# abcam

# Product datasheet

# Anti-SNF5/SMARCB1 antibody [EPR20189] ab222519

ועלשעבע RabMAb

3 References 画像数9

# 製品の概要

製品名 Anti-SNF5/SMARCB1 antibody [EPR20189]

製品の詳細 Rabbit monoclonal [EPR20189] to SNF5/SMARCB1

由来種 Rabbit

アプリケーション 適用あり: IHC-P, IP, ICC/IF, WB, Flow Cyt (Intra)

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HeLa, Jurkat, PC-12 and NIH-3T3 whole cell lysates; Human fetal brain, fetal heart and fetal

spleen lysates; Mouse and rat brain and spleen lysates. IHC-P: Human, mouse and rat kidney

tissues. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル EPR20189 クローン名

## アプリケーション

**The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab222519の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.
ICC/IF		1/100.
WB		1/1000. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa).
Flow Cyt (Intra)		1/500.

## ターゲット情報

#### 機能

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.

## 関連疾患

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.

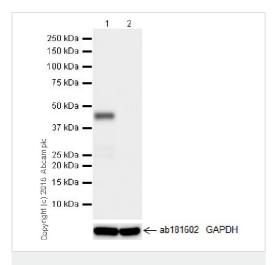
Defects in SMARCB1 are a cause of schwannomatosis (SCHWA) [MIM:162091]; also called congenital cutaneous neurilemmomatosis. Schwannomas are benign tumors of the peripheral nerve sheath that usually occur singly in otherwise normal individuals. Multiple schwannomas in the same individual suggest an underlying 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.

配列類似性 Belongs to the SNF5 family.

翻訳後修飾 Phosphorylated upon DNA damage, probably by ATM or ATR.

細胞内局在 Nucleus.

## 画像



Western blot - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

**All lanes**: Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519) at 1/1000 dilution

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2 :** G-401 (Human rhabdoid tumor kidney epithelial cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

# Secondary

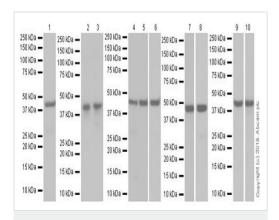
**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

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

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

**Negative control: G-401** (PMID: 19789351).



Western blot - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

**All lanes :** Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519) at 1/1000 dilution

Lane 1 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate at 20 µg

**Lane 2 :** PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate at 10  $\mu$ g

Lane 3: NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate at 10 µg

**Lane 4**: Human fetal brain lysate at 10 μg **Lane 5**: Human fetal heart lysate at 10 μg **Lane 6**: Human fetal spleen lysate at 10 μg

Lane 7: Mouse brain lysate at 10 μg
Lane 8: Mouse spleen lysate at 10 μg
Lane 9: Rat brain lysate at 10 μg
Lane 10: Rat spleen lysate at 10 μg

# Secondary

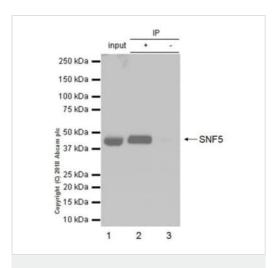
**Lanes 1-3 & 7-10 :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

**Lanes 4-6:** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

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

Blocking/Dilution buffer: 5% NFDM/TBST.

**Exposure times :** Lane 1-3: 2 seconds; Lanes 4-5/7: 15 seconds; Lane 6/8-9: 4 seconds; Lane 10: 1 minute.



Immunoprecipitation - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

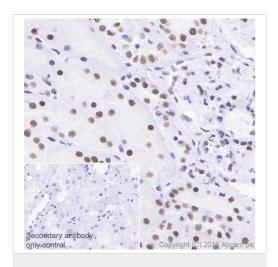
SNF5/SMARCB1 was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab222519 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab222519 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (input).

Lane 2: ab222519 IP in HeLa whole cell lysate,

**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab222519 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST Exposure time: 10 seconds.



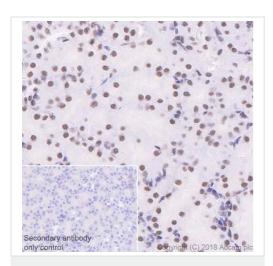
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling SNF5/SMARCB1 with ab222519 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

Nuclear staining in human kidney is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



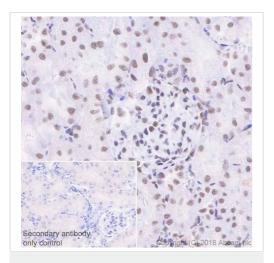
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling SNF5/SMARCB1 with ab222519 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

Nuclear staining in mouse kidney is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

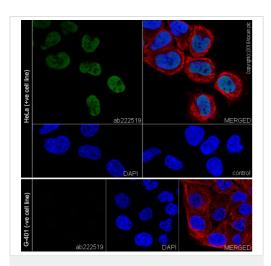


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

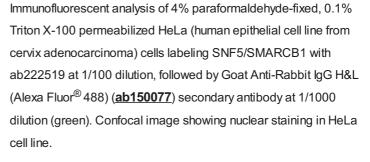
Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling SNF5/SMARCB1 with ab222519 at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP), Ready to use. Nuclear staining in rat kidney is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



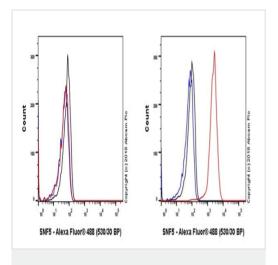
Immunocytochemistry/ Immunofluorescence - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)



The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution.

Negative control: G-401 cell line (PMID:19789351).



Flow Cytometry (Intracellular) - Anti-SNF5/SMARCB1 antibody [EPR20189] (ab222519)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeablizedG-401 (Human rhabdoid tumor kidney epithelial cell line, Left) and HeLa (Human epithelial cell line from cervix adenocarcinoma, Right) cells labeling SNF5/SMARCB1 with ab222519 at 1/500 dilution (red) compared with a Rabbit lgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.

Negative control: G-401 (PMID:19789351)



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

# Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

# Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors