	Human
Dilution info	-
Notes	Use 20µl/mg lysate.

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1 µL for 10^6 Cells
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
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	Blue Ice
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

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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

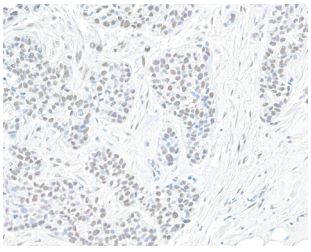
We do not recommend this combination. It is not covered by our product promise.

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:
Terms & Conditions.

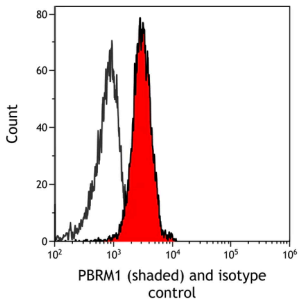
7 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

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

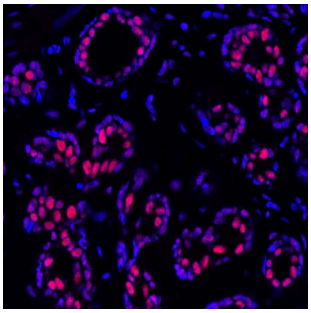
Immunohistochemical analysis of Formalin-Fixed Paraffin-Embedded human breast carcinoma labeling human PBRM1 with ab243876, followed by a HRP-conjugated goat anti-rabbit IgG as secondary. Substrate: DAB. Nuclear staining on breast carcinoma is observed. Counter stained with hematoxylin. Epitope retrieval with citrate buffer pH 6.0 for 20 minutes is recommended.



Flow Cytometry - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

PBRM1/BAF180 Flow Cytometry staining of Jurkat cells using rabbit Anti-PBRM1/BAF180 antibody

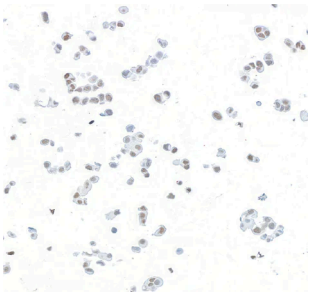
Flow cytometry overlay histogram of 4% formaldehyde fixed Jurkat cells permeabilized with 90% methanol labeling human PBRM1 with ab243876 at 1 µl per 1 x 10^6 cells. (shaded) compared with a Isotype control (unshaded). Secondary antibody details: Goat Anti-Rabbit IgG H&L (DyLight® 488) (ab96883).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

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

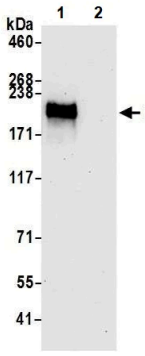
Formalin-fixed, paraffin-embedded human Breast tissue stained for PBRM1/BAF180 using ab243876 in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit IgG was used as the secondary. Opal™ staining and DAPI counterstain.



Immunocytochemistry - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

PBRM1/BAF180 Immunocytochemistry staining of Formalin-Fixed Paraffin-Embedded MCF7 cells using rabbit Anti-PBRM1/BAF180 antibody

Immunocytochemical analysis of Formalin-Fixed Paraffin-Embedded MCF7 cells labeling human PBRM1 with ab243876 followed by a HRP-conjugated goat anti-rabbit IgG as secondary. Substrate: DAB. Nuclear staining on MCF7 cells is observed. Counter stained with hematoxylin. Epitope retrieval with citrate buffer pH 6.0 for 20 minutes is recommended.



Immunoprecipitation - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

PBRM1/BAF180 was immunoprecipitated from 1 mg HEK-293T whole cell lysate with ab243876 at 20 µl per reaction Western blot was performed on the immunoprecipitate using ab243876 at 1/1000 dilution. Lysates prepared using NETN lysis buffer.
Detection: Chemiluminesence

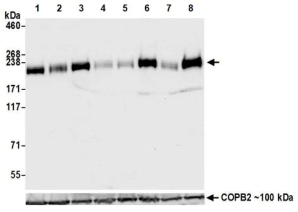
Lane 1: ab243876 IP in HEK-293T whole cell lysate.

Lane 2: Contol IgG in HEK-293T whole cell lysate.

All lanes:
Immunoprecipitation - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

Predicted band size: 193 kDa

Exposure time: 10s



Western blot - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

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

Detection: Chemiluminescence
All lanes:
Western blot - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876) at 1/1000 dilution

Lane 1:
HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 µg

Lane 2:
HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 50 µg

Lane 3:
MCF7 (Human breast adenocarcinoma cell line) whole cell lysate at 50 µg

Lane 4:
HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate at 50 µg

Lane 5:
A549 (Human lung carcinoma cell line) whole cell lysate at 50 µg

Lane 6:
SW620 at 50 µg

Lane 7:
SK-MEL-28 at 50 µg

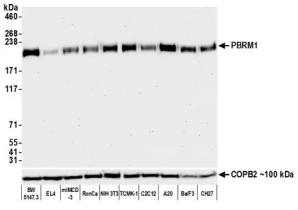
Lane 8:
Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

Predicted band size: 193 kDa

Exposure time: 10s



Western blot - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876)

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

All lanes:
Western blot - Anti-PBRM1/BAF180 antibody [BL-39-2C3] (ab243876) at 1/1000 dilution

Lane 1:
BW5147.3 whole cell lysate at 50 µg

Lane 2:
EL4 whole cell lysate at 50 µg

Lane 3:
mIMCD-3 whole cell lysate at 50 µg

Lane 4:
RenCa whole cell lysate at 50 µg

Lane 5:
NIH 3T3 whole cell lysate at 50 µg

Lane 6:
TCMK-1 whole cell lysate at 50 µg

Lane 7:
C2C12 whole cell lysate at 50 µg

Lane 8:
A20 whole cell lysate at 50 µg

Lane 9:
Ba/F3 whole cell lysate at 50 µg

Lane 10:
CH27 whole cell lysate at 50 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051)

Developed using the ECL technique.

Predicted band size: 187 kDa

Observed band size: 200 kDa

Exposure time: 30s

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