

BAF Complex Antibody Sampler Kit

Cat# AK0129

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

ATP-dependent chromatin remodeling complexes play an essential role in the regulation of various nuclear processes, such as gene expression, DNA replication, and repair. 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. 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. BRM and BRG1 are also considered to be tumor suppressors and their expression levels are severely reduced in several cancer cell lines. SMARCC1/BAF155, SMARCC2/BAF170, and SMARCB1/BAF47 are members of the core subunits of the SWI/SNF complex, which is necessary for efficient nucleosome remodeling by BRG1 in vitro. ARID1A/BAF250A is one of the accessory subunits of the SWI/SNF complex. SMARCC1, SMARCB1, and ARID1A are an essential part of the mouse embryonic stem cell specific SWI/SNF complex (esBAF). SMARCC1 is necessary for early embryogenesis, especially proper brain and visceral endoderm development. SMARCB1 is necessary for early embryogenesis and hepatocyte differentiation. ARID1A is critical for ES cell pluripotency and differentiation into mesoderm-derived cardiomyocytes and adipocytes. While SMARCC2 has been shown to be part of the SWI/SNF complex in non-pluripotent cells, it is absent in pluripotent embryonic stem (ES) cells. Expression of SMARCC2 has been shown to be up-regulated in neurons/neuronal progenitors upon differentiation of mouse ES cells with retinoic acid, and exogenous expression of SMARCC2 leads to loss of stem cell pluripotency and self renewal.

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340114	SMARCA4 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340706	SMARCA2 Polyclonal Antibody	20µL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340145	SMARCB1 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse	Rabbit

A340442	SMARCC2 Polyclonal Antibody	20μL	WB, IF, ELISA	Human, Mouse	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat

PRODUCT USE LIMITATION

These products are intended for research use only.