Datasheet for ABIN6972743

anti-SMARCB1 antibody

2 Images

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Overview

Quantity:	100 µg
Target:	SMARCB1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	This antibody was raised against full-length recombinant human SMARCB1 protein.
Clone:	2C2
Isotype:	IgG2a
Characteristics:	SMARCB1 (SWI/SNF Related, Matrix Associated, Actin Dependent Regulator Of Chromatin, Subfamily B, Member 1) is a core component of the BAF (hSWI/SNF) complex. This ATP-dependent chromatin-remodeling complex plays important roles in cell proliferation and differentiation, in cellular antiviral activities and inhibition of tumor formation. The BAF complex is able to create a stable, altered form of chromatin that constrains fewer negative supercoils than normal. This change in supercoiling would be due to the conversion of up to one-half of the nucleosomes on polynucleosomal arrays into asymmetric structures, termed altosomes, each composed of 2 histones octamers. Stimulates in vitro the remodeling activity of SMARCA4/BRG1/BAF190A. Involved in activation of CSF1 promoter. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a

Product Details

	stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth (By similarity). Plays a key role in cell-cycle control and causes cell cycle arrest in G0/G1. Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. SMARCB1 antibody (mAb) (Clone 2C2) was raised in a Mouse host. It has been validated for use in Immunocytochemistry, Immunofluorescence and Western blot, it has been shown to react with Human samples.
Purification:	Protein A Chromatography

Target Details

Target:	SMARCB1
Alternative Name:	SMARCB1 (SMARCB1 Products)
Molecular Weight:	45 kDa
NCBI Accession:	NP_001007469

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

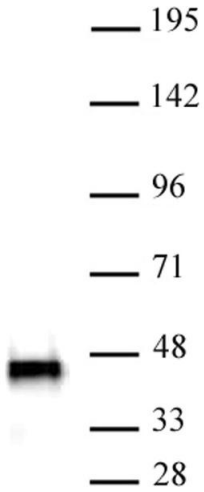
Handling

Buffer:	Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

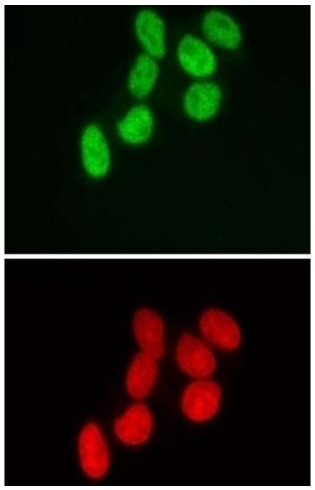
	should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.

Images



Western Blotting

Image 1. SMARCB1 antibody (mAb) (Clone 2C2) tested by Western blot. SMARCB1 antibody detection by Western blot. The analysis was performed using 20 µg of Jurkat nuclear extract and SMARCB1 antibody at a 2 µg/mL dilution.



Immunofluorescence

Image 2. SMARCB1 antibody (mAb) (Clone 2C2) tested by immunofluorescence. Top: HeLa cells stained with SMARCB1 antibody (mAb). Bottom: Hoechst staining.