abcam

Product datasheet

Anti-ARID1A antibody [EPR13501-73] ab182561

KO 評価済 リコンビナント RabMAb

★★★★★ 1 Abreviews 7 References 画像数 7

製品の概要

製品名	Anti-ARID1A antibody [EPR13501-73]
製品の詳細	Rabbit monoclonal [EPR13501-73] to ARID1A
由来種	Rabbit
アプリケーション	**適用あり:** ChIC/CUT&RUN-seq, WB, Flow Cyt (Intra), ICC/IF, IHC-P
種交差性	**交差種:** Human **交差が予測される動物種:** Mouse, Rat
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Wild-type HAP1 treated with 10uM MG-132 for 6 hours whole cell lysate. Flow-Cyt (intra): SH-SY5Y cells. IHC-P: Human kidney and Human adenocarcinoma of endometrium without ARID1A mutation. ICC/IF: SH-SY5Y cells. ChIC/CUT&RUN-Seq: HCT116 cells.
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: 40% Glycerol, 0.05% BSA, 59% PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名	EPR13501-73
アイソタイプ	IgG

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ab182561の使用に適用されます

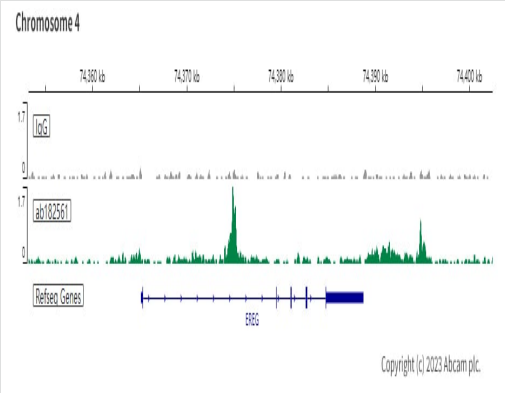
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ChIC/CUT&RUN-seq		Use at an assay dependent concentration. 5µg
WB		1/1000. Predicted molecular weight: 242 kDa.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	1/500.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ターゲット情報

機能	Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Binds DNA non-specifically. 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. 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.
組織特異性	Highly expressed in spleen, thymus, prostate, testis, ovary, small intestine, colon, and PBL, and at a much lower level in heart, brain, placenta, lung, liver, skeletal muscle, kidney, and pancreas.
配列類似性	Contains 1 ARID domain.
翻訳後修飾	Phosphorylated upon DNA damage, probably by ATM or ATR.
細胞内局在	Nucleus.

画像

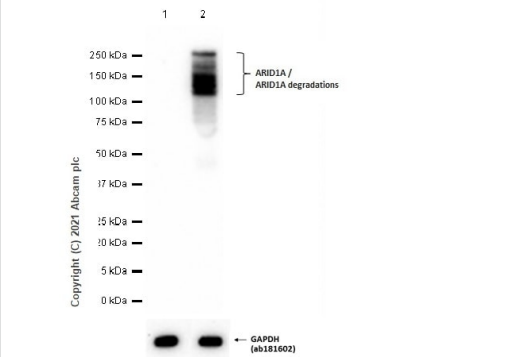


ChIC/CUT&RUN sequencing - Anti-ARID1A antibody [EPR13501-73] (ab182561)

ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/mL, 2.5 x 10^5 HCT116 cells and 5µg of ab182561 [EPR13501-73]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown.

Additional screenshots of mapped reads can be downloaded **here**.

The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Western blot - Anti-ARID1A antibody [EPR13501-73] (ab182561)

All lanes : Anti-ARID1A antibody [EPR13501-73] (ab182561) at 1/1000 dilution

Lane 1 : ARID1 knockout HAP1 (Human chronic myelogenous leukemia near-haploid cell line) treated with 10uM MG-132 for 6 hours whole cell lysate
Lane 2 : Wild-type HAP1 (Human chronic myelogenous leukemia-haploid cell line) treated with 10uM MG-132 for 6 hours whole cell lysate

Lysates/proteins at 20 µg per lane.

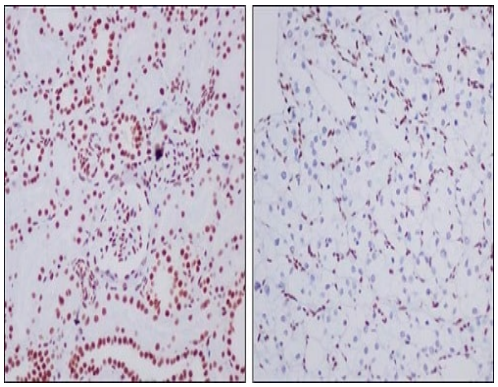
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 242 kDa
Observed band size: 130-270 kDa

Exposure time: 10 seconds

Blocking and diluting buffer: 5% NFDM/TBST

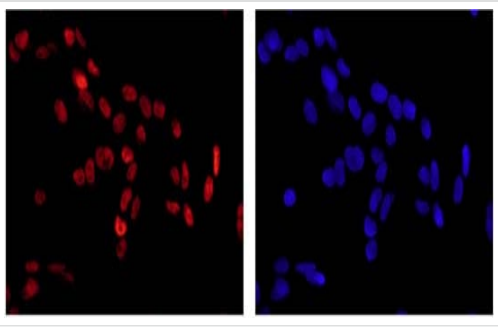
ARID1A has many mutations which typically generate truncated proteins that are highly prone to degradation. (PMID: 21614196, PMID: 29486633, PMID: 34429326).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARID1A antibody [EPR13501-73] (ab182561)

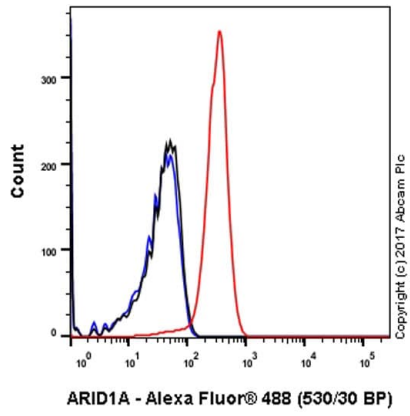
Immunohistochemical analysis of paraffin-embedded Human kidney tissue (left image) labeling ARID1A using ab182561 at 1/1000 dilution. Right image: human clear cell carcinoma of kidney with ARID1A mutation. A Ready to use HRP Polymer for Rabbit IgG (prediluted) was used as secondary. Counterstain: Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



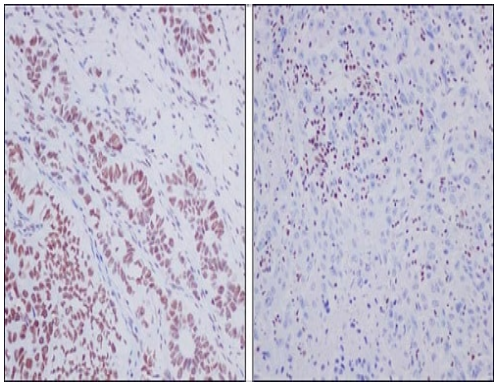
Immunocytochemistry/ Immunofluorescence - Anti-ARID1A antibody [EPR13501-73] (ab182561)

Immunofluorescent analysis of SH-SY5Y cells labeling ARID1A with ab182561 at 1/500 and Goat anti rabbit IgG(Alexa Fluor®555) at 1/200. Image at the right stained with DAPI.



Flow Cytometry (Intracellular) - Anti-ARID1A antibody [EPR13501-73] (ab182561)

Intracellular Flow Cytometry analysis of SH-SY5Y (human neuroblastoma) cells labeling ARID1A with purified **ab92512** at 1/500 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARID1A antibody [EPR13501-73] (ab182561)

Immunohistochemical analysis of paraffin-embedded Human adenocarcinoma of endometrium without ARID1A mutation (left image) labeling ARID1A using ab182561 at 1/1000 dilution. Right image: human adenocarcinoma of endometrium with ARID1A mutation. A Ready to use HRP Polymer for Rabbit IgG (prediluted) was used as secondary. Counterstain: Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Anti-ARID1A antibody [EPR13501-73] (ab182561)

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