

Product Name: KD-Validated ARID1A Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01417

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 242.0kDa

Antigen Information

Gene Name	ARID1A ARID1A; AT-Rich Interaction Domain 1A; BAF250; B120; SMARCF1; P270; SWI/SNF-Related, Matrix-Associated, Actin-Dependent Regulator Of Chromatin Subfamily F Member 1; AT-Rich Interactive Domain-Containing Protein 1A; AT Rich Interactive Domain 1A (SWI-Like); ARID Domain-Containing Protein 1A; SWI/SNF Complex Protein P270; BRG1-Associated
Alternative Names	Factor 250a; SWI-Like Protein; Osa Homolog 1; BAF250a; BAF250A; C1orf4; HOSA1; OSA1; HELD; SWI/SNF Related, Matrix Associated, Actin Dependent Regulator Of Chromatin, Subfamily F, Member 1; AT Rich Interactive Domain 1A (SWI- Like); Chromatin Remodeling Factor P250; BRG1-Associated Factor 250; OSA1 Nuclear Protein; Brain Protein 120; C1orf4; C10RF4; C1ORF4; BM029; MRD14; CSS2; ELD
Gene ID	8289.0

SwissProt ID	O14497
Immunogen	A synthesized peptide derived from human ARID1A

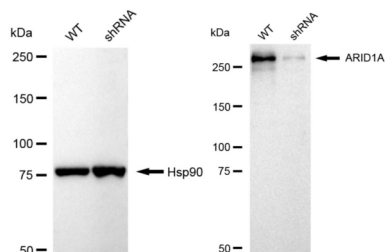
Background

This gene encodes a member of the SWI/SNF family, whose members have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. The encoded protein is part of the large ATP-dependent chromatin remodeling complex SNF/SWI, which is required for transcriptional activation of genes normally repressed by chromatin. It possesses at least two conserved domains that could be important for its function. First, it has a DNA-binding domain that can specifically bind an AT-rich DNA sequence known to be recognized by a SNF/SWI complex at the beta-globin locus. Second, the C-terminus of the protein can stimulate glucocorticoid receptor-dependent transcriptional activation. It is thought that the protein encoded by this gene confers specificity to the SNF/SWI complex and may recruit the complex to its targets through either protein-DNA or protein-protein interactions. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

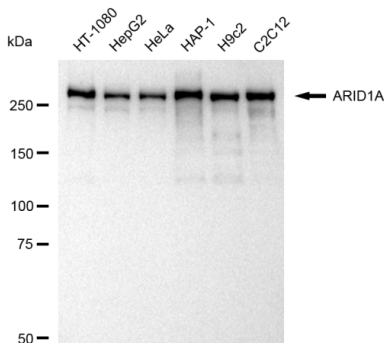
Research Area

Signal Transduction, Epigenetics and Nuclear Signaling, Cancer

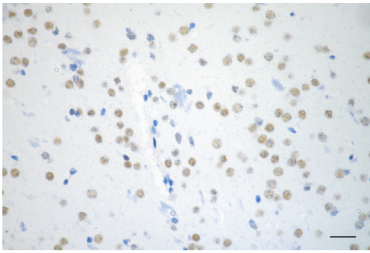
Image Data



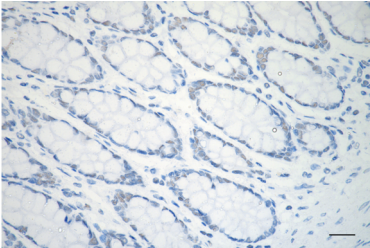
Western blotting analysis using ARID1A antibody (KVA01417). ARID1A expression in wild type (WT) and ARID1A shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ARID1A antibody (KVA01417, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



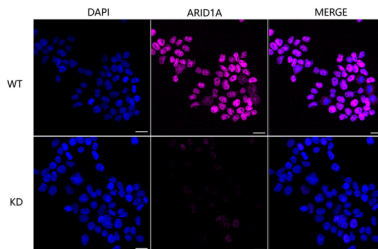
Western blotting analysis using ARID1A antibody (KVA01417). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ARID1A antibody (KVA01417, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



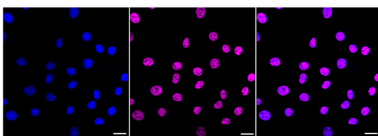
Immunohistochemistry was performed on paraffin-embedded mouse brain using ARID1A antibody (KVA01417, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



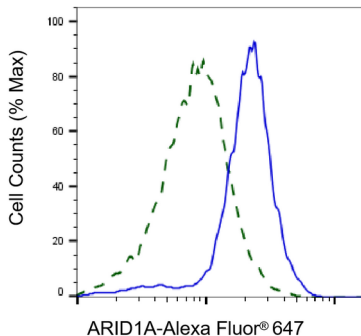
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using ARID1A antibody (KVA01417, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



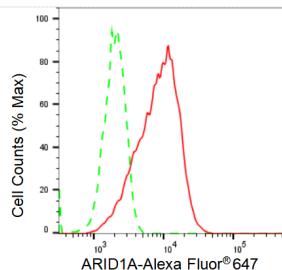
Immunocytochemical staining of HeLa cells using ARID1A antibody (KVA01417, 1:1,000). Top panel: wild-type (WT); Bottom panel: ARID1A shRNA knockdown (KD). Nuclei were stained blue with DAPI; ARID1A was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.



Immunocytochemical staining of C2C12 cells with ARID1A antibody (KVA01417, 1:1,000). Nuclei were stained blue with DAPI; ARID1A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μm.



Validation of ARID1A knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ARID1A antibody (KVA01417, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ARID1A expression in C2C12 cells using ARID1A antibody (KVA01417, 1:2,000). Green, isotype control; red, ARID1A.