

ARID1A Rabbit mAb

Catalog # AP78652

Product Information

Application IHC-P, IF, ICC Primary Accession 014497

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human ARID1A

Purification Affinity Chromatography

Calculated MW 242045

Additional Information

Gene ID 8289

Other Names ARID1A

Dilution IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.