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PBAF Complex Antibody Sampler Kit



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1 Kit (5 x 20 microliters)

For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Brg1 (D1Q7F) Rabbit mAb	49360	20 µl	220 kDa	Rabbit IgG
BRD7 (D9K2T) Rabbit mAb	15125	20 µl	85 kDa	Rabbit IgG
PBRM1/BAF180 (E9X2Z) Rabbit mAb	89123	20 µl	205 kDa	Rabbit IgG
ARID2 (D8D8U) Rabbit mAb	82342	20 µl	220 kDa	Rabbit IgG
SMARCC1/BAF155 (D7F8S) Rabbit mAb	11956	20 µl	155 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The PBAF Complex Antibody Sampler Kit provides an economical means of detecting members of the PBAF chromatin remodeling complex. ARID2, BRD7, and PBRM1/BAF180 are unique members of the PBAF complex, while Brg1 and SMARCC1/BAF155 are shared with BAF and non-canonical BAF complexes. The kit includes enough antibody to perform two western blot experiments with each primary antibody.

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.*

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, ARID2, and BRD7 are unique members 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). ARID2 is the targeting subunit of the PBAF complex and critical for complex stability (15). Bromodomain-containing BRD7 interacts with acetylated histones to regulate gene transcription (16,17). SMARCC1/BAF155 is a core subunit of all BAF complexes including PBAF, and is necessary for efficient nucleosome remodeling by BRG1 *in vitro* (18).

Background References

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