

**KD-Validated Anti-ARID1A Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1318**

**Specification**

**KD-Validated Anti-ARID1A Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">O14497</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 242 kDa, observed, 270 kDa
Gene Name	KDa
Aliases	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 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; C10RF4; BM029; MRD14; CSS2; ELD
Immunogen	A synthesized peptide derived from human ARID1A

**KD-Validated Anti-ARID1A Rabbit Monoclonal Antibody - Additional Information**

Gene ID	8289
<b>Other Names</b>	AT-rich interactive domain-containing protein 1A, ARID domain-containing protein 1A, B120, BRG1-associated factor 250, BAF250, BRG1-associated factor 250a, BAF250A, Osa homolog 1, hOSA1, SWI-like protein, SWI/SNF complex protein p270, SWI/SNF-related, matrix-associated, actin-dependent regulator of chromatin subfamily F member 1, hELD, ARID1A, BAF250, BAF250A, C1orf4, OSA1, SMARCF1

**KD-Validated Anti-ARID1A Rabbit Monoclonal Antibody - Protein Information**

**Name** ARID1A

**Synonyms** BAF250, BAF250A, C1orf4, OSA1, SMARCF1

**Function**

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner. Binds DNA non-specifically. 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 postmitotic 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 postmitotic 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).

**Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000269|PubMed:11318604, ECO:0000269|PubMed:26614907}

**Tissue Location**

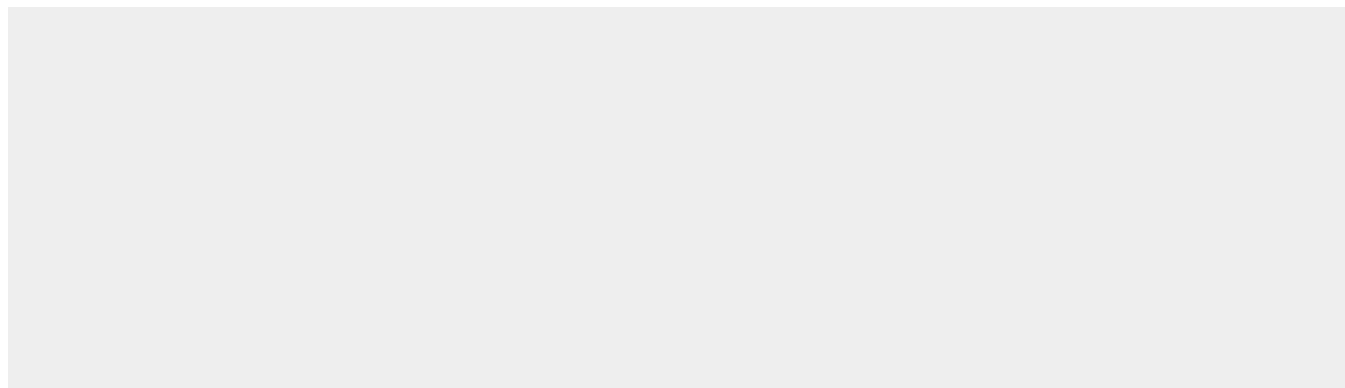
Highly expressed in spleen, thymus, prostate, testis, ovary, small intestine, colon, and PBL, and at a much lower level in heart, brain, placenta, lung, liver, skeletal muscle, kidney, and pancreas.

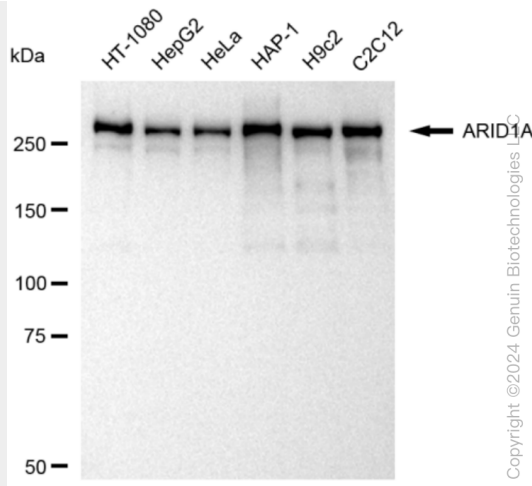
**KD-Validated Anti-ARID1A Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

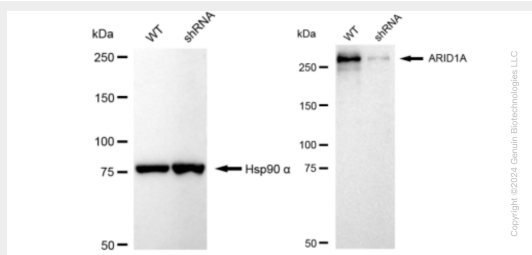
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**KD-Validated Anti-ARID1A Rabbit Monoclonal Antibody - Images**

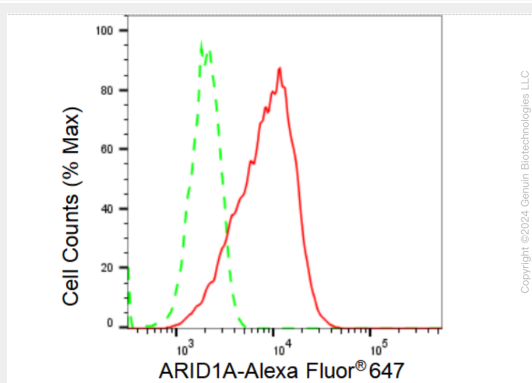




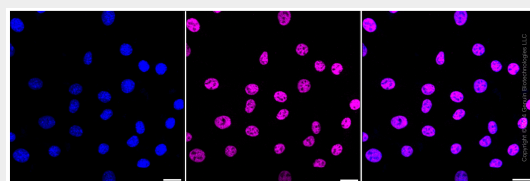
Western blotting analysis using anti-ARID1A antibody (Cat#AGI1318). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ARID1A antibody (Cat#AGI1318, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-ARID1A antibody (Cat#AGI1318). 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 anti-ARID1A antibody (Cat#AGI1318, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ARID1A expression in C2C12 cells using ARID1A antibody (Cat#AGI1318, 1:2000). Green, isotype control; red, ARID1A.



Immunocytochemical staining of C2C12 cells with ARID1A antibody (Cat#AGI1318, 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  $\mu$ m.