Store at -20°C

#78779

PBAF Complex Antibody Sampler Kit

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not For Use In Diagnostic Procedures.

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

See www.cellsignal.com for individual component applications, species cross-reactivity, dilutions, and additional application protocols.

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.

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).

Specificity/Sensitivity: Each antibody in the PBAF Complex Antibody Sampler Kit detects endogenous levels of its target protein. In addition, Brg1 (D1Q7F) Rabbit mAb does not cross-react with BRM protein.

Source/Purification: Monoclonal antibodies are produced by immunizing rabbits with synthetic peptides corresponding to residues surrounding Val891 of human ARID2, Leu1672 of human PBRM1/BAF180, and Gly975 of human SMARCC1/BAF155, recombinant protein specific to the carboxy terminus of human BRD7, and recombinant protein specific to the amino terminus of human Brg1.

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.*

Please visit www.cellsignal.com for validation data and a complete listing of recommended companion products.

Background References:

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Applications: W—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide **Species Cross-Reactivity: H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.