

PBRM1/BAF180 (E6N2K) Mouse mAb

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, ChIP	H M R Mk	Endogenous	205	Mouse IgG2a kappa	#Q86U86	55193

Product Usage Information

For optimal ChIP results, use 10 µl of antibody and 10 µg of chromatin (approximately 4×10^6 cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

Application

Western Blotting
Chromatin IP

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

Specificity/Sensitivity

PBRM1/BAF180 (E6N2K) Mouse mAb recognizes endogenous levels of total PBRM1/BAF180 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the amino terminus of human PBRM1/BAF180 protein.

Background

ATP-dependent chromatin remodeling complexes play an essential role in the regulation of various nuclear processes, such as gene expression, DNA replication, and repair (1,2). The SWI/SNF chromatin remodeling complex consists of more than 10 subunits with a single molecule of the ATPase catalytic subunit BRM or BRG1, but not both. The activities of these two subunits drive the disruption of histone-DNA contacts that lead to changes in accessibility of crucial regulatory elements within chromatin (2-5). The BRM/BRG1 containing SWI/SNF complexes are recruited to target promoters by transcription factors, such as nuclear receptors, p53, RB, and BRCA1 to regulate gene activation, cell growth, the cell cycle, and differentiation processes (1,6-9).

PBRM1/BAF180 is a unique member of the SWI/SNF complex PBAF, which binds to kinetochores in mitotic chromatin (10,11). PBAF is involved in nuclear receptor-mediated transcription and retinoic acid driven gene activation (12,13). *PBRM1/BAF180* has been shown to be a potent tumor suppressor, as it is the second-most mutated gene in renal carcinomas (14). Mutations of *PBRM1/BAF180* have also been shown to be involved in breast cancer, and low expression relates to poorer prognosis (15,16). PBRM1/BAF180 is phosphorylated at Ser948 by ATM during DNA damage, which is important for transcriptional silencing and repair around double-stranded breaks (17).

test

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **ChIP:** Chromatin IP

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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