

## **ARID1A Antibody**

Rabbit mAb Catalog # AP90985

## **Product Information**

**Application** WB, IHC, IF, ICC, IHF

Primary Accession <u>014497</u>

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

Other Names ARID1A; BAF250; C1orf4; ELD; HOSA1; Osa homolog 1; OSA1 nuclear protein;

SMARCF1; MRD14; p270; B120; BM029;

IsotypeRabbit IgGHostRabbitCalculated MW242045

## **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200

**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.

## **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 No

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.

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