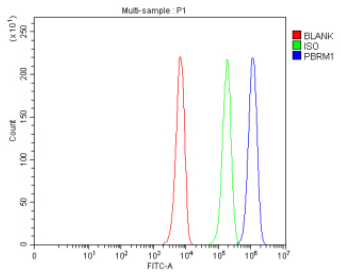
PBRM1 Antibody / Polybromo-1 Polyclonal Antibody (FY13190)

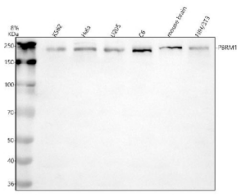
Catalog No.	Formulation	Size
FY13190	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

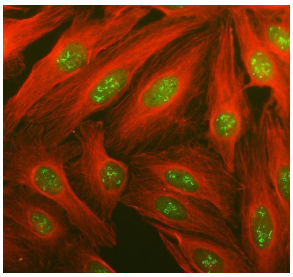
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q86U86
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This PBRM1 Antibody / Polybromo-1 Polyclonal Antibody is available for research use only.



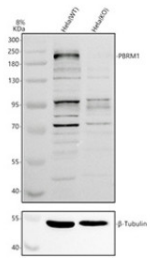
PBRM1 Antibody FACS Analysis of Human K562 Cells. Flow cytometry analysis of fixed and permeabilized human K562 cells using Polybromo-1 Polyclonal Antibody at 1 ug per million cells. The blue histogram represents antibody-stained cells, the green histogram represents the rabbit IgG isotype control, and the red histogram represents the unstained control. A rightward fluorescence shift is observed in the antibody-stained population relative to both controls, demonstrating increased antibody-associated fluorescence.



PBRM1 Antibody WB Analysis of Human K562, HeLa, U2OS, Rat C6, Mouse Brain and NIH/3T3 Samples. Western blot analysis of human K562 (lane 1), HeLa (lane 2), and U2OS (lane 3) whole-cell lysates, rat C6 cells (lane 4), mouse brain tissue (lane 5), and mouse NIH/3T3 cells (lane 6) using Polybromo-1 Polyclonal Antibody at 0.5 ug/ml. An immunoreactive band is detected near 240 kDa across the tested samples, above the calculated molecular weight of approximately 193 kDa for PBRM1.



PBRM1 Antibody IF Staining of Human U2OS Cells. Immunofluorescence analysis of human U2OS cells using Polybromo-1 Polyclonal Antibody at 5 ug/ml. Green fluorescence demonstrates predominantly nuclear PBRM1 staining, with a punctate distribution and regions of stronger intranuclear signal. Alpha Tubulin is visualized in red, outlining the cytoskeletal network. The nuclear distribution is consistent with the established role of PBRM1 as a chromatin-associated component of the PBAF remodeling complex. Enzymatic antigen retrieval was performed for 15 minutes before staining.



PBRM1 Antibody WB Analysis of Wild-Type and PBRM1 Knockout HeLa Cells. Western blot analysis of human HeLa wild-type (WT, lane 1) and PBRM1 knockout (KO, lane 2) whole-cell lysates using Polybromo-1 Polyclonal Antibody at 0.5 ug/ml. The prominent immunoreactive band near 240 kDa in WT lysate is substantially reduced in KO lysate, supporting PBRM1-dependent detection. Additional lower-molecular-weight bands are visible, but their identities have not been established. Beta-Tubulin serves as the loading control. The calculated molecular weight of canonical PBRM1 is approximately 193 kDa.

Description

PBRM1 Antibody / Polybromo-1 Polyclonal Antibody targets Polybromo-1 (PBRM1), also known as BAF180, a nuclear protein involved in ATP-dependent chromatin remodeling and transcriptional regulation. PBRM1 is a defining component of the polybromo-associated BAF (PBAF) complex, a specialized form of the SWI/SNF family of chromatin-remodeling assemblies. These complexes regulate access to genomic DNA by repositioning or restructuring nucleosomes, thereby influencing gene expression, cellular differentiation, and genome maintenance.

PBRM1 contains six bromodomains, two bromo-adjacent homology (BAH) domains, and a high-mobility group (HMG) domain. Its bromodomains recognize acetylated lysine residues on histone proteins, helping establish interactions between the PBAF complex and chromatin. The multiple bromodomains contribute to the recognition of specific histone acetylation patterns, while other structural regions support protein interactions and complex function. Through these mechanisms, PBRM1 influences the recruitment and activity of chromatin-remodeling machinery at regulatory genomic regions.

Within the PBAF complex, PBRM1 associates with proteins including SMARCA4, ARID2, and BRD7. These components cooperate to regulate transcriptional programs involved in cell-cycle control, differentiation, and responses to cellular stress. PBRM1 also participates in maintaining genomic integrity, with research implicating PBAF-dependent chromatin remodeling in DNA damage responses and the organization of chromosome-associated structures.

PBRM1 is an important tumor suppressor, particularly in clear cell renal cell carcinoma. Inactivating alterations in the PBRM1 gene are frequently identified in this malignancy, often alongside alterations affecting other genes on chromosome 3p. Loss of PBRM1 can disrupt chromatin accessibility and transcriptional regulation, contributing to changes in cellular proliferation, differentiation, and tumor-associated signaling. Its relationship with tumor progression and therapeutic response is complex and varies according to molecular context.

PBRM1 Antibody supports investigations into chromatin organization, PBAF complex biology, and the molecular consequences of altered tumor suppressor function. Understanding PBRM1 expression and regulation provides insight into how histone recognition and ATP-dependent chromatin remodeling contribute to transcriptional control, genome stability, and cancer development.

For studies requiring knockout-validated western blot specificity, see our PBRM1 Antibody AFHG-16, a rabbit monoclonal antibody targeting BAF180 with validated WB and IHC applications.

Application Notes

Optimal dilution of the PBRM1 Antibody / Polybromo-1 Polyclonal Antibody should be determined by the researcher.

Immunogen

E.coli-derived human PBRM1 recombinant protein (Position: D45-R1647) was used as the immunogen for the PBRM1 antibody.

Storage

After reconstitution, the PBRM1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Polybromo-1 antibody, BAF180 antibody, PBRM1 protein antibody, Polybromo 1 antibody, Polybromo-1 protein antibody, Polybromo-1 chromatin remodeling antibody, PBAF complex subunit antibody, PBAF chromatin remodeling protein antibody, BRG1-associated factor 180 antibody, SWI/SNF complex subunit PBRM1 antibody

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