

## **ARID1A Antibody**

Rabbit mAb Catalog # AP90985

### **Specification**

## **ARID1A Antibody - Product Information**

Application IHC, ICC
Primary Accession O14497
Reactivity Rat

Clonality Monoclonal

**Other Names** 

ARID1A; BAF250; C1orf4; ELD; HOSA1; Osa homolog 1; OSA1 nuclear protein; SMARCF1; MRD14;

p270; B120; BM029;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 242045 Da

## **ARID1A Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

ARID1A

Description Involved in transcriptional activation and

repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Binds DNA non-specifically. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF

complex).

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### **ARID1A 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.

# **ARID1A Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ARID1A Antibody - Images