abcam

Product datasheet

Anti-SNF5/SMARCB1 antibody ab88589

1 References 4 Images

Overview

Product name	Anti-SNF5/SMARCB1 antibody
Description	Mouse polyclonal to SNF5/SMARCB1
Host species	Mouse
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant full length protein within Human SNF5/SMARCB1. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. Database link: **NP_003064.2**
Positive control	Cell lysate from transfected 293T cells. HeLa cells and Human esophagus tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.4 Constituent: PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab88589 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa).
IHC-P		Use a concentration of 3 µg/ml.
ICC/IF		Use a concentration of 10 µg/ml.

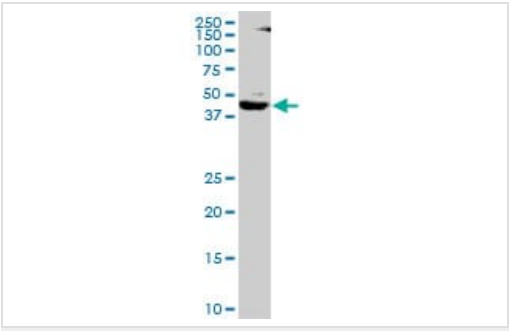
Target

Function 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 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.

Involvement in disease Defects in SMARCB1 are a cause of rhabdoid tumor (RDT) [MIM:609322]; also known as malignant rhabdoid tumor (MRT). RDT are a highly malignant group of neoplasms that usually occur in early childhood. SMARCB1/INI1 is also frequently inactivated in epithelioid sarcomas. Defects in SMARCB1 are a cause of schwannomatosis (SCHWA) [MIM:162091]; also called congenital cutaneous neurilemmomatosis. Schwannomas are benign tumors of the peripheral nerve sheath that usually occur singly in otherwise normal individuals. Multiple schwannomas in the same individual suggest an underlying tumor-predisposition syndrome. The most common such syndrome is NF2. The hallmark of NF2 is the development of bilateral vestibular-nerve schwannomas; but two-thirds or more of all NF2-affected individuals develop schwannomas in other locations, and dermal schwannomas may precede vestibular tumors in NF2-affected children. There have been several reports of individuals with multiple schwannomas who do not

	show evidence of vestibular schwannoma. Clinical report suggests that schwannomatosis is a clinical entity distinct from other forms of neurofibromatosis.
Sequence similarities	Belongs to the SNF5 family.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Nucleus.

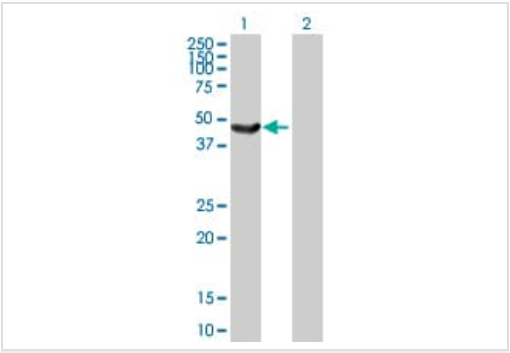
Images



Western blot - Anti-SNF5/SMARCB1 antibody (ab88589)

Anti-SNF5/SMARCB1 antibody (ab88589) at 1 µg/ml + 293 cell lysate at 25 µg

Predicted band size: 44 kDa
Observed band size: 44 kDa



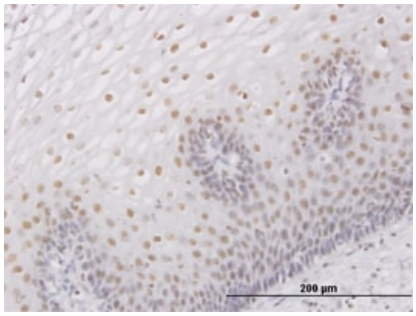
Western blot - Anti-SNF5/SMARCB1 antibody (ab88589)

All lanes : Anti-SNF5/SMARCB1 antibody (ab88589) at 1 µg/ml

Lane 1 : cell lysate from SNF5/SMARCB1 transfected 293T cells
Lane 2 : cell lysate from non trasfected 293T cells

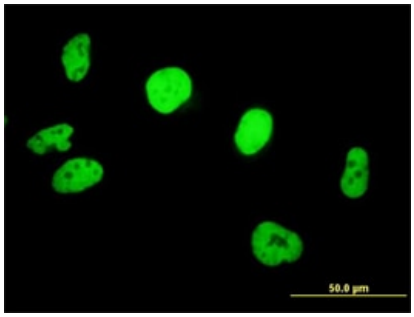
Lysates/proteins at 25 µg per lane.

Predicted band size: 44 kDa
Observed band size: 44 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNF5/SMARCB1 antibody (ab88589)

ab88589 at 3 µg/ml staining SNF5/SMARCB1 in formalin-fixed paraffin-embedded Human esophagus by immunohistochemistry.



Immunocytochemistry/ Immunofluorescence - Anti-SNF5/SMARCB1 antibody (ab88589)

ab88589 at 10 µg/ml detecting SNF5/SMARCB1 in HeLa cells by immunofluorescence.

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